Multinational Enterprises and the Global Economy, Second Edition

John H. Dunning
Emeritus Esmee Fairbairn Professor of International Investment and Business Studies, University of Reading, UK and Emeritus State of New Jersey Professor of International Business, Rutgers, The State University of New Jersey, Newark, USA

Sarianna M. Lundan
Associate Professor of International Business Strategy, Maastricht University, The Netherlands and Associate Research Fellow, ETLA, the Research Institute of the Finnish Economy, Helsinki, Finland

Edward Elgar
Cheltenham, UK • Northampton, MA, USA
Contents

List of figures xv
List of tables xvi
List of boxes xviii
List of abbreviations xix
Acknowledgements xxi
Introduction to the second edition xxii

PART I  FACTS, THEORY AND HISTORY

1 Definitions and sources of data 3
  1.1 The nature of a multinational enterprise 3
    1.1.1 A working definition 3
    1.1.2 The distinctive features of an MNE 5
    1.1.3 Forms of foreign involvement by MNEs 7
  1.2 Measuring the extent and pattern of multinational activity 9
    1.2.1 Sources and types of data 9
    1.2.2 Deficiencies in the quality of statistical data on FDI 12
    1.2.3 Size and stability of foreign investment flows 15

2 The extent and pattern of foreign direct investment 17
  2.1 Introduction 17
  2.2 A general overview 17
    2.2.1 The position in the beginning of the 21st century 17
    2.2.2 General trends 19
  2.3 The leading outward investors 23
    2.3.1 The facts 23
    2.3.2 The significance of outward direct investment to home countries 27
  2.4 The leading inward investors 29
    2.4.1 The facts 29
    2.4.2 The significance of inward direct investment for host countries 33
  2.5 The balance between outward and inward direct investment 34
  2.6 The sectoral composition of outward and inward investment 35
    2.6.1 The main orders of economic activity 35
    2.6.2 The composition of FDI within broad industrial sectors 38
  2.7 Some country-specific differences in the geography of foreign investment 48
    2.7.1 Outward direct investment 48
    2.7.2 Inward direct investment 49
## Contents

2.8 The world’s leading MNEs 54
  2.8.1 The transnationality index 61
  2.8.2 The rise and decline of state-owned enterprises 61

3 The motives for foreign production 63
  3.1 Introduction 63
  3.2 Why do firms wish to engage in foreign production? 63
  3.3 The main types of foreign production 67
    3.3.1 The natural resource seekers 68
    3.3.2 The market seekers 69
    3.3.3 The efficiency seekers 72
    3.3.4 The strategic asset seekers 72
    3.3.5 Other motives for MNE activity 74
  3.4 The political economy of outward FDI 77
  3.5 Conclusions 78

4 Theories of foreign direct investment 79
  4.1 Introduction 79
  4.2 Theories of the MNE and MNE activity: 1960–76 82
    4.2.1 Prior to the 1960s 82
    4.2.2 The contribution of Hymer 83
    4.2.3 The product cycle 85
    4.2.4 Follow-up developments 86
    4.2.5 Other theoretical contributions: a selected view 89
  4.3 General explanations of MNE activity 93
    4.3.1 Internalisation theory 93
    4.3.2 The eclectic or OLI paradigm 95
    4.3.3 A macroeconomic approach to understanding MNE activity 109
  4.4 A note on an evolutionary approach to explaining MNE activity 111
  4.5 Issues resolved and unresolved by received theory 113

5 The determinants of MNE activity: the OLI paradigm revisited 116
  5.1 Introduction 116
  5.2 New theoretical perspectives 117
    5.2.1 Cooperative relationships and I advantages 117
    5.2.2 The resource-based view and dynamic O advantages 120
    5.2.3 The knowledge-based theory of the firm and dynamic O advantages 122
  5.3 Institutions in international business 123
    5.3.1 Why focus on institutions? 125
    5.3.2 Institutions in the international business literature 126
  5.4 Incorporating institutions into the OLI paradigm 129
    5.4.1 Institutions defined 129
    5.4.2 Ownership-specific advantages 131
    5.4.3 Locational factors 137
5.4.4 Internalisation factors 140
5.4.5 Propositions regarding institutional transfer and change 142
5.5 Conclusions 143

6 The emergence and maturing of international production: an historical excursion 145
6.1 Introduction 145
6.2 Colonising and merchant capitalism 146
6.3 The early 19th century: the forerunners of the modern MNE 149
   6.3.1 Introduction 149
   6.3.2 The individual entrepreneurs 150
   6.3.3 The finance capitalists 151
   6.3.4 The embryonic MNEs 152
6.4 From 1870 onwards: the modern MNE emerges 154
   6.4.1 New technological and organisational advances 154
   6.4.2 Market-seeking investments 157
   6.4.3 Resource-seeking investments 163
   6.4.4 Other investments 170
   6.4.5 The position prior to 1914: a résumé 172
6.5 The maturing of foreign production: 1918–39 176
   6.5.1 Introduction 176
   6.5.2 Market-seeking investments 179
   6.5.3 Resource-based investments 183
   6.5.4 Other investments 183
   6.5.5 The inter-war years: conclusions 184
6.6 The early post-war period: 1945–60 185
   6.6.1 Some facts 185
   6.6.2 Changes in the organisation of international business 186
   6.6.3 Changes in locational determinants 188
6.7 Towards the globalisation of production: 1960–2000 189
   6.7.1 Introduction 189
   6.7.2 Changes in organisational form 191
   6.7.3 Recent locational changes 194
6.8 Conclusions 196

PART II INSIDE THE MULTINATIONAL ENTERPRISE

7 Entry and expansion strategies of MNEs 201
   7.1 Introduction 201
   7.2 The concept of business strategy 202
   7.3 The value-added chain 205
      7.3.1 Some general principles 205
      7.3.2 Value-added networks and MNE activity 206
   7.4 Analysis of the internationalisation process 212
      7.4.1 Introduction 212
      7.4.2 Learning in the internationalisation process 212
7.4.3 A network approach to the multinational firm 213
7.4.4 Phase 1: exports and foreign sourcing 215
7.4.5 Phase 2: investment in marketing and distribution 218
7.4.6 Phase 3: foreign production of intermediate goods and services 221
7.4.7 Phase 4: deepening and widening of the value-added network 223
7.4.8 Phase 5: the integrated network multinational 227

7.5 Conclusions 231

8 The organisation of MNE activity: the internal network 233
  8.1 Introduction 233
  8.2 The organisational function: some general observations 234
    8.2.1 The need for an organisational structure 234
    8.2.2 Strategic responses to organisational needs 236
  8.3 Organisational structures of MNEs 238
    8.3.1 Some general points 238
    8.3.2 Organisational governance of domestic firms 239
    8.3.3 The impact of internationalisation on organisational governance 241
    8.3.4 The organisational structure of global firms 243
    8.3.5 Organisational structures: a résumé 248
  8.4 The locus of decision making 249
    8.4.1 Introduction 249
    8.4.2 An economic approach to decision making 250
    8.4.3 A strategic approach to decision making 252
  8.5 Affiliate roles and evolution 253
    8.5.1 Introduction 253
    8.5.2 Affiliate autonomy 254
    8.5.3 Knowledge transfer 256
  8.6 Conclusions 258

9 The organisation of MNE activity: the external network 260
  9.1 Introduction 260
  9.2 The spectrum of organisational modes: cooperation and competition 260
  9.3 Cooperative agreements: some theoretical and methodological considerations 264
    9.3.1 Transaction costs and resource attributes 264
    9.3.2 Some methodological issues 267
  9.4 Joint equity ventures 269
    9.4.1 Why do firms enter into joint ventures? 269
    9.4.2 When are joint ventures likely to succeed? 272
    9.4.3 Cultural and institutional influences in joint ventures 274
    9.4.4 Concluding remarks 275
  9.5 Non-equity cooperative agreements 277
    9.5.1 Buyer/seller agreements 277
    9.5.2 Strategic alliances 281
  9.6 The choice between acquisitions, alliances and greenfield investment 286
### PART III THE IMPACT OF MNE ACTIVITY

10 FDI, growth and development  
10.1 Introduction  
10.2 A new paradigm of development  
10.3 Institutions and economic growth  
10.3.1 Formal institutions  
10.3.2 Informal institutions and social capital  
10.4 Institutional quality and the ability to attract FDI  
10.4.1 Good governance  
10.4.2 Bad governance  
10.4.3 Conclusion  
10.5 Economic growth and inbound FDI  
10.5.1 How does FDI affect growth?  
10.5.2 Empirical evidence  
10.5.3 Conclusions  
10.6 The OLI paradigm revisited  
10.6.1 O-specific advantages  
10.6.2 L-specific advantages  
10.6.3 I-related advantages  
10.7 The investment development path  
10.7.1 Stages of the IDP  
10.7.2 Institutions and the IDP  
10.8 Conclusions  

11 Technology and innovatory capacity: the role of firms  
11.1 Introduction  
11.1.1 Direct and indirect effects  
11.1.2 Some stylised facts  
11.1.3 Some definitions and a taxonomy of technology  
11.2 The distribution of technological capacity  
11.2.1 R&D expenditures  
11.2.2 Training of scientists and engineers  
11.2.3 Patenting  
11.2.4 Royalties and licence fees  
11.3 The impact of MNEs on host country technological capacity  
11.3.1 Share of foreign affiliates in funding and performing R&D  
11.3.2 R&D intensity of foreign affiliates  
11.3.3 Spillovers to local firms  
11.4 The transfer and adaptation of technology by MNEs  
11.4.1 Market size and characteristics  
11.4.2 Factor availability and price differentials  
11.4.3 Institutional and cultural differences
11.5 Motivation, type and organisation of affiliate R&D 368
  11.5.1 Motivations for affiliate R&D 369
  11.5.2 Types of R&D performed by affiliates 370
  11.5.3 Organisation of affiliate R&D 372
11.6 The internationalisation of corporate R&D 374
  11.6.1 Diversification and the technological profiles of MNEs 374
  11.6.2 How international is corporate R&D? 376
11.7 External technology sourcing by MNEs 378
  11.7.1 Motivations for R&D alliances 378
  11.7.2 Trends in alliance activity 379
  11.7.3 Choice between alliances and acquisitions 381
11.8 Conclusions 381

12 Technology and innovatory capacity: the role of government 383
  12.1 Introduction 383
  12.2 The role of government in host countries 383
    12.2.1 The ability of governments to affect indigenous technological capacity 384
    12.2.2 Strategies of host governments 388
    12.2.3 Developing countries and technological capabilities 397
  12.3 The role of government in home countries 400
    12.3.1 Effects of asset-exploiting investment 401
    12.3.2 Effects of asset-augmenting investment 405
    12.3.3 FDI as a means of domestic technological restructuring 409
  12.4 Conclusions 411

13 Employment and human resource development 414
  13.1 Introduction 414
  13.2 Theoretical underpinnings 416
    13.2.1 What is distinctive about MNEs? A reprise 416
    13.2.2 A methodological note 419
  13.3 Employment in MNEs 420
  13.4 The employment effects of MNE activity on home countries 425
    13.4.1 Earlier empirical evidence on home country employment effects 428
    13.4.2 Recent empirical evidence on home country employment effects 430
    13.4.3 The effects of outsourcing 433
    13.4.4 Conclusions 435
  13.5 The employment effects of MNE activity on host countries 436
    13.5.1 Earlier empirical evidence on host country effects on employment and wages 438
    13.5.2 Wages, productivity and skills: recent evidence 441
    13.5.3 Conclusions 443
  13.6 Employment conditions 444
    13.6.1 The training practices of MNEs 444
### Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.6.2 Working practices and standards</td>
<td>450</td>
</tr>
<tr>
<td>13.6.3 Labour-management relations</td>
<td>452</td>
</tr>
<tr>
<td>13.7 ILO core labour standards</td>
<td>454</td>
</tr>
<tr>
<td>13.7.1 Sweatshops and EPZs</td>
<td>456</td>
</tr>
<tr>
<td>13.7.2 Child labour</td>
<td>458</td>
</tr>
<tr>
<td>13.8 MNEs and human resource development: some policy considerations</td>
<td>459</td>
</tr>
<tr>
<td>14 The balance of payments and the structure of trade</td>
<td>463</td>
</tr>
<tr>
<td>14.1 Introduction</td>
<td>463</td>
</tr>
<tr>
<td>14.2 A methodological note</td>
<td>464</td>
</tr>
<tr>
<td>14.2.1 Measuring the direct effects of MNE activity</td>
<td>464</td>
</tr>
<tr>
<td>14.2.2 Assessing the opportunity cost of external transactions by MNEs</td>
<td>466</td>
</tr>
<tr>
<td>14.3 Measuring the transactions of MNEs</td>
<td>469</td>
</tr>
<tr>
<td>14.3.1 Identifying and evaluating the transactions in the home and host countries: some analytical issues</td>
<td>469</td>
</tr>
<tr>
<td>14.3.2 Some empirical results: home countries</td>
<td>474</td>
</tr>
<tr>
<td>14.3.3 Some empirical results: host countries</td>
<td>478</td>
</tr>
<tr>
<td>14.4 Intra-firm trade</td>
<td>482</td>
</tr>
<tr>
<td>14.4.1 The determinants of intra-firm trade</td>
<td>482</td>
</tr>
<tr>
<td>14.4.2 Empirical evidence of the extent of intra-firm trade</td>
<td>484</td>
</tr>
<tr>
<td>14.4.3 The implications of intra-firm trade</td>
<td>489</td>
</tr>
<tr>
<td>14.5 MNEs and the structure of trade</td>
<td>490</td>
</tr>
<tr>
<td>14.5.1 The distribution of MNE activity across sectors</td>
<td>491</td>
</tr>
<tr>
<td>14.5.2 The export intensity of foreign affiliates and indigenous firms</td>
<td>493</td>
</tr>
<tr>
<td>14.6 A policy footnote</td>
<td>496</td>
</tr>
<tr>
<td>14.6.1 Macroeconomic policies and MNEs</td>
<td>496</td>
</tr>
<tr>
<td>14.6.2 The stability of the global financial system</td>
<td>498</td>
</tr>
<tr>
<td>14.7 Conclusions: the evolution of trade and FDI linkages</td>
<td>500</td>
</tr>
<tr>
<td>15 Market structure, performance and business practices</td>
<td>503</td>
</tr>
<tr>
<td>15.1 Introduction</td>
<td>503</td>
</tr>
<tr>
<td>15.2 A conceptual framework</td>
<td>504</td>
</tr>
<tr>
<td>15.3 MNEs and allocative efficiency</td>
<td>506</td>
</tr>
<tr>
<td>15.3.1 Inter-sectoral efficiency</td>
<td>507</td>
</tr>
<tr>
<td>15.3.2 Intra-sectoral efficiency</td>
<td>511</td>
</tr>
<tr>
<td>15.3.3 Effects on the home country</td>
<td>513</td>
</tr>
<tr>
<td>15.3.4 Conclusions</td>
<td>516</td>
</tr>
<tr>
<td>15.4 MNEs and technical efficiency</td>
<td>517</td>
</tr>
<tr>
<td>15.4.1 Evidence of productivity gaps</td>
<td>518</td>
</tr>
<tr>
<td>15.4.2 The impact of acquisitions on productivity</td>
<td>523</td>
</tr>
<tr>
<td>15.4.3 Evidence of profitability gaps</td>
<td>524</td>
</tr>
<tr>
<td>15.5 MNEs and market structure</td>
<td>530</td>
</tr>
<tr>
<td>15.5.1 Market concentration</td>
<td>531</td>
</tr>
<tr>
<td>15.5.2 Product differentiation</td>
<td>537</td>
</tr>
</tbody>
</table>
17.4.3 Indirect economic effects of TPM 634
17.4.4 Challenges for the future 635
17.5 Conclusions 635

18 Political, cultural and social responsibility issues 637
18.1 Introduction 637
18.2 MNEs and sovereignty 638
  18.2.1 Economic welfare and sovereignty 638
  18.2.2 Economic autonomy and/or independence 639
18.3 MNEs and strategic interests 642
  18.3.1 National security 643
18.4 The cultural and institutional influence of MNEs 647
18.5 MNEs and corporate social responsibility 649
  18.5.1 Introduction 649
  18.5.2 The ‘business case’ for social responsibility 650
  18.5.3 Whose standards should apply? 653
  18.5.4 Evidence on the contribution of MNEs to social issues 655
  18.5.5 Limits to the market for virtue 658
18.6 Conclusions 660

PART IV IMPLICATIONS FOR POLICY

19 Governments and MNE activity: the unilateral response 665
19.1 Introduction 665
19.2 Some theoretical issues 666
  19.2.1 A further application of the OLI paradigm 666
  19.2.2 A schematic framework 668
  19.2.3 A bargaining model 670
19.3 Interaction between host governments and MNEs 674
  19.3.1 The changing scenario over the past 40 years 674
  19.3.2 Policies specifically directed to affect inward direct investment 681
  19.3.3 General policies of host governments as a consequence of the growth of inward direct investment 688
19.4 Actions of home governments towards outward direct investment 691
19.5 The changing political economy of foreign investment 694
  19.5.1 Sovereignty at bay in the digital economy 694
  19.5.2 States, firms and civil society 696
19.6 The case of extra-territoriality: how might home/host differences be reconciled? 697
  19.6.1 Introduction 697
  19.6.2 Export embargoes 698
  19.6.3 Application of anti-trust policy 700
  19.6.4 Responsibility for human rights violations 702
  19.6.5 Other areas of conflict 703
19.7 Conclusions 704
20 Governments and MNE activity: the multilateral response 707

20.1 Introduction 707

20.2 Multinational actions to assist the bargaining power of host countries 708

20.2.1 Collective action by countries 708

20.2.2 Assisting national governments to re-evaluate their domestic policies 709

20.2.3 Codes and guidelines 710

20.2.4 A new international governance structure? 712

20.3 Collective investment supporting or market-facilitating schemes 712

20.4 Regional integration 714

20.4.1 Introduction 714

20.4.2 The determinants of the international allocation of economic activity 715

20.4.3 The role of MNEs in influencing the international allocation of activity 717

20.4.4 Recent efforts at regionalisation 719

20.4.5 Regional agreements and the multilateral system 721

20.5 Setting the conditions for international investment: the role of multilateral institutions 722

20.5.1 Investment-related measures under the WTO 722

20.5.2 The prospects for a multilateral agreement on investment 726

20.5.3 Commitments under the Kyoto protocol 728

20.6 Conclusions: towards a new multilateral governance 730

PART V LOOKING AHEAD

21 The future of MNEs in a global economy 735

21.1 Introduction: the five stages in the evolution of the global economy 735

21.1.1 Stage 1: up to 1914 735

21.1.2 Stage 2: Inter-war years 736

21.1.3 Stage 3: 1945 to late 1960s 737

21.1.4 Stage 4: from late 1960s to mid-1980s 738

21.1.5 Stage 5: mid-1980s to date 739

21.2 The determinants of international production: a reprise 740

21.3 Contemporary developments 742

21.3.1 Technological advances 742

21.3.2 Economic development 745

21.3.3 New organisational forms 748

21.3.4 The role of government 750

21.4 Challenges for scholarship in the 21st century 758

21.5 Conclusions 761

Notes 765

References 817

Index 891
Figures

0.1 Analysing the role of MNEs in the global economy: a conceptual outline xxiv
7.1 The value chain: four possible cases 210
7.2 The possible evolution of an MNE 216
8.1 Four types of MNE organisational structure 240
10.1 Some dynamics of the OLI paradigm from the perspective of an MNE 319
16.1 The direct and indirect effects of MNE entry on a host country 552
19.1 The MNE–home/host country relationship 669
19.2 MNEs and host countries – a bargaining framework 671
## Tables

2.1 The significance of MNEs in the global economy 19
2.2 Sales and purchases of cross-border M&As by industry, 1990–2005 21
2.3 Outward stock of FDI by major home countries and regions 24
2.4 Outflows of FDI from major home countries and regions 25
2.5 Outward stock of FDI for selected developing countries and transition economies 26
2.6 Inward stock of FDI by major host countries and regions 31
2.7 Changes in the sectoral composition of the stock of outward FDI of investing countries, 1975–2003 37
2.8a Industrial distribution of outward FDI stock for selected developed economies, 2003 40
2.8b Industrial distribution of outward FDI stock for selected developing and transition economies, 1997–2003 42
2.9a Industrial distribution of inward FDI stock for selected developed economies, 2003 44
2.9b Industrial distribution of inward FDI stock for selected developing and transition economies, 1997–2004 46
2.10a Geographical distribution of the outward FDI stock of selected developed economies 50
2.10b Geographical distribution of the outward FDI stock of selected developing economies 52
2.11 The world’s top 50 non-financial MNEs ranked by foreign assets, 2004 55
2.12 The world’s top 50 non-financial MNEs from developing countries ranked by foreign assets, 2004 58
4.1 Types of international production: some determining factors 104
4.2 Some illustrations of how OLI characteristics may vary according to country-, industry- and firm-specific circumstances 106
5.1 Incorporating institutional assets into the eclectic paradigm 135
6.1 Estimated stock of accumulated FDI by country of origin, 1914–1960 174
6.2 Estimated stock of accumulated FDI by recipient country or area, 1914–1960 175
9.1 A typology of cross-border cooperation modes 261
10.1 Stages of economic development 332
11.1 Gross domestic expenditure on R&D as a percentage of GDP, 1981–2005 346
11.2 First university degrees and share of S&E degrees in selected countries, 1975–2004 350
11.3 Share of S&E fields in doctoral degrees in selected countries, 2002 352
11.4 Number of triadic patent families and share (of OECD total) of countries in patent families 355
### Tables

11.5 Payments and receipts of royalties and licence fees by MNE affiliates in selected host countries and affiliate share in host country total 357

11.6 R&D expenditures of foreign affiliates as a percentage of host country total in selected developed and developing countries, 1993–2004 359

13.1 Affiliate employment in host country manufacturing and affiliate share of manufacturing and total employment 422

13.2 Employment in foreign affiliates of home-based MNEs and their share of total home country employment 423

13.3 Selected indicators of the importance of MNE affiliates in host economies 424

14.1 The US balance of payments 472

14.2 Share of foreign MNE affiliates in the trade of selected host countries and intra-firm trade as a percentage of affiliate trade 485

14.3 Share of intra-firm trade in goods by US affiliates abroad and foreign affiliates in the US 486

14.4 Cross-border trade, intra-firm trade and affiliate sales in US services; royalties and licence fees 488
Boxes

4.1 The eclectic (OLI) paradigm of international production 101
9.1 Some reasons for concluding cross-border strategic business alliances 283
10.1 Host country determinants of FDI 325
15.1 Selected restrictive business practices addressed by competition law 546
16.1 Types of linkage benefits 574
17.1 Methods of transfer pricing 631
18.1 The OECD Guidelines for Multinational Enterprises 655
18.2 The principles of the UN Global Compact 656
19.1 Types of investment incentives 682
19.2 Categories of performance requirements 685
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEAN</td>
<td>Association of South East Asian Nations</td>
</tr>
<tr>
<td>BEA</td>
<td>Bureau of Economic Analysis (US)</td>
</tr>
<tr>
<td>BIT</td>
<td>Bilateral investment treaty</td>
</tr>
<tr>
<td>CEO</td>
<td>Chief executive officer</td>
</tr>
<tr>
<td>CEPR</td>
<td>Centre for Economic Policy Research (London)</td>
</tr>
<tr>
<td>CIS</td>
<td>Commonwealth of Independent States</td>
</tr>
<tr>
<td>CSR</td>
<td>Corporate social responsibility</td>
</tr>
<tr>
<td>EC</td>
<td>European Community</td>
</tr>
<tr>
<td>EPZ</td>
<td>Export processing zone</td>
</tr>
<tr>
<td>ESP</td>
<td>Environment/systems/policy</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign direct investment</td>
</tr>
<tr>
<td>FTA</td>
<td>Free trade agreement</td>
</tr>
<tr>
<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross domestic product</td>
</tr>
<tr>
<td>IB</td>
<td>International business</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and communication technology</td>
</tr>
<tr>
<td>IDP</td>
<td>Investment development path</td>
</tr>
<tr>
<td>IIA</td>
<td>International investment agreement</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Office</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>IPA</td>
<td>Investment promotion agency</td>
</tr>
<tr>
<td>IPR</td>
<td>Intellectual property rights</td>
</tr>
<tr>
<td>IRS</td>
<td>Internal Revenue Service (US)</td>
</tr>
<tr>
<td>IT</td>
<td>Information technology</td>
</tr>
<tr>
<td>JV</td>
<td>Joint venture</td>
</tr>
<tr>
<td>LDC</td>
<td>Less developed country</td>
</tr>
<tr>
<td>M&amp;A</td>
<td>Merger and acquisition</td>
</tr>
<tr>
<td>MNE</td>
<td>Multinational enterprise</td>
</tr>
<tr>
<td>NAFTA</td>
<td>North American Free Trade Area</td>
</tr>
<tr>
<td>NBER</td>
<td>National Bureau of Economic Research (US)</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organisation</td>
</tr>
<tr>
<td>NIC/NIE</td>
<td>Newly industrialising country/economy</td>
</tr>
<tr>
<td>NIS</td>
<td>National innovation system</td>
</tr>
<tr>
<td>NPV</td>
<td>Net present value</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OEM</td>
<td>Original equipment manufacturer</td>
</tr>
<tr>
<td>OLI</td>
<td>Ownership/location/externalisation</td>
</tr>
<tr>
<td>OPEC</td>
<td>Organisation of Petroleum Exporting Countries</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>PPP</td>
<td>Purchasing power parity</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research &amp; development</td>
</tr>
<tr>
<td>RCA</td>
<td>Revealed comparative advantage</td>
</tr>
<tr>
<td>RTA</td>
<td>Revealed technological advantage</td>
</tr>
<tr>
<td>SIC</td>
<td>Standard industrial classification</td>
</tr>
<tr>
<td>SME</td>
<td>Small and medium-sized enterprise</td>
</tr>
<tr>
<td>SOE</td>
<td>State-owned enterprise</td>
</tr>
<tr>
<td>TFP</td>
<td>Total factor productivity</td>
</tr>
<tr>
<td>TNC</td>
<td>Transnational corporation</td>
</tr>
<tr>
<td>TNI</td>
<td>Transnationality index</td>
</tr>
<tr>
<td>TPM</td>
<td>Transfer price manipulation</td>
</tr>
<tr>
<td>TRIMs</td>
<td>Trade-related investment measures</td>
</tr>
<tr>
<td>TRIPs</td>
<td>Trade-related aspects of intellectual property rights</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>UNCTC</td>
<td>United Nations Centre on Transnational Corporations</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNIDO</td>
<td>United Nations Industrial Development Organisation</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organisation</td>
</tr>
</tbody>
</table>
Acknowledgements

It gives us great pleasure to recognise the help of many people in the preparation of this volume. Though appearing under our names, it is very much a compendium of the scholarly thinking and writings of many colleagues, who, over many years, have helped fashion our own views and ideas. We have done our best to refer to and acknowledge their contributions to international business research. If we have failed to refer to some important books or papers that they have written, we hope the authors will accept our apologies.

We particularly wish to acknowledge several colleagues who have read drafts of specific chapters, and provided us with their valuable comments. These are Christian Bellak, Douglas van den Berghe, Tony Corley, Geoff Jones, Ans Kolk, Joanna Scott-Ken nel and Mira Wilkins. We would also like to thank other colleagues who have shared their views and contributions on particular topics, notably, Jean Boddewyn, John Cantwell, Jean-François Hennart, Rajneesh Narula, Dennis Rondinelli and Alain Verbeke, and others, including Lorraine Eden, Peter Gray and Karl Sauvant, who have been supportive of our efforts in one way or another. We also extend our thanks to the Division on Investment, Technology and Enterprise Development (DITE) at UNCTAD, and specifically to Masataka Fujita and Shin Ohinata. All errors, omissions and misunderstandings, relating to things or people, remain our own.

Finally, and most importantly, we would like to express our deepest gratitude to our families, John to his wife Christine, and Sarianna to her partner Minna, whose support has made the entire process possible.

John H. Dunning and Sarianna M. Lundan
Reading and Maastricht, May 2007
Introduction to the second edition

In the decade and a half since the initial publication of this book, the field of international business has witnessed a considerable rise in scholarly interest. Nowhere is this more clearly seen than in the rapidly growing number of new journals and articles dealing with issues related to the interconnections between trade and foreign direct investment (FDI), multinational enterprise (MNE) strategy and structure, and the impact of FDI on competitiveness, growth and development. This wealth of new research presents a considerable challenge to anyone wishing to present an overview of the contemporary issues and methodologies germane to an analysis of the global operations of firms. A rough count suggests that up to 12,000 such articles have appeared in a wide range of journals during the past decade or so; while a very rough estimate of the scholarly monographs relevant to international business numbers around 500 volumes in the same period.

It follows from this that selectivity in presenting the research findings of the past decade or so is an essential precondition to the success of the new edition of this book. In our case, this process of selection has resulted in our incorporating a set of new articles and books that we believe represents the most influential writings on the theory of foreign direct investment and the multinational enterprise; the economic impact of MNE activity on the national states in which they operate; the burgeoning literature on the knowledge-seeking activities of firms; and of the role and decision-making functions of their foreign affiliates. The areas where we feel our selection process has not been as robust, and which are undeniably underrepresented in this volume, include particularly those of human resource management and cross-cultural management inside the multinational firm. While excellent work has been produced in this area, and we do provide references to this literature, our discussion is mainly based on economic argumentation at a meso- or macroeconomic level, and we have largely left it to the scholars in organisation science and management to synthesise their views of the MNE from the inside.

Several volumes have been published in the past decade that have evaluated the current state of international business (IB) research, and have sought to map its direction for the future. The most extensive and ambitious of these, entitled International Business: An Emerging Vision (Toyne and Nigh, 1997) contained a collection of papers presented at a conference, held at the University of South Carolina in 1992. The conference brought together an influential group of scholars for the express purpose of defining the domain of IB research. There have also been several compendia of influential papers published, among which are The Oxford Handbook of International Business (Rugman and Brewer, 2001) and the four-volume collection International Business: Critical Perspectives on Business and Management (Rugman, 2002). Finally, we would mention the 20 volumes published in the United Nations Library on Transnational Corporations series, which contain some of the seminal contributions to the scholarly literature on all aspects of the activities of MNEs. Among others, these works have served as a guideline for the range of issues and sources to be covered in this updated volume.
Trying to define the domain of IB as a field of research is a longstanding preoccupation of scholars. There are currently two dominant variants; the first sees IB as a discipline in its own right, alongside economics, finance, accounting, organisation and marketing, while the second views it as a particular application of the existing core subjects. We view the arena of IB as comprising a unique combination of topics and methodologies that seeks to understand the forms and consequences of one of the distinguishing features of the global economy, namely, the behaviour and activities of enterprises which own, control or influence value-adding activities outside their national boundaries. The endeavour to better understand the global economy is inherently interdisciplinary, and our attempt to do this, as was the case in the first edition, is to cover the range of issues and methodologies we believe add to our understanding of the behaviour of MNEs. While we welcome the application of a functional perspective to specific issues related to the MNE, we see our contribution, and more generally, that of the study of IB, as the synthesis of various strands of research to explain the broad patterns of activity by international companies, and the interaction between these activities and the individuals and organisations, including governments, most affected by it. If IB research is to offer no more than a new area of application to functionally orientated research, its unique contribution to our knowledge and understanding is likely to be relatively minor. Therefore, by widening the scope of our inquiries to encompass related areas of study, and by incorporating the work of a large number of scholars in different functional fields, we hope to offer a richer understanding of the interactions between MNEs and the various stakeholder groups with which they interact in their home and host economies, and the global economy at large.

The organisation of this book follows the outline of the first edition with only moderate modifications to structure and form. In terms of content, all the chapters have been thoroughly updated and amended to reflect changes in the global economy and the thrust of scholarly interest. Chapters 5, 10 and 21 are entirely new, while four others – Chapters 13, 16, 17 and 18 – have been comprehensively rewritten to reflect important new areas of research. Furthermore, our analysis builds on and extends the work of the eminent economist Douglass North concerning the ways in which both formal and informal institutions combine to create the ‘rules of the game’ in an economy. Consequently, the impact of institutions on the determinants and effects of MNE activity is a recurring theme in the new edition. Figure 0.1 presents the structure of the book in diagrammatic form.

Part I introduces the eclectic paradigm (or the OLI paradigm – ownership/location/internalisation – as it is sometimes called) as the conceptual framework that is applied throughout this volume. It is specifically through the application of this unifying paradigm that we try to achieve a degree of consistency and coherence in the exposition that might otherwise be lost, given the range of issues touched upon in this work. Motivated by our belief in the value of an institutionally grounded analysis, in Chapter 5 we set out a revised and extended form of our analytic paradigm, which we first introduce in Chapter 4. This framework sets the tone of our thinking for the rest of the volume. In addition to explaining the theoretical underpinnings of this conceptual framework, we also offer extensive evidence in tabular form on the patterns of MNE activity, as well as an excursion, in Chapter 6, into the history of its antecedents. This excursion is placed in Part I, partly because it provides the basis not only for understanding the patterns and economic importance of FDI and other forms of MNE activity today, but also because it provides an example of the application of the framework that will be used throughout the book.
Thus we would hope that while the non-specialist reader may not be as interested in the theoretical or analytical underpinnings of the eclectic paradigm, the reader may nonetheless wish to understand its basic foundations, and see it applied to explain the evolution and changing structure of FDI and MNE activity; as well as consulting the tables portraying its industrial and geographic patterns in the global economy.

In Part II we move from discussing the theory of foreign production (and, by extension, that of MNE activity) to considering the changes in the strategy and structure of international firms that have become the focus of interest of so many of our colleagues, particularly in the areas of organisation and management. In this part, we discuss the different

---

**Figure 0.1 Analysing the role of MNEs in the global economy: a conceptual outline**

---

Thus we would hope that while the non-specialist reader may not be as interested in the theoretical or analytical underpinnings of the eclectic paradigm, the reader may nonetheless wish to understand its basic foundations, and see it applied to explain the evolution and changing structure of FDI and MNE activity; as well as consulting the tables portraying its industrial and geographic patterns in the global economy.

In Part II we move from discussing the theory of foreign production (and, by extension, that of MNE activity) to considering the changes in the strategy and structure of international firms that have become the focus of interest of so many of our colleagues, particularly in the areas of organisation and management. In this part, we discuss the different
motives driving firms to engage in foreign value adding activity, namely resource-seeking, market-seeking, efficiency-seeking and strategic asset-seeking investment, as well as explanations for the different internationalisation processes of firms. New to the second edition are sections in Chapters 8 and 9 that deal with the structural changes MNEs have undergone, from the transnational solution of Bartlett and Ghoshal (1989) to the metanational network structure (Doz et al., 2001). Specifically, Chapter 8 covers contemporary research topics such as knowledge management and relational interactions within MNEs, the different roles that foreign affiliates acquire in the multinational network, and the degree of autonomy afforded to them by the parent company. This discussion of the internal network of the multinational is complemented by Chapter 9, which deals with the changing configuration of the external relationships of the MNE. Such a network consists of the MNE’s interaction with other organisations, which may range from a joint venture involving equity participation, to a long-term relationship with a complex of suppliers, or a strategic research alliance with no ownership involvement.

Following our review of the changes in the organisation and structure of the MNE, in Part III we move on to evaluate the impact of the activities of MNEs on the home and host countries in which they operate, as well as on various stakeholder groups in these countries. We begin our analysis in Chapter 10 by examining the evidence that has emerged over the past decade or so on the extent to which institutional factors have had an impact on the ability of countries to attract FDI, and to derive a sustained benefit from it. We also revisit our theoretical framework to explicitly evaluate the effect of MNE strategies on the evolution of economic and social change in home and host countries and vice versa. However, while this evidence tells us something about the macro-level impact of FDI, it does not reveal much about how the beneficial or detrimental effects have come about. Consequently, from this macro-level foundation, we then move on to consider micro-level evidence, and examine the direct and indirect ways in which FDI, and MNE activity in general, have made an impact on the goals and aspirations of home and host countries.

We begin the micro-level analysis by considering the important role played by MNEs in technology transfer. Specifically, Chapters 11 and 12 present evidence of the globalisation of technological capability, and discuss the policy implications of the internationalisation of corporate research and development (R&D) on both the home and host countries. Chapters 13, 14 and 15 then consider the impact of MNEs on employment, the balance of payments and market structure. Among other topics, we review new evidence on the link between wages, productivity and skills, and consider the issues related to the application of International Labour Office (ILO) core labour standards in developing host countries. In these chapters, we also consider the importance of intra-firm trade and MNE activity on host country market structures; and examine, in some detail, the implications of the productivity gap between foreign and domestic firms. In some sense, Chapter 16 is where the five previous chapters come together, as it concentrates on the spillover, or indirect, effects arising from MNE activity, which can only be assessed once the known direct effects are accounted for. We examine the specific conditions under which spillovers are most likely to emerge, and in doing so, pay particular attention to the formation of linkages with local firms. The following two chapters on taxation and transfer pricing (Chapter 17), and the cultural and social impact of MNEs (Chapter 18), begin to move us towards the issues of public policy and MNE–government relations, which are formally considered in Part IV. However, the focus in these chapters is still on the evidence
related to the extent and structure of MNE activity, and its impact on the home and host countries. It should also be noted that since much more evidence is available on the effects pertaining to host rather than home countries, our discussion also reflects this balance.

Since Part III concentrates on reviewing the extant empirical evidence concerning the effects of MNE activity, these chapters explore the important research findings at some length, and this, coupled with the range of issues covered, makes it the longest part of the volume. Identifying the impact of MNE activity on any particular dimension of the home or host country economy is often fraught with difficulty, and not surprisingly, we find many contradictory results in the literature. However, simply reporting that some studies have found a positive relationship between two or more variables, while others have found a negative one, would hardly be sufficient, and consequently we devote some time to trying to understand why such results arise. In doing so, we pay particular attention to some important methodological issues that have arisen in the literature, including the use of partial models, where missing variables might account for the observed results, the possibility of reverse causality, and the consequences of a failure to articulate an appropriate counterfactual against which the evidence can be assessed. Although such issues may not be of great interest to every reader, they form an important part of our discussion, since they, along with the size and composition of the research samples, influence how the results we present should be interpreted.

Having considered the motives, form and impact of MNE activity, Part IV addresses the national and supranational policy responses to such activity. For quite some time, there has been an ongoing academic discussion of the extent to which MNEs have become more powerful than nation states, and whether and how they may have encroached on the sovereignty of national governments, particularly in connection with institutional reform issues such as health and environmental standards. Since the first large-scale protests at the World Trade Organisation (WTO) meeting in Seattle in 1997, and the emergence of the modern anti-globalisation movement, issues concerning global governance have also become a permanent feature in the popular media, particularly in connection with the meetings of supranational organisations. Consequently, Part IV examines the emerging governance architecture of the global economy, where MNEs, along with civil society and supranational institutions, play a role in defining the ‘rules of the game’. Specifically, Chapter 19 is concerned with the relationship between the MNE and the host country, and it reviews the evidence on changing policies towards FDI, and the use of incentives to attract MNEs. Chapter 20 argues that MNE activity in the global economy can no longer be understood purely in terms of bilateral relationships, but rather requires that the institutional and political influence of MNEs themselves is accounted for, along with the role played by civil society and multilateral institutions such as the WTO. New areas of supranational regulation, such as that arising from the Kyoto protocol, and the evolving framework that covers intellectual property rights, are also briefly considered here.

Part V contains only one chapter. In Chapter 21 we take a brief look back at the history of the evolution of the MNE, and our evolving understanding of its impact on home and host countries. We conclude by identifying some promising avenues for future research, and by making some cautious predictions regarding the future evolution of the global economy, and of the role played by MNEs in it.
PART I

Facts, theory and history

This first part of the book consists of six chapters. Chapter 1 introduces the reader to the distinctive nature and form of MNEs, presents some key definitions, and goes on to describe some of the sources and shortcomings of the data used by scholars in their search to understand the causes and consequences of MNE activity in the global economy. Chapter 2 then surveys the extent, structure, growth and economic significance of FDI and MNE activity, over the last 40 years or so.

Chapters 3, 4 and 5 present the theoretical core of the volume. Chapter 3 identifies the motives for several kinds of MNE activity. The distinctions set out in this chapter are important ones, and are used throughout the rest of the book. Chapter 4 then surveys the various explanations of the growth of MNEs and MNE activity that have been put forward by economists and business analysts over the past 40 years. After a review of a group of theories to explain particular kinds of FDI or other aspects of MNE activity, more particular attention is given to three more general theories or paradigms. These include the eclectic or OLI paradigm of international production, which is the central analytical concept used throughout the volume. The chapter concludes by considering some of the lacunae in received theoretical thinking, and suggests some of the likely courses that such thinking might take in the future.

Chapter 5 concerns itself with two things. Its first task is to consider the implications for our theoretical framework of theoretical developments in the management and strategy fields, specifically those involving the resource-based view and the knowledge-based theory of the firm. The second, and main, contribution of this chapter is an examination of the importance of the theory of institutions advanced by Douglass North on theorising in international business, and how an institutional perspective can be incorporated into the eclectic paradigm. The final chapter of Part I examines some of the facts relating to the evolution of IB activity in the light of the theoretical framework we put forward. It traces the changing nature and value of the competitive advantages of firms and countries over the past century or more, and the way in which this has led to the growth of value-added activities of firms outside their national boundaries.
1. Definitions and sources of data

1.1 THE NATURE OF A MULTINATIONAL ENTERPRISE

1.1.1 A Working Definition

A multinational or transnational enterprise is an enterprise that engages in foreign direct investment (FDI) and owns or, in some way, controls value-added activities in more than one country.\(^3\) This is the threshold definition of a multinational enterprise (MNE), and one that is widely accepted in academic and business circles, by data-collecting agencies such as the Organisation for Economic Co-operation and Development (OECD), UNCTAD’s Division on Investment, Technology and Enterprise Development (DITE),\(^4\) and by most national governments and supranational entities. At the same time, some scholars and practitioners have found it desirable to distinguish between the universe of enterprises undertaking foreign-owned production, and those that have substantial overseas commitments and/or pursue an integrated managerial and/or organisational strategy towards their foreign and domestic operations. In particular, business analysts like to distinguish between MNEs that govern a group of largely independent multidomestic foreign subsidiaries, each of which produces goods and services mainly for the local market, and those that treat their affiliates as an important part of a regionally or globally coordinated network of asset-creating and asset-exploiting activities.

The literature has identified several criteria for assessing the degree or intensity of an enterprise’s multi- or transnationality.\(^5\) These include:

1. the number and size of foreign affiliates or associate companies it owns or exercises control over;
2. the number of countries in which it owns or in some way controls value-added activities such as mines, plantations, factories, sales outlets, banks, offices and hotels;
3. the proportion of its global assets, revenue, income or employment accounted for by its foreign affiliates;
4. the degree to which its management or ownership is internationalised;
5. the extent to which its higher-value activities, for example, research and development (R&D), are internationalised. *Inter alia*, this measure is intended to capture the *quality* or *depth* of foreign production; and the contribution of foreign affiliates to accessing, or directly creating, new knowledge;
6. the extent and pattern of the systemic advantages arising from its governance of, and influence over, a network of economic activities located in different countries; and
7. the extent to which responsibility for the creation and usage of institutions and assets, as well as decision making concerning financial and marketing issues, are devolved to foreign affiliates.
While each of these criteria helps delineate different types of FDI and international production, there is no escaping the fact that the choice of the point at which an enterprise is deemed to become a multinational – not to mention a regional and/or global corporation – is bound to be arbitrary. Moreover, the multi- or transnationality of an enterprise is best considered as a multidimensional, rather than a unidimensional concept. Since no single index of international activity is likely to capture the relevant dimension for every firm, most studies nowadays tend to employ a composite measure representing, for instance the average of all foreign assets as a proportion of global assets, foreign employment as a proportion of global employment, and foreign sales as a proportion of global sales.

The last combination has been used by UNCTAD since 1995 to construct its Transnationality Index (TNI) of the leading MNEs, which is published each year as part of the *World Investment Report*. Such an index allows us to differentiate, for example, between a firm such as Bowater, a Canadian pulp and paper company that in 2005 had 58% of its production capacity located abroad, but with only 5% located outside of the US, and a firm like Unilever, which had a presence in 150 countries around the world, and derived 63% of its turnover from outside of Europe. While the next chapter will present aggregate evidence on the overall increase in economic activity that crosses borders in the global economy, it should be noted that the level of multinationality of the firms that make up these changes varies considerably, both in terms of the geographic spread of activities, as well as the degree to which their activities are integrated across borders. For example, based on data from UNCTAD (2006), of the 100 largest non-financial MNEs in the world in 2004, 84 recorded a TNI of more than 40%. MNEs such as AstraZeneca, Unilever, Nestlé, Philips and Vodafone each had a TNI ratio of 80% or more. Moreover, on average, and for most MNEs – particularly non-US MNEs – this ratio has risen markedly since the early 1960s. Increasingly, the global competitiveness of the world’s leading industrial and service MNEs is a direct result of their foreign operations, including the foreign sourcing of intermediate goods and knowledge (Dunning and Lundan, 1998; Dunning and McKaig-Berliner, 2002).

Three other attempts to construct similar indices are worthy of mention. The first is that by van Tulder et al. (2001) who, in their SCOPE project, collected similar ratios in respect of 200 of the world’s largest enterprises, and also on the extent to which (a selection of) European and non-European MNEs were increasing or reducing the European share of their assets and sales. Using data for 1993 and 1995, the SCOPE project found that while non-European (mainly US and Japanese MNEs) marginally increased their regional share, the opposite was the case for European firms.

The second notable effort is by Rugman (2001, 2005), who has devoted his attention to measuring the extent to which the sales of the world’s largest Triad-based MNEs are contained within their home region (that is, North America, Europe and Asia), or are spread across two or three regions. The precursor to this work was the Templeton Global Performance Index, which evaluated not just the degree of multinationality, but also the financial performance of the foreign operations of firms in the Fortune Global 500. The key finding of this study was that there was often a sizeable performance gap between a firm’s domestic and foreign activities – whether measured by revenue, assets or income – which suggested that there were limits to the ability of MNEs to undertake global strategies (Gestrin et al., 2000). In a later study, Rugman and Verbeke (2004b) found that only
nine of the 365 firms from the Fortune Global 500 for which data were available could be properly considered global, in so far as they had sales of at least 20% in each Triad region, and no more than 50% in any one region.

One criticism that can clearly be levelled against the Rugman measure of globalisation is that it limits attention to the geographic destination of the output of MNEs, and pays no attention to that of the sourcing of the inputs. Indeed, as Rugman and Verbeke (2004b, 2007) themselves acknowledge, the upstream activities of MNEs are likely to be more easily internationalised than are its sales and distribution. It is also the case that as the number of countries integrated into the global economy increases, the degree of globalisation of firms is likely to increase as well. This is, however, somewhat aside from the original point made by Rugman, which was that the home region is still likely to have a strong influence on corporate strategy, and that even when MNEs talk about being global, their decision making must be informed by the demands and opportunities present in their most important markets, and particularly so when the profitability of the foreign operations lags behind those in the home country.9

The third attempt to evaluate and to isolate the regional from the global spread of MNE activity is that by Dunning (2002a) who, drawing on the SCOPE data, directed his attention to considering the extent to which European MNEs engaged in value-added activities outside their home country, but still within Europe, as compared with the rest of the world. He found that in 1998, some 37% of the foreign-owned assets of 38 of the leading European MNEs were located outside Europe. In 12 of these companies the ratio exceeded 50%, with the pharmaceutical, food, drink and tobacco MNEs, and those from the UK, Switzerland and the Netherlands being the most globalised. However, in the case of two-thirds of European MNEs, the majority of their foreign assets were located elsewhere in Europe.

A rather different kind of dissatisfaction of confining the scope of an MNE to the foreign value-added activities it owns, is that many such companies also engage in a variety of cross-border non-equity cooperative ventures, for example, via licensing agreements, turnkey operations and strategic alliances, each of which may give them some degree of control or influence over the foreign value-added activities associated with these ventures. At the same time, MNEs are also increasingly participants in international networks of related economic activity involving, for example, suppliers and industrial customers, in which the transactional relationships between the members of the network, though less formally specified, are frequently, by custom or tradition, no less binding. Indeed, as MNE systems tend to increasingly concentrate on their core value-added activities, these arrangements are becoming increasingly important.10 Section 1.1.3 of this chapter takes up this point in more detail.

1.1.2 The Distinctive Features of an MNE

The MNE is one of several organisations that engage in international business. In particular, it has two near relations. The first is the international trading firm, like which it exchanges goods and services across national boundaries, but unlike which it transacts these internally before or after adding value to them from the assets it owns or controls in a foreign country. Second, like a domestic multi-activity or diversified firm, it engages in multiple economic activities,11 but unlike this type of firm, it
undertakes at least some of these in a country, or countries, other than the one in which
it is incorporated.

An MNE qua MNE has, therefore, two distinctive features. First, it accesses, organises
and coordinates multiple value-added activities across national boundaries and, second,
it internalises at least some of the cross-border markets for the intermediate products
arising from these activities. No other institution engages in both cross-border production
and transactions.

An MNE may be privately or publicly (that is, state) owned and managed. If the former,
its stock can be privately held by a small group of owner-investors, or widely held and
traded on a stock exchange. It may be a large diversified global corporation owning or
managing a network of activities in many countries or a single-product firm that operates
only one foreign marketing venture; it may be a private equity-managed firm (UNCTAD,
2006); it may be an entrepreneurial venture financed by immigrant capital (UNIDO,
2007); or it may be a born global venture (Hashai and Almor, 2004; Knight and Cavusgil,
2004). It may be a corporation whose foreign portfolio of assets dates back many years;
or it may be only recently established. Its assets may be owned and controlled by citizens
or institutions of a single country, nationally controlled but internationally managed and
owned, or internationally owned and controlled. In practice, most MNEs are nationally
controlled but internationally owned, meaning that while their top management still con-
sists mostly of home country nationals, their shareholders are spread across the globe.

Most MNEs can be readily identified as originating from a single country. For example,
ICI is easily identified as a British firm, Ford as a US firm, NEC as a Japanese firm, Volvo
as a Swedish firm, Siemens as a German firm, Samsung as a Korean firm, and Nokia as
a Finnish firm. Yet each of these MNEs has its shares quoted on a number of stock
exchanges throughout the world, and the membership of their board of directors is
multinational, while an increasing proportion of their value-added activity is undertaken
outside their home countries. Increasingly, too, the (regional) head offices of MNEs are
being relocated. More difficult is to identify the true nationality of ownership of an
MNE that is, itself, fully or partly owned by foreign interests. As global or regional inte-
gration increases, it is likely that these ‘spin-off’ or secondary MNE activities are also
likely to increase.

Indeed, the internationalisation of enterprises is reducing the significance of the
nationality of ownership as a feature influencing the contribution of such firms to
national economic welfare. Less and less is the competitiveness and growth of such MNEs
tied to their home country’s economic success or failure. From the perspective of a host
country, it is quite possible that a foreign-owned affiliate could be contributing more to
the upgrading of workforce skills, R&D and productivity than an indigenous company.
In 2006, 41% of the components of a Chevy HHR – a General Motors vehicle – was made
in the US and Canada, whereas 85% of the content of the Japanese-owned Toyota Sienna
was made in North America. And, as far back as 1989, Robert Reich (1990) had found
that more than one-third of Taiwan’s trade surplus with the US came from US corpora-
tions making or buying products there, and then selling or using them in the US. The same
corporate sourcing practices account for a substantial share of the US trade imbalance
with China today.

Furthermore, between 1994 and 2002, the research performed abroad by US firms as a
proportion of their global R&D effort rose from 11.5 to 13.2%; while in the case of
Swedish MNEs the respective proportions for 1995 and 2003 were 21.8 and 42.5% (UNCTAD, 2005c). At the same time, the share of host country R&D accounted by foreign affiliates has also risen from 11% in 1996 to 16% in 2002 in the case of developed countries, and from 2 to 18% in the case of developing countries (ibid.). Truly the ownership and location of innovatory activity are becoming increasingly separate from each other. Indeed, in some industrial sectors dominated by global producers, notably pharmaceuticals, autos and electronic goods, it is becoming increasingly difficult to distinguish between the nationality of the ownership of value-added activities in any meaningful way. Some implications of this fact are discussed in some detail in Parts III and IV.

1.1.3 Forms of Foreign Involvement by MNEs

Traditionally, the territorial expansion of a firm’s production outside its national boundaries has been achieved by the act of a foreign direct investment. FDI is different from foreign portfolio (or indirect) investment in two important respects. First, the former involves the transfer of a package of assets or intermediate products, which includes financial capital, management and organisational expertise, technology, entrepreneurship, incentive structures, values and cultural norms, and access to markets across national boundaries; the last involves only the transfer of financial capital.14 Second, unlike arm’s-length trade in assets and intermediate products, FDI does not involve any change in ownership; in other words, the power to control decision making over the use of the transferred resources remains in the hands of the investing entity. Put another way, while the indirect exchange of assets and intermediate products is organised by the market, the direct exchange is administered by, and within, investing hierarchies.

De jure, the boundaries of a uninational or MNE are determined by its ownership. In cases of shared ownership with another organisation – private or public – provided that it has a majority equity stake, it has a legal right to control all the decisions taken by the joint venture. Where it has a minority equity stake, it has, at best, a shared right. Yet most countries treat a foreign investment as direct whenever a single investing company is perceived able to exert a significant degree of control or influence over the management or organisation of a foreign company. Indeed, FDI is defined in the IMF (1993) Balance of Payments Manual, 5th edition (BPM5) as ‘investment that involves a long-term relationship reflecting a lasting interest of a resident entity in one economy (direct investor) in an entity resident in an economy other than that of the investor. The direct investor’s purpose is to exert a significant degree of influence on the management of the enterprise resident in the other economy’.15 Both the IMF and the OECD recommend a 10% stake for identifying direct investment. There is, none the less, as yet no firm international consensus on the minimum equity stake deemed necessary for such an effective voice, but for the majority of countries it is likely to vary between 10 and 25% of the total equity stake of an enterprise.16 Nor are the accounting systems used to compile direct investment data always directly comparable between countries.

Another complication is introduced by the increasing cross-border nature of the private equity market, which includes speculative investments such as hedge funds, but also different types of venture capital. The latter involve active oversight of management, and the provision of additional financial resources, advice and networking to assist the target
firms in reaching their growth targets. Due to the active involvement of the investors, and the degree of their equity share, it would be incorrect to class such investment as portfolio investment. At the same time, a typical time horizon of five to 10 years may not be considered indicative of a permanent controlling interest (UNCTAD, 2006:18). According to estimates made by UNCTAD, the share of collective investment funds in cross-border merger and acquisition (M&A) deals has grown from around 5% in the late 1980s to around 15% in the early 2000s.

Once one moves from control to influence as a criterion for delineating the boundaries of a firm, one opens up a Pandora’s box. There are as many instances of MNEs exerting very little de facto influence over the day-to-day decision making of their 100% owned affiliates, as there are of such enterprises with only a minority foreign shareholding exercising a substantial influence. And if influence or voice is the criterion, why confine attention to a minority equity investment? What of firms that engage in a keiretsu network of inter-firm cooperation? What of the cross-holding relationships in Germany between banks and industrial corporations? As later chapters in this volume will illustrate, companies that enter into sourcing agreements with firms in other countries may sometimes build into these agreements the right for the former to exercise substantial financial or operational control over the subcontractors. In many respects these agreements may be thought of as a form of quasi-internalisation; quasi-, in this instance, suggesting a partial, specified and time-limited control, unlike that stemming from an equity interest which is assumed to be total and without time limit.

The problem does not, however, end there. Even more difficult to handle are the cooperative alliances now being forged by firms to undertake specific functions. If Tata (an Indian corporation) agrees with TLF (a French corporation) for the latter to market its leather products in Europe, to whom are the sales credited? If Philips of the Netherlands and Siemens of Germany agree to share the cost and the fruits of R&D in computed tomography (CAT scan) equipment, how exactly are these allocated in their respective income statements? And what of the learning benefits likely to accrue to foreign affiliates as a result of being part of the biopharmaceutical cluster in New Jersey in the US?

It is but one step further to incorporating the influence of an MNE on its suppliers, customers and competitors. If an automobile assembly firm subcontracts its production of shock absorbers to an independent component supplier, and is the sole customer of that supplier, then in a very real sense, the latter might be thought to be controlled by the former. Similarly, if an aluminium fabricating firm is totally dependent on a single bauxite producer for its raw materials, then it might be said to be controlled by that firm. The domination of many Indian-based call centres by their large clients in the US and Europe is another example. Finally, in a variety of ways, a dominant MNE in a particular sector might be able to influence the strategy, performance and behaviour of its smaller competitors.

For these and more practical reasons (see Section 1.2.1) the approach in this volume is to define an MNE as an enterprise that engages in FDI and organises the production of goods or services in more than one country. In practice, many MNEs own or control a plurality of economic activities. It is also understandable that since foreign production is highly concentrated among the world’s largest firms, scholars often focus their attention on MNEs of a certain size, or with a minimum geographical spread of activities, or on
those that pursue particular strategies towards their domestic and foreign operations. At the same time, there is a growing consensus that the increasing number of minority joint ventures, cooperative alliances and contractual network relationships should be considered as part and parcel of an MNE’s sphere of influence and control.

1.2 MEASURING THE EXTENT AND PATTERN OF MULTINATIONAL ACTIVITY

1.2.1 Sources and Types of Data

In attempting to assess the extent and pattern of the activities of MNEs in the global economy, at first glance, several sources of data appear to be available. In practice, however, the choice is seriously constrained by the quality and comparability of the information that is regularly published. Naturally, which statistics are sought and used will depend on the purpose for which they are being collected, and the level of analysis being made. The informational requirements of organisational scholars are likely to be different from those of marketing scholars or economists, while those of the MNEs themselves are not likely to be the same as those of governments, supranational entities, labour unions or civil society. The data most appropriate for assessing the role of affiliates in host countries or sectors will be different from that needed to evaluate the impact of MNEs on the restructuring of the world economy. Assessing the impact of FDI on the quantity and quality of the world’s labour force will clearly require employment data. For evaluating their effects on the balance of payments, statistics on trade and investment flows, profits and dividends may be more relevant, while data on R&D expenditure and intra-firm technology payments may be a useful starting-point for assessing the contribution of MNEs to innovatory capacity.

At a more micro level, more detailed operational and financial data may be needed for an evaluation of particular foreign investment projects. However, as an indicator of the overall or sectoral economic significance of MNE activity, we believe that the most appropriate is the value added created by such firms outside their national boundaries, and more particularly, that part of the value added accruing to the investing or recipient countries. Throughout this volume, as far as possible, we shall be using this measure to analyse the interaction between the domestic and foreign production of MNEs, and of their impact on the economic welfare of the countries in which they operate.

In the first edition, we characterised statistical data on MNEs and their activities as fragmentary, variable in quantity and rarely comparable between countries, industries and firms, or over time. While many of these problems still persist on the national level, that is, in the agencies charged with the collection of data on foreign investment, typically in connection with preparing the national accounts and the balance of payments, the availability of basic data on the stocks and flows of inward and outward investment is much more readily available than it was just a decade and a half ago. For example, since 1991, UNCTAD has published the annual World Investment Report, one of the main purposes of which is to disseminate information on the extent and pattern of foreign investment and the activities of multinationals in a consistent format. In addition to this, UNCTAD also publishes the World Investment Directory,
covering each of the major economic regions of the world, have been published between 1992 and 2004.

The *World Investment Report* includes a core set of comparative (dollar-denominated) data tables on inward and outward investment stocks and flows and cross-border M&As that are compiled annually. At the same time, each report focuses on a specific topic, such as economic integration, employment, services and economic development to name a few. By contrast, the entries in the *World Investment Directory*, which cover one country at a time in a consistent format, provide a wealth of information on the extent and impact of MNE activity (expressed in the national currency), including FDI stocks and flows, and the sales, assets and employment of MNE affiliates, including those of home-based MNEs, as well as those of foreign MNEs. In recent years, reports on FDI have also begun to be published by Eurostat (2002) and the OECD (2002a), which have so far mainly concentrated on a subset of countries in the global economy.

In addition to these sources, basic balance of payments data are available from the IMF *Balance of Payments Statistics Yearbook*, while the International Labour Office regularly compiles a wide range of labour-related statistics. In addition, there are several national, international and industrial business directories, such as Dun & Bradstreet’s *Who Owns Whom?*, that identify the more important MNEs, together with their foreign affiliates classified by country of operation. Some estimates of future FDI flows and stocks, broken down by the main host regions of the world, are also contained in the annual publication *World Investment Prospects*, compiled by the Economist Intelligence Unit.

In addition to the printed editions of these reports, UNCTAD offers free access to nearly all of these key publications on the internet either in the form of downloadable files, or through an interactive database. Eurostat, the OECD and the IMF also provide access to their extensive data online, although the last two only in connection with a paid subscription. Consequently, while we still want to present the overall patterns of inward and outward investment in the next chapter, we have redesigned many of the data tables to provide more value added, particularly by including a longer time horizon, in the light of the basic information being available to anyone with an internet connection.

There are thus two primary and several secondary sources of data on MNEs and their activities. The primary sources are the enterprises themselves (or their affiliates) and the governments of the home and host countries in which they operate. Secondary sources include most international or regional economic agencies, including UNCTAD, the World Bank, the IMF, the ILO, the OECD and Eurostat, industrial and commercial trade associations, civil society groups and academic scholars.

Country-level data reveal that some governments, for example, those of Australia, Canada, Germany, Ireland, Sweden, the UK and the US, compile a fairly comprehensive range of statistics on inward and outward MNE activity, although most countries limit their data gathering to the outward and inward FDI stock (usually compiled irregularly on a survey or sample basis) and FDI flows (obtained largely from balance of payments statistics). Some recipient countries, and particularly those in which the affiliates of foreign MNEs play a significant role, distinguish between the contribution of the activities of domestic- and foreign-owned firms operating within their boundaries. Such data include the sales, employment, exports and imports, wages and profits, and sometimes R&D expenditures, of foreign affiliates. Again, problems of coverage and classification make it difficult to make meaningful cross-country comparisons, but such data as are
available do give a reasonable indication of the geographical and sectoral orientation of outward and inward direct investment, and the relative significance of such investment to home and host countries. Chapter 2 will present some of these statistics.

The most comprehensive data on the operations of home-based MNE affiliates abroad, as well as those of foreign affiliates in the home country, is collected by the Bureau of Economic Analysis (BEA) in the United States. Every year, detailed tables on the US outward direct investment position and the related capital and income flows appear in the Survey of Current Business. In addition, annual survey-based data on the operations of US parent companies and their foreign affiliates is published, including operating and financial data such as balance sheets, income statements, employment and compensation of employees, and trade and sales of goods and services. These are supplemented every five years by broader benchmark surveys, the latest of which was conducted in 2004. On the inward investment side, annual data are similarly published in the Survey of Current Business, with the latest benchmark survey having been conducted in 2002. In addition, detailed establishment data for the US affiliates of foreign MNEs may be obtained from a project that links the BEA's enterprise-level data with the Census Bureau's establishment-level data for all US firms.

An examination of the various available sources of data reveals that comprehensive and comparable statistics are available for only three indices of multinational activity, namely, the outward and inward foreign capital stock, the income earned on that capital stock and new investment flows. Some sectoral information on these variables and on the number of the affiliates of MNEs is also published in the annual World Investment Report, and by the major investing and recipient countries. For the 29 countries of the OECD, information on other input and output measures, such as employment, R&D expenditure, imports and exports, is available on the national level, but outside of this, it is better obtained from databases reproducing data supplied by the leading MNEs or their affiliates, such as Compustat or Worldscope. Data published in these databases vary in coverage and scope, but they tend to be concentrated on the information contained in the financial statements of the firms. At the end of the day, they are only as good as the statistics provided by the enterprises, and the ability of the compilers of the data sources to interpret them. Of course, there is a vast amount of other quantitative and qualitative information on the scope and pattern of the activities of MNEs, much of which is contained in the hundreds of books and reports, and thousands of papers and articles, written on this subject over the past 40 or more years.

Statistical facts on the non-equity involvement of, or collaborative alliances between, MNEs are even more difficult to obtain. Only a few countries (notably the US, the UK and Germany) publish details on the receipts and payments made for cross-border sales of technology and management, administrative and marketing services, or on the number of international non-equity agreements concluded. Most data so far published on M&As and strategic alliances have been compiled by banks, accountancy firms, business consultancies and academic scholars from information supplied by individual enterprises or derived from trade and financial directories, magazines and newspaper reports. However, some governments (for example, the UK and the US) and the European Commission now publish details about M&As involving foreign firms. Some industrial trade associations also collect information about the foreign activities of their member firms. Much useful data on the international operations of MNEs in the motor vehicles, pharmaceutical,
consumer electronics, petroleum, banking and insurance sectors are obtainable from such sources.

1.2.2 Deficiencies in the Quality of Statistical Data on FDI

The first thing to note about the statistical data on FDI is what it does and does not measure. Since data on FDI stocks and flows rely on balance of payments definitions, these data do not represent the total assets or extent of activity in a foreign affiliate, but rather they represent the proportion of financing for the foreign affiliate that originates in the home country of the parent. In most cases the affiliate receives financing from other sources as well. This is, of course, not a shortcoming of the data as such, but simply an acknowledgement that FDI stocks and flows are but a proxy for the economic activities undertaken by MNEs, which increasingly involve other forms of financing, and other non-ownership-based (contractual) activities as well.29

It is also the case that even if we take FDI data for what they represent, some cross-border capital flows reflect distortions in the market, rather than real economic activity. This is the case with the so-called ‘round-tripping investment’ between China and Hong Kong and Russia and Cyprus, for example, which aims to take advantage of incentives offered to foreign investors.30 It is also the case with FDI undertaken via holding companies in countries such as the British Virgin Islands or Bermuda, or indeed, in countries such as the Netherlands and Luxembourg, which are used as tax havens by MNEs (Desai et al., 2006a; UNCTAD, 2006).

Quite apart from differences in the coverage of data published by national governments – for example, data on the foreign capital stock varies from an estimated 85 to 95% coverage of all firms in the case of the US, Germany and the UK, to a much lower proportion in the case of many developing countries – there are several reasons for exercising considerable caution in the interpretation of published statistics. For example, according to the figures compiled by UNCTAD, the difference between global inward and outward investment flows in 2000–02 amounted to $239 billion, or 10% of FDI outflows. The corresponding difference in respect of FDI stocks for the same period was $859 billion, or 4% of the outward FDI stock. Although similar differences exist in the value of world exports and imports, those related to direct investment flows are notably larger, although not as large as those pertaining to portfolio investment.31 Thus, particularly when considering the relative ease with which the basic data on FDI are available today, we think that some caveats are in order. Several of these are common to evaluating the economic activity of all firms, but some are specific to MNEs, and concentrate on the definition and valuation of foreign investment.

Regarding the first issue, as we have already mentioned, although much work has been undertaken on standardising the definition of foreign investment to 10% or above of the equity stake of a company, variations from this standard persist, and drawing a distinction between portfolio investment and direct investment can sometimes be difficult. A major definitional issue that complicates the cross-border comparability of FDI data is that some countries do not publish details of each of the three components of investment flows, which, respectively, are equity, inter-company debt and reinvested earnings. Particularly problematic is the treatment of reinvested earnings, where countries as diverse as Denmark, France, Japan, Spain, Singapore and Thailand have not collected data on reinvested
earnings, have collected the data but not reported them, or have collected data pertaining to either inward or outward transactions.

The primary reason for this is due to the fact that reinvested earnings is the only major component of the foreign investment position that originates in the host country, rather than being transferred from the home country. Since reinvestment does not give rise to cross-border transactions that would flow through the banking system, enterprise surveys are required to obtain the data, and these are not conducted by all host countries. However, the differences in investment flows that arise from including or not including reinvested earnings can be substantial, and the more extensive the investment stock is abroad, the more important is the contribution of reinvested earnings to the annual flows of foreign investment (Lundan, 2006). Some indication of the magnitude of reinvestment is given in Chapter 2.

While, in general, OECD countries do not rely on investment approval authorities to provide FDI data, those provided by some developing countries are, none the less, based on FDI intentions or approvals instead of, or in addition to, the published facts on investment actually undertaken (the latter is the case for India and China, for example). Additionally, several countries, such as Costa Rica, Indonesia and Malaysia, do not regularly collect details about the stock of FDI, which then needs to be estimated by aggregating past investment flows. Finally, countries organise the collection of information relating to MNE activity in different ways and (rather irritating to the academic researcher) at different times. Moreover, the quality and accuracy of the data, as well as the level of aggregation of the published data, are likely to vary according to confidentiality safeguards surrounding the collection and assembly process, and whether or not the data are provided voluntarily or compulsorily.

The second major issue of measurement relates to the value of the capital stock. In most cases, this is represented by the historical or book value of assets of MNEs or their affiliates, which are likely to be a considerable underestimate of their current market value. Scholars have tried to remedy this problem in two ways. The first is by revaluing the stock of FDI at the replacement cost of assets (accounting for depreciation); and the second by calculating it at market prices, by using the firm’s current stock market value. Whichever way is chosen, the revaluated stocks can then be expressed in constant or current prices, and in common or local currencies. Revaluation at market prices is generally likely to yield higher estimates than revaluation at replacement cost, but it should also be noted that simply applying a currency adjustment to historical prices is likely to lead to an overestimation of current value, if the asset stock consists of investments of very different ‘vintages’.

The latter problem has been tackled by Cantwell and Bellak (Cantwell and Bellak, 1998; Bellak and Cantwell, 2004), who have developed a model of revaluing the FDI stock that takes into account changes in real prices as well as those in exchange rates, and that yields estimates that can be compared both across countries and over time. Comparing the FDI stock for the US, the UK, Germany and Japan at historic, constant and current prices in 1960–95, they confirmed that the FDI stock at historical value grossly overstated the real or constant value that should be used as a basis for comparisons. At the same time, the historic figures underestimated the current FDI stock by a considerable margin. Not surprisingly, a revaluation of the stock of ‘old’ investor countries such as the US and the UK had the most impact on the results. However, the changes were not always as one
might have expected, since the price and exchange rate effects can work in either the same or the opposite directions at any one point in time. Since 1991, the BEA has also published regular estimates of the US outward and inward FDI positions at current replacement cost and at market value, and these confirm the tendency of the market cost estimates to exceed the current cost estimates, and for both alternative valuation methods to exceed the historical cost estimates (Mataloni, 1995; Nguyen, 2006).34

Finally, countries may also differ in the way in which they deal with currency translation adjustments, and in their accounting conventions, particularly the way in which they depreciate assets and value trade investments.35 Additionally, because of the cross-border transfer pricing practices of MNEs, intra-firm sales, costs and profits actually recorded may under- or overestimate their arm’s-length values.

It is not surprising, then, that in the light of the above and other problems associated with the collection and recording of FDI and similar data, it is sometimes difficult to reconcile statistics on the same MNE-related variable provided by home and host countries. Thus, for example, the outflow of FDI from the US to China in 2002 was recorded as $924 million by the US authorities, but as an inflow of $5,424 million by the Chinese authorities (UNCTAD, 2005c:4). While the degree of discrepancy in this particular example may be quite extreme, those of a somewhat smaller magnitude are not uncommon. We accept that there is little that the analyst can easily do about these problems – not, at least, in making macroeconomic comparisons – except frequently to remind him- or herself that all estimates are only as good as the data on which they are based, and that in many cases, because they are not adequately defined or carefully analysed, they may be subject to misleading and injudicious interpretations.

As might be expected, the inconsistencies in the data are not only limited to cross-country comparisons. In the statistical tables presented in this book, we have attempted to keep as much of the older data as possible to allow for comparisons to be made over a longer period of time. However, sometimes this produces unexpected outcomes, such as in the case of France, which according to earlier data from UNCTAD had an outward investment stock of $12.2 billion in 1980, while in the World Investment Report of 2002 the stock figures for 1980 were reported as $24.3 billion, following a recalculation whereby stocks prior to 1987 were obtained by subtracting flows. While such instances are thankfully rare, the data available from UNCTAD and other international agencies are occasionally quite substantially revised to account for new information, or to bring existing statistics closer to a common standard.

Such discrepancies notwithstanding, several countries have made efforts to make their statistics compatible with the BPM5 standards of the IMF. In this respect, a recent survey conducted jointly by the IMF and the OECD indicated some definite improvements in the collection and publication of balance of payments statistics.36 This study, the Survey of Implementation of Methodological Standards for Direct Investment (SIMSDI), was first carried out in 1997, and updated in 2001. It grew out of an earlier IMF study, the Report on the Measurement of International Capital Flows, in 1992, which identified the failure of countries to account for reinvested earnings as the most important source of the global discrepancy between inward and outward investment flows.

The report on the SIMSDI survey indicates that three-quarters of the OECD and non-OECD countries now apply the 10% rule in identifying direct investment, and that many of the non-OECD countries not using the standard measures were those that relied on
data on investment approvals rather than on that of actual investment. However, while 23 (out of 29) OECD countries included reinvested earnings in their investment data, and 44 (out of 85) non-OECD countries included reinvested earnings in their data on inward investment, less than half of the non-OECD countries also compiled data on reinvested earnings with respect to outward FDI. Furthermore, in measuring reinvested earnings, which according to the BPM5 should only include income from normal operations and exclude capital gains and losses and non-recurring items, only 13 countries fully complied with this rule. Countries also continue to differ in the extent to which they account for the direct investment made by the parent, and that of their affiliates, on a fully consolidated basis. Only 15 countries complied fully with these recommendations, indicating perhaps that at this point of time at least, the aim of fully consolidating MNEs’ accounts to reflect both direct and indirect investment positions may be too ambitious to be workable.

1.2.3 Size and Stability of Foreign Investment Flows

Since most of the available data on foreign investment stocks and flows originate in the national accounts, it is important to note that measures of FDI flows that are based on balance of payments data represent a lower-bound estimate of the true extent of multinational investment, since such data account only for that component of total foreign investment that is financed in the home country of the investing firm. This is a reasonably accurate measure if most investment consists of greenfield investment, that is, where a company decides to build a new factory or an assembly plant in a foreign country, and where it finances the investment from home country sources. Such investment, which brings with it a bundle of financial, technological and management resources, is also the kind of high-profile investment that countries or regions have sought to attract through a variety of policy initiatives. However, much of the FDI in the past decade or so has not been greenfield investment, but rather has taken the form of M&As, where financing from the home country of the acquiring firm represents only a part of the entire investment. In such cases, the true influence and extent of the foreign investment far exceeds its impact on the balance of payments.

In addition to equity investment, whether in the form of greenfield investment or M&As, another factor influencing the size of FDI flows is the proportion of reinvested earnings, which represent cumulative investment into the existing facilities of MNE affiliates abroad. For example, if an American MNE acquires a wholly owned affiliate in the Netherlands for the total price of €500 million, and finances 60% of the equity by foreign investment from the home country, and the remaining 40% by funds raised by the parent company in international capital markets, the value of the investment in balance of payments terms is (the dollar equivalent of) €300 million, although the parent has full control of the affiliate. If the affiliate then makes a profit of €20 million each year, which it reinvests in the business, this investment would represent another €12 million in direct investment flows from the US to the Netherlands. Although the reinvestment of earnings does not represent an actual transfer of funds from the home country, the parent is, in fact, engaging in incremental foreign investment, since the earnings represent funds that could have been repatriated to the home country. Indeed, over time, it is perfectly possible that incremental investment of this kind might equal or exceed the amount of the initial equity investment.
Finally, it should be noted that largely because of the importance of M&As as a part of FDI flows in the past decade, annual flows of direct investment have been quite variable from year to year. Since stock measures of foreign investment are considerably more stable than flows, the former is always preferable to the latter as an index of the foreign activities of MNEs; while flows averaged over several years are always preferable to a single flow measure in any given year. Furthermore, while flows of FDI tend to be considerably more stable than their portfolio counterparts, they are also sensitive to economic and political changes. Significant changes, for example, can be brought about by a new government, as in the case of the departure of the British from Hong Kong, or the opening up of a large market, such as in the case of the ‘gold rush’ to invest in China, or indeed, by the implosion of a speculative market, such as took place with the bursting of the internet bubble. Another major source of volatility are unexpected and extremely adverse economic events, such as in the case of the Latin American, Asian and Russian currency crises, and shocks such as the attacks on the US on 11 September 2001, all of which took place in the span of less than a decade. All of these occurrences are present and influence the data presented in the next chapter.
2. The extent and pattern of foreign direct investment

2.1 INTRODUCTION

The purpose of this chapter is to present a broad overview of the pattern and significance of FDI using the latest available data, and of the main changes that have taken place in these patterns over the previous four decades. This view is complemented by Chapter 6, which will trace some of the more important historical landmarks in the internationalisation of economic activity over the past century. We cover the largest inward and outward investor countries, the sectoral distribution of FDI, as well as the composition of direct investment in terms of equity, reinvested earnings and inter-company debt. We also present some information on the degree or intensity of the multi- or transnationalisation of the largest MNEs, as well as on the connection between the growth in cross-border M&As and the growth in FDI. We have retained as much as possible of the data contained in the tables published in the first edition to allow for comparisons over a longer time period.

The principal sources of data used in this chapter are various editions of the World Investment Report and the World Investment Directory, published by UNCTAD, and the data on foreign investment and globalisation contained in the OECD database. As we discussed in the previous chapter, these data are collected by national authorities in order to compile balance of payments and other statistics. Due to their intrinsic nature, the focus of this chapter is on the ownership aspect of FDI, rather than on the overall operations of MNEs, which may not involve equity participation, and which may also contain activities financed from sources other than FDI. In Part III, we move on to consider the impact of MNE activity on the home and host economies in which they operate, and present data on value added and employment, productivity and profitability and innovative performance.

2.2 A GENERAL OVERVIEW

2.2.1 The Position in the Beginning of the 21st Century

UNCTAD (2006) estimates the total world outward stock of foreign investment (valued at current prices) to have been $10,672 billion in 2005, which represents a sixfold increase from the estimated stock of $1,723 billion in 1990. There is, in general, a positive relationship between flows of FDI and growth in world GDP, and, as a share of world GDP, the importance of the FDI stock has increased significantly over the past two decades. In spite of such rapid growth, the years 2001 and 2002 saw a 38% drop in world outbound
FDI flows compared with the previous two years. Some reasons for this lie in the bursting of the internet bubble, the subsequent crash of world stock markets in 2000, the events of September 11, 2001, and the dissipating of the wave of M&As that had driven the growth of FDI in the 1990s.

In 1990, when the total assets of foreign affiliates were estimated at $1,723 billion, the combined domestic and foreign net assets of such enterprises, as recorded in their balance sheets, was probably nearer to $5,000 billion. Estimates of the sales and value added generated by the total capital stock, and calculated by the UNCTC (1992b), suggest that MNEs accounted for between 25 and 30% of the GDP of the world’s market economies in the mid-1980s. They were also responsible for around three-quarters of the world’s commodity trade, and four-fifths of the trade in technology and managerial skills of these economies. These data exclude the assets, output or trade arising from non-equity contractual agreements or strategic alliances in which MNEs are involved, although these, too, are known to be substantial. They also exclude the activities of foreign firms in the Central and Eastern European economies and in China, as well as outward direct investment by state-owned transnational activities by non-market economies.

More recent UNCTAD estimates for 2005 indicate that the sales of foreign affiliates could now account for as much as a half of world GDP. Although these estimates are approximate and should be treated with a great deal of caution – particularly since GDP is a value-added measure, while sales are not – they give some idea of the dimensions and significance of MNEs in the global economy. Later sections in this chapter will pay more attention to the industrial and geographical composition of MNE activity, and to the contribution of individual enterprises.

The most recent UNCTAD estimates, based on data provided by national administrations, indicate that in 2005 there were roughly 77,000 parent MNEs with 770,000 affiliates worldwide (UNCTAD, 2006). The number of new MNEs has increased at a rapid rate, particularly in developing countries. While such countries accounted for only 9% of MNEs’ parents and 58% of all affiliates in 1994, by 2002 they were responsible for 22% of MNE parents and 60% of all affiliates. However, the fastest rate of growth in the number of MNE parents and of inbound foreign affiliates in 1994–2002 took place in Central and Eastern Europe, where the number of the former reached 850 and the latter 242,698 (UNCTAD, 2003b). However, again it should be pointed out that these figures should be treated with the greatest of caution. They are, perhaps, more useful for analysing trends than for making comparisons between countries, as definitions of MNEs and foreign affiliates, and the quality of their collection agencies, differ considerably. There are, for example, some quite startling anomalies in the data. For example, in 2002, Romania was shown to be host to more foreign affiliates than the whole of Western Europe, while the number of MNE parents originating from both South Korea and Denmark was shown to be more than twice those originating from the US!

The contribution made by some of the largest MNEs is evident in the data presented by Dunning and Cantwell (1987), who, drawing on the official statistics of some 65 countries which accounted for 95% of all MNE-related activity, calculated that the largest 300 MNEs accounted for 70% of the total FDI stock. According to more recent data from UNCTAD (2006), in 2004, the foreign assets of the top 100 non-financial MNEs accounted for 46% of the global outward FDI stock. Table 2.1 sets out some other facts about the extent of MNE activity in 2005.
2.2.2 General Trends

The only reasonably comprehensive and reliable time-series data on the activities of MNEs is that on their aggregate FDI stock and annual investment flows. Some information is also available on the foreign and global production of the world's largest industrial companies since 1962. To gain some idea of the changing role of MNEs in the global economy, these data may be related to a variety of macroeconomic variables and, in particular, to GDP and world trade.

According to UNCTAD (ibid.:9), since the mid-1980s, growth in FDI (stocks and flows) has consistently outstripped that of both the world GDP and world exports, similar to an earlier period of growth in the 1960s. However, as we discussed in the previous chapter, measures of the stock of FDI at historic prices are not directly comparable to measures such as GDP, which are expressed at current prices or in real terms (Bellak and Cantwell, 2004). This is particularly relevant when comparing the growth of FDI stocks and that of exports and GDP over time. Indeed, Bellak and Cantwell found that, when valued at constant prices and exchange rates, FDI stocks in the 'old' investor countries of

### Table 2.1 The significance of MNEs in the global economy

<table>
<thead>
<tr>
<th></th>
<th>Value at current prices</th>
<th>Annual growth rate (percentages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI inflows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>59</td>
<td>21.7</td>
</tr>
<tr>
<td>1990</td>
<td>202</td>
<td>21.8</td>
</tr>
<tr>
<td>2000</td>
<td>1,271</td>
<td>40.0</td>
</tr>
<tr>
<td>2005</td>
<td>916</td>
<td></td>
</tr>
<tr>
<td>FDI outflows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>28</td>
<td>24.6</td>
</tr>
<tr>
<td>1990</td>
<td>230</td>
<td>17.1</td>
</tr>
<tr>
<td>2000</td>
<td>1,150</td>
<td>36.5</td>
</tr>
<tr>
<td>2005</td>
<td>779</td>
<td></td>
</tr>
<tr>
<td>FDI inward stock</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>647</td>
<td>16.8</td>
</tr>
<tr>
<td>1990</td>
<td>1,789</td>
<td>9.3</td>
</tr>
<tr>
<td>2000</td>
<td>6,314</td>
<td>17.3</td>
</tr>
<tr>
<td>2005</td>
<td>10,130</td>
<td></td>
</tr>
<tr>
<td>FDI outward stock</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>600</td>
<td>18.0</td>
</tr>
<tr>
<td>1990</td>
<td>1,791</td>
<td>10.7</td>
</tr>
<tr>
<td>2000</td>
<td>5,976</td>
<td>18.9</td>
</tr>
<tr>
<td>2005</td>
<td>10,672</td>
<td></td>
</tr>
<tr>
<td>Cross-border M&amp;As</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>n/a</td>
<td>25.9</td>
</tr>
<tr>
<td>1990</td>
<td>151</td>
<td>24.0</td>
</tr>
<tr>
<td>2000</td>
<td>1,144</td>
<td>51.5</td>
</tr>
<tr>
<td>2005</td>
<td>716</td>
<td></td>
</tr>
<tr>
<td>Sales of foreign affiliates*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>2,620</td>
<td>19.7</td>
</tr>
<tr>
<td>1990</td>
<td>6,045</td>
<td>8.9</td>
</tr>
<tr>
<td>2000</td>
<td>15,680</td>
<td>10.1</td>
</tr>
<tr>
<td>2005</td>
<td>22,171</td>
<td></td>
</tr>
<tr>
<td>Gross product of foreign affiliates*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>646</td>
<td>17.4</td>
</tr>
<tr>
<td>1990</td>
<td>1,481</td>
<td>6.9</td>
</tr>
<tr>
<td>2000</td>
<td>3,167</td>
<td>8.8</td>
</tr>
<tr>
<td>2005</td>
<td>4,517</td>
<td></td>
</tr>
<tr>
<td>Total assets of foreign affiliates*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>2,108</td>
<td>18.1</td>
</tr>
<tr>
<td>1990</td>
<td>5,956</td>
<td>13.8</td>
</tr>
<tr>
<td>2000</td>
<td>21,102</td>
<td>21.0</td>
</tr>
<tr>
<td>2005</td>
<td>45,564</td>
<td></td>
</tr>
<tr>
<td>Exports of foreign affiliates*</td>
<td></td>
<td>14.3</td>
</tr>
<tr>
<td>1982</td>
<td>647</td>
<td>8.4</td>
</tr>
<tr>
<td>1990</td>
<td>1,366</td>
<td>4.8</td>
</tr>
<tr>
<td>2000</td>
<td>3,572</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>4,214</td>
<td></td>
</tr>
<tr>
<td>Employment of foreign affiliates (thousands)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>19,537</td>
<td>5.4</td>
</tr>
<tr>
<td>1990</td>
<td>24,551</td>
<td>3.2</td>
</tr>
<tr>
<td>2000</td>
<td>45,587</td>
<td>11.0</td>
</tr>
<tr>
<td>2005</td>
<td>62,095</td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td></td>
<td>11.1</td>
</tr>
<tr>
<td>1982</td>
<td>10,899</td>
<td>5.9</td>
</tr>
<tr>
<td>1990</td>
<td>21,898</td>
<td>1.3</td>
</tr>
<tr>
<td>2000</td>
<td>31,895</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>44,674</td>
<td></td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td></td>
<td>12.7</td>
</tr>
<tr>
<td>1982</td>
<td>2,397</td>
<td>5.6</td>
</tr>
<tr>
<td>1990</td>
<td>4,925</td>
<td>1.1</td>
</tr>
<tr>
<td>2000</td>
<td>6,466</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>9,420</td>
<td></td>
</tr>
<tr>
<td>Royalties and licence fee receipts</td>
<td></td>
<td>21.2</td>
</tr>
<tr>
<td>1982</td>
<td>9</td>
<td>14.3</td>
</tr>
<tr>
<td>1990</td>
<td>30</td>
<td>7.8</td>
</tr>
<tr>
<td>2000</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>Exports of goods and non-factor services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>2,247</td>
<td>12.7</td>
</tr>
<tr>
<td>1990</td>
<td>4,261</td>
<td>8.7</td>
</tr>
<tr>
<td>2000</td>
<td>7,036</td>
<td>3.6</td>
</tr>
<tr>
<td>2005</td>
<td>1,2641</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** * Figures based on UNCTAD estimates.

**Source:** UNCTAD (2006); 2000 data from UNCTAD (2001).
the US and the UK grew only slightly more than their respective GDPs in 1960–95; and, in the case of the US, at only half the rate of exports, and less than that of domestic investment. In the ‘newer’ investor countries of Japan and Germany, however, the growth of FDI relative to exports and domestic investment was considerably stronger.

In addition to the difficulties of reconciling the balance of payments statistics, it should also be noted that all data in this and most subsequent tables is converted into $US, and, thus, may reflect exchange rate fluctuations as well as any real factors. This is particularly important in the case of major outward investors, such as the UK, whose currency in dollar terms has fluctuated between 2.43 in 1979 and 1.09 in 1983, then to 1.96 in early 1991 and around 1.5 from 1993 to 2000, and up again to 1.93 in the beginning of 2007. However, the data suggest that until 1981 there was a steady increase in the money value of outward direct investment flows from the major investing countries, but that, in the following four years, these dropped sharply, primarily because of the economic recession, the growing debt crisis and a realignment of the major world currencies. By 1986, however, capital exports had recovered to a new peak, while between 1987 and 1989, they were more than four times that of the first half of the 1980s. The fact that, with a few exceptions, the value of the sales of MNE affiliates continued to rise throughout the period, suggests that their activities were financed increasingly from local sources, or from the local or international capital market.

The following sections will show that while the international data on FDI have been strongly influenced by MNEs of US origin, the growth in European investment in the 1990s, and that of several emerging economies in the early 2000s, has changed the geographical origin of FDI stocks to a notable degree. In addition to the emergence of major new investors, the composition of the flows of FDI has also changed over time. In particular, the past decade has seen two periods of fervent M&A activity, the first in 1999–2001, and the second since 2005. During the first boom period and in 2005, more than six thousand cross-border M&As were undertaken annually, of which well over a hundred deals had a value in excess of $1 billion (UNCTAD, 2006:16).

Both peaks of M&A activity boosted the flows of FDI to a considerable extent, although it should be noted again that FDI is only one component in the financing of these cross-border deals. Table 2.2 shows the value of cross-border M&A sales and purchases at five-year intervals since 1990. Especially notable is the proportion of M&As in the service industries, which have accounted for about two-thirds of the value of all M&A purchases since 2000, with financial services accounting for a large part of that share. Also notable is the strong rise in M&A activity in the mining and petroleum sectors since 2003 (UNCTAD, 2007). An indication of the broadening of the number of countries involved in cross-border M&A activity is that in 2005, 17% of all sales, and 13% of all purchases, involved developing countries (UNCTAD, 2006:40).

In addition to the increasing importance of cross-border M&As, changes in the composition of FDI flows are also reflected in the relative share of equity flows, reinvestment and inter-company loans. As we discussed in the previous chapter, as the stock of outward FDI matures, reinvested earnings are likely to account for a larger share of the flows of FDI. There are notable differences between investor countries in their degree of reinvestment, which may reflect, among other things, differences in affiliate profitability, and/or corporate policies, including tax planning (Lundan, 2006). For some ‘old’ investor countries, such as the US, Sweden and Switzerland, reinvestment has accounted for between a
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>Purchases</td>
<td>150,576</td>
<td>186,593</td>
<td>1,143,816</td>
<td>593,960</td>
<td>369,789</td>
<td>296,988</td>
<td>380,598</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>150,576</td>
<td>186,593</td>
<td>1,143,816</td>
<td>593,960</td>
<td>369,789</td>
<td>296,988</td>
<td>380,598</td>
</tr>
<tr>
<td>Primary</td>
<td>Purchases</td>
<td>2,131</td>
<td>7,951</td>
<td>8,968</td>
<td>6,537</td>
<td>9,309</td>
<td>4,227</td>
<td>4,766</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>5,170</td>
<td>8,499</td>
<td>9,815</td>
<td>28,280</td>
<td>12,751</td>
<td>7,714</td>
<td>6,978</td>
</tr>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>Purchases</td>
<td>47</td>
<td>182</td>
<td>1,472</td>
<td>784</td>
<td>37</td>
<td>228</td>
<td>648</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>221</td>
<td>1,019</td>
<td>1,110</td>
<td>316</td>
<td>265</td>
<td>1,350</td>
<td>1,245</td>
</tr>
<tr>
<td>Mining, quarrying and petroleum</td>
<td>Purchases</td>
<td>2,084</td>
<td>7,769</td>
<td>7,496</td>
<td>5,753</td>
<td>9,272</td>
<td>4,000</td>
<td>4,119</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>4,949</td>
<td>7,480</td>
<td>8,705</td>
<td>27,964</td>
<td>12,486</td>
<td>6,363</td>
<td>5,733</td>
</tr>
<tr>
<td>Secondary</td>
<td>Purchases</td>
<td>79,908</td>
<td>93,784</td>
<td>302,507</td>
<td>199,887</td>
<td>115,460</td>
<td>112,758</td>
<td>119,674</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>75,495</td>
<td>84,462</td>
<td>291,654</td>
<td>197,174</td>
<td>137,414</td>
<td>129,713</td>
<td>134,975</td>
</tr>
<tr>
<td>Food, beverages and tobacco</td>
<td>Purchases</td>
<td>13,523</td>
<td>22,546</td>
<td>60,189</td>
<td>23,238</td>
<td>20,996</td>
<td>23,307</td>
<td>22,735</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>12,676</td>
<td>18,108</td>
<td>50,247</td>
<td>34,624</td>
<td>32,072</td>
<td>29,597</td>
<td>23,870</td>
</tr>
<tr>
<td>Textiles, clothing and leather</td>
<td>Purchases</td>
<td>3,363</td>
<td>1,569</td>
<td>3,741</td>
<td>1,129</td>
<td>549</td>
<td>681</td>
<td>256</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>1,281</td>
<td>2,039</td>
<td>2,526</td>
<td>3,510</td>
<td>915</td>
<td>676</td>
<td>1,585</td>
</tr>
<tr>
<td>Wood and wood products</td>
<td>Purchases</td>
<td>6,717</td>
<td>6,466</td>
<td>18,342</td>
<td>12,498</td>
<td>5,258</td>
<td>2,671</td>
<td>3,916</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>7,765</td>
<td>4,855</td>
<td>23,562</td>
<td>13,878</td>
<td>7,325</td>
<td>2,765</td>
<td>3,769</td>
</tr>
<tr>
<td>Coke, petroleum and nuclear fuel</td>
<td>Purchases</td>
<td>7,051</td>
<td>6,679</td>
<td>40,701</td>
<td>30,971</td>
<td>28,201</td>
<td>20,260</td>
<td>13,138</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>6,480</td>
<td>5,644</td>
<td>45,015</td>
<td>31,167</td>
<td>33,018</td>
<td>24,267</td>
<td>15,108</td>
</tr>
<tr>
<td>Chemicals and chemical products</td>
<td>Purchases</td>
<td>15,260</td>
<td>28,186</td>
<td>24,085</td>
<td>22,935</td>
<td>20,958</td>
<td>16,927</td>
<td>31,290</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>12,275</td>
<td>26,984</td>
<td>30,446</td>
<td>26,462</td>
<td>20,370</td>
<td>22,927</td>
<td>41,788</td>
</tr>
<tr>
<td>Rubber and plastic products</td>
<td>Purchases</td>
<td>1,904</td>
<td>4,852</td>
<td>1,214</td>
<td>1,535</td>
<td>819</td>
<td>893</td>
<td>747</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>2,745</td>
<td>4,313</td>
<td>4,723</td>
<td>2,406</td>
<td>2,257</td>
<td>1,582</td>
<td>570</td>
</tr>
<tr>
<td>Metals and metal products</td>
<td>Purchases</td>
<td>3,076</td>
<td>1,472</td>
<td>12,713</td>
<td>20,081</td>
<td>9,015</td>
<td>11,390</td>
<td>4,541</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>4,426</td>
<td>2,515</td>
<td>16,782</td>
<td>12,890</td>
<td>10,034</td>
<td>8,083</td>
<td>4,579</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>Purchases</td>
<td>1,906</td>
<td>3,760</td>
<td>12,938</td>
<td>20,130</td>
<td>3,432</td>
<td>1,932</td>
<td>4,722</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>1,750</td>
<td>5,103</td>
<td>8,980</td>
<td>4,073</td>
<td>2,564</td>
<td>4,332</td>
<td>6,688</td>
</tr>
<tr>
<td>Electrical and electronic eq.</td>
<td>Purchases</td>
<td>7,190</td>
<td>7,576</td>
<td>68,284</td>
<td>29,097</td>
<td>8,678</td>
<td>7,817</td>
<td>18,216</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>6,114</td>
<td>5,581</td>
<td>53,859</td>
<td>25,732</td>
<td>8,556</td>
<td>5,409</td>
<td>12,998</td>
</tr>
<tr>
<td>Motor vehicles and other transp.</td>
<td>Purchases</td>
<td>8,369</td>
<td>2,267</td>
<td>30,852</td>
<td>5,127</td>
<td>6,516</td>
<td>6,322</td>
<td>4,010</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>7,390</td>
<td>2,657</td>
<td>25,272</td>
<td>5,662</td>
<td>8,590</td>
<td>5,760</td>
<td>3,639</td>
</tr>
</tbody>
</table>
Table 2.2  (continued)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tertiary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>68,423</td>
<td>84,824</td>
<td>832,303</td>
<td>387,425</td>
<td>243,771</td>
<td>180,002</td>
<td>256,156</td>
<td>461,969</td>
</tr>
<tr>
<td>Sales</td>
<td>69,911</td>
<td>93,632</td>
<td>842,342</td>
<td>368,506</td>
<td>219,623</td>
<td>159,561</td>
<td>238,645</td>
<td>397,152</td>
</tr>
<tr>
<td><strong>Electricity, gas and water</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>332</td>
<td>10,466</td>
<td>84,409</td>
<td>17,953</td>
<td>57,866</td>
<td>13,440</td>
<td>10,484</td>
<td>610</td>
</tr>
<tr>
<td>Sales</td>
<td>609</td>
<td>12,240</td>
<td>46,711</td>
<td>21,047</td>
<td>61,572</td>
<td>15,909</td>
<td>24,799</td>
<td>38,259</td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>257</td>
<td>1,160</td>
<td>2,921</td>
<td>1,397</td>
<td>1,041</td>
<td>1,048</td>
<td>1,089</td>
<td>3,324</td>
</tr>
<tr>
<td>Sales</td>
<td>533</td>
<td>1,738</td>
<td>5,170</td>
<td>2,167</td>
<td>1,465</td>
<td>1,089</td>
<td>2,922</td>
<td>6,232</td>
</tr>
<tr>
<td><strong>Trade</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>5,502</td>
<td>6,937</td>
<td>19,184</td>
<td>17,312</td>
<td>22,886</td>
<td>10,761</td>
<td>13,087</td>
<td>15,166</td>
</tr>
<tr>
<td>Sales</td>
<td>7,630</td>
<td>7,048</td>
<td>27,610</td>
<td>23,308</td>
<td>16,710</td>
<td>13,183</td>
<td>26,445</td>
<td>29,232</td>
</tr>
<tr>
<td><strong>Hotels and restaurants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>3,769</td>
<td>5,319</td>
<td>2,335</td>
<td>5,821</td>
<td>1,433</td>
<td>5,496</td>
<td>1,268</td>
<td>2,058</td>
</tr>
<tr>
<td>Sales</td>
<td>8,728</td>
<td>6,358</td>
<td>10,191</td>
<td>10,529</td>
<td>3,860</td>
<td>4,142</td>
<td>4,618</td>
<td>7,604</td>
</tr>
<tr>
<td><strong>Transport, storage and communication</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>4,785</td>
<td>6,085</td>
<td>368,954</td>
<td>112,498</td>
<td>37,115</td>
<td>21,598</td>
<td>24,634</td>
<td>66,215</td>
</tr>
<tr>
<td>Sales</td>
<td>14,460</td>
<td>8,225</td>
<td>365,673</td>
<td>121,490</td>
<td>30,824</td>
<td>34,724</td>
<td>36,214</td>
<td>97,502</td>
</tr>
<tr>
<td><strong>Finance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>43,671</td>
<td>45,368</td>
<td>241,282</td>
<td>181,234</td>
<td>90,787</td>
<td>114,150</td>
<td>174,096</td>
<td>290,454</td>
</tr>
<tr>
<td>Sales</td>
<td>21,722</td>
<td>31,059</td>
<td>183,665</td>
<td>122,005</td>
<td>41,903</td>
<td>54,790</td>
<td>81,809</td>
<td>93,795</td>
</tr>
<tr>
<td><strong>Business services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>6,377</td>
<td>4,843</td>
<td>82,790</td>
<td>33,111</td>
<td>29,805</td>
<td>9,090</td>
<td>22,387</td>
<td>48,900</td>
</tr>
<tr>
<td>Sales</td>
<td>11,831</td>
<td>9,715</td>
<td>137,416</td>
<td>54,319</td>
<td>47,248</td>
<td>23,565</td>
<td>55,261</td>
<td>93,127</td>
</tr>
</tbody>
</table>

third and a half of the annual outflows of investment over the past decade or so. At the same time, the recent rates of reinvestment for the US as a host country have generally been quite low, possibly reflecting the relatively low profitability of foreign affiliates in that country (Mataloni, 2000; Jones and Gálvez-Muñoz, 2002).

Since all three components of FDI flows can be either positive or negative, they can offset each other, so that a cumulative repatriation of profits, or a large-scale repayment of loans, would reduce the net outward flows of FDI. For example, inflows of FDI to Germany turned negative in 2004, when large repayments of intra-company loans more than offset equity flows and reinvestment, which were also negative (UNCTAD, 2005c: 85). Similarly, divestments, which in 1983–2002 accounted for an average of 24% of the gross flows of FDI in the UK, and 31% in the US, partially offset the positive flows of outward FDI (UNCTAD, 2003b:205).

### 2.3 THE LEADING OUTWARD INVESTORS

#### 2.3.1 The Facts

In 1980, 12 developed countries accounted for 94% of the total stock of outward direct investment. The leading four – the US, the UK, West Germany and the Netherlands – accounted for 73%. At that time, of some 98,000 foreign affiliates of MNEs identified by UNCTC (1983), those based in these same countries accounted for 97%, and those in the leading four investor countries for 70%. By the year 2005, the 14 countries identified in Table 2.3 accounted for 78% of the total stock of outward investment, and the four leading investors – the US, the UK, France and Germany – for only 48%.

Although the US continues to be by far the largest outward direct investor, its share of the world direct capital stock over the past four decades has steadily fallen from 47% in 1960 to 42% in 1980, 24% in 1990 and 19% in 2005. In 1962, the US accounted for 61% of the 500 largest industrial companies in the world, while in 1982 it accounted for 44% (Dunning and Pearce, 1985). In the Fortune Global 500 list of 2006, US firms were still the most numerous, although they now accounted for only 34% of the total.

Between 1973 and 2002, the four main European investors (the UK, Germany, the Netherlands and France) and Japan accounted for 43% of the accumulated stock of FDI compared with only 30% in 1973. Another feature of the outward FDI stock data (not shown in Table 2.3) is the sharp increase in the rate of growth of the stake of several smaller developed countries. For example, between 1990 and 2002, Denmark, Austria, Israel and Portugal each more than doubled their share.

Trends in outward investment flows tell the same story. Table 2.4 shows the continuing relative decline of the US as a major outward investor, and a sharp increase in the significance of some EU investors, such as the UK, France, Spain and Belgium/Luxembourg. To a large extent, the relative decline in the position of the US as an international direct investor was to be expected. It primarily reflects the reinstatement of the European countries as leading outward investors, and the emergence of Japan as a major global player.

However, perhaps most impressive of all has been the emergence of some developing and transition economies as significant outward foreign investors.
Table 2.3  Outward stock of FDI by major home countries and regions (billions of US dollars)

<table>
<thead>
<tr>
<th>Country/region</th>
<th>1967</th>
<th>% of GDP</th>
<th>1973</th>
<th>% of GDP</th>
<th>1980</th>
<th>% of GDP</th>
<th>1990</th>
<th>% of GDP</th>
<th>2000</th>
<th>% of GDP</th>
<th>2005</th>
<th>% of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed economies</td>
<td>109.3</td>
<td>4.8</td>
<td>205.0</td>
<td>5.1</td>
<td>507.4</td>
<td>6.2</td>
<td>1,642.2</td>
<td>9.6</td>
<td>5,578.3</td>
<td>22.8</td>
<td>9,271.9</td>
<td>27.9</td>
</tr>
<tr>
<td>European Union</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>293.1</td>
<td>6.2</td>
<td>810.3</td>
<td>11.5</td>
<td>3,050.1</td>
<td>36.8</td>
<td>5,475.0</td>
<td>40.7</td>
</tr>
<tr>
<td>UK</td>
<td>15.8</td>
<td>14.5</td>
<td>15.8</td>
<td>9.1</td>
<td>80.4</td>
<td>15.0</td>
<td>229.3</td>
<td>23.2</td>
<td>897.8</td>
<td>62.4</td>
<td>1,238.0</td>
<td>56.2</td>
</tr>
<tr>
<td>France</td>
<td>6.0</td>
<td>7.0</td>
<td>8.8</td>
<td>3.8</td>
<td>23.6</td>
<td>3.6</td>
<td>110.1</td>
<td>9.0</td>
<td>445.1</td>
<td>33.5</td>
<td>853.2</td>
<td>40.5</td>
</tr>
<tr>
<td>Germany</td>
<td>3.0</td>
<td>1.6</td>
<td>11.9</td>
<td>3.4</td>
<td>43.1</td>
<td>4.7</td>
<td>151.6</td>
<td>9.1</td>
<td>541.9</td>
<td>29.0</td>
<td>967.3</td>
<td>34.6</td>
</tr>
<tr>
<td>Belgium and Luxembourg</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>6.0</td>
<td>4.9</td>
<td>40.6</td>
<td>19.4</td>
<td>179.8</td>
<td>72.5</td>
<td>386.3</td>
<td>103.8</td>
</tr>
<tr>
<td>Netherlands</td>
<td>11.0</td>
<td>33.1</td>
<td>15.8</td>
<td>25.8</td>
<td>42.1</td>
<td>24.5</td>
<td>106.9</td>
<td>36.3</td>
<td>305.5</td>
<td>82.4</td>
<td>641.3</td>
<td>102.6</td>
</tr>
<tr>
<td>Spain</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>1.9</td>
<td>0.9</td>
<td>15.7</td>
<td>3.0</td>
<td>167.7</td>
<td>28.9</td>
<td>381.3</td>
<td>33.8</td>
</tr>
<tr>
<td>Italy</td>
<td>2.1</td>
<td>2.8</td>
<td>3.2</td>
<td>2.4</td>
<td>7.3</td>
<td>1.6</td>
<td>60.2</td>
<td>5.5</td>
<td>180.3</td>
<td>16.8</td>
<td>293.5</td>
<td>16.6</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.7</td>
<td>5.7</td>
<td>3.0</td>
<td>6.1</td>
<td>3.7</td>
<td>3.0</td>
<td>50.7</td>
<td>21.2</td>
<td>123.2</td>
<td>51.4</td>
<td>202.8</td>
<td>56.5</td>
</tr>
<tr>
<td>Other Western Europe</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>22.1</td>
<td>13.1</td>
<td>77.0</td>
<td>21.3</td>
<td>593.0</td>
<td>139.1</td>
<td>769.3</td>
<td>112.0</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2.5</td>
<td>10.0</td>
<td>7.1</td>
<td>16.2</td>
<td>21.5</td>
<td>21.1</td>
<td>66.1</td>
<td>28.0</td>
<td>229.7</td>
<td>93.4</td>
<td>394.8</td>
<td>107.4</td>
</tr>
<tr>
<td>Norway</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>0.6</td>
<td>0.9</td>
<td>10.9</td>
<td>9.4</td>
<td>362.6</td>
<td>217.2</td>
<td>365.1</td>
<td>123.3</td>
</tr>
<tr>
<td>North America</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>244.0</td>
<td>8.2</td>
<td>515.3</td>
<td>8.1</td>
<td>1,553.9</td>
<td>14.8</td>
<td>2,450.6</td>
<td>18.0</td>
</tr>
<tr>
<td>US</td>
<td>56.6</td>
<td>7.1</td>
<td>101.3</td>
<td>7.7</td>
<td>220.2</td>
<td>8.1</td>
<td>430.5</td>
<td>7.5</td>
<td>1,316.2</td>
<td>13.5</td>
<td>2,051.3</td>
<td>16.4</td>
</tr>
<tr>
<td>Canada</td>
<td>3.7</td>
<td>5.3</td>
<td>7.8</td>
<td>6.1</td>
<td>23.8</td>
<td>9.0</td>
<td>84.8</td>
<td>14.8</td>
<td>237.6</td>
<td>33.3</td>
<td>399.4</td>
<td>35.3</td>
</tr>
<tr>
<td>Other developed economies</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>28.3</td>
<td>2.1</td>
<td>239.5</td>
<td>6.9</td>
<td>381.4</td>
<td>7.2</td>
<td>576.9</td>
<td>10.5</td>
</tr>
<tr>
<td>Japan</td>
<td>1.5</td>
<td>0.9</td>
<td>10.3</td>
<td>2.5</td>
<td>19.6</td>
<td>1.9</td>
<td>201.4</td>
<td>6.6</td>
<td>278.4</td>
<td>5.9</td>
<td>386.6</td>
<td>8.5</td>
</tr>
<tr>
<td>Australia</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>2.3</td>
<td>1.5</td>
<td>30.5</td>
<td>9.8</td>
<td>85.4</td>
<td>22.0</td>
<td>159.2</td>
<td>22.5</td>
</tr>
<tr>
<td>Developing economies</td>
<td>3.0</td>
<td>0.6</td>
<td>6.1</td>
<td>0.6</td>
<td>16.5</td>
<td>0.9</td>
<td>148.7</td>
<td>4.3</td>
<td>871.0</td>
<td>13.4</td>
<td>1,273.6</td>
<td>12.8</td>
</tr>
<tr>
<td>World</td>
<td>112.3</td>
<td>4.0</td>
<td>211.1</td>
<td>4.2</td>
<td>523.9</td>
<td>5.3</td>
<td>1,791.1</td>
<td>8.6</td>
<td>6,471.4</td>
<td>20.6</td>
<td>10,671.9</td>
<td>23.9</td>
</tr>
</tbody>
</table>

Notes: * Figure for Belgium only; na – not available.

Sources: Data for 1967 and 1973: UNCTAD, based on Dunning and Cantwell (1987); official national and international data and World Development Report, various editions. Data for 1980 from UNCTAD (2001). Data for 1990, 2000 and 2005 from UNCTAD (2006), for these years figures for the EU comprise the EU-25. From 1990 onwards, the world total includes developed and developing countries as well as CIS as a separate category.
Table 2.4  Outflows of FDI from major home countries and regions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Billions of US dollars)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developed economies</td>
<td>642.6</td>
<td>1,036.8</td>
<td>1,107.8</td>
<td>681.7</td>
<td>489.4</td>
<td>510.6</td>
<td>685.7</td>
<td>640.7</td>
<td>0.99</td>
<td>0.94</td>
<td>0.89</td>
<td>0.89</td>
</tr>
<tr>
<td>Europe</td>
<td>444.5</td>
<td>765.7</td>
<td>871.4</td>
<td>474.0</td>
<td>281.7</td>
<td>317.0</td>
<td>368.0</td>
<td>618.8</td>
<td>0.44</td>
<td>0.52</td>
<td>0.57</td>
<td>0.59</td>
</tr>
<tr>
<td>Switzerland</td>
<td>18.8</td>
<td>33.3</td>
<td>44.7</td>
<td>18.3</td>
<td>8.2</td>
<td>15.4</td>
<td>26.8</td>
<td>42.9</td>
<td>na</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>EU-25</td>
<td>421.9</td>
<td>727.1</td>
<td>813.1</td>
<td>435.4</td>
<td>265.8</td>
<td>286.1</td>
<td>334.9</td>
<td>554.8</td>
<td>0.43</td>
<td>0.48</td>
<td>0.53</td>
<td>0.54</td>
</tr>
<tr>
<td>UK</td>
<td>122.8</td>
<td>201.5</td>
<td>233.4</td>
<td>58.9</td>
<td>50.3</td>
<td>62.2</td>
<td>94.9</td>
<td>101.1</td>
<td>0.16</td>
<td>0.18</td>
<td>0.14</td>
<td>0.13</td>
</tr>
<tr>
<td>France</td>
<td>48.6</td>
<td>126.9</td>
<td>177.4</td>
<td>86.8</td>
<td>50.4</td>
<td>53.1</td>
<td>57.0</td>
<td>115.7</td>
<td>0.04</td>
<td>0.07</td>
<td>0.08</td>
<td>0.11</td>
</tr>
<tr>
<td>Germany</td>
<td>88.8</td>
<td>108.7</td>
<td>56.6</td>
<td>39.7</td>
<td>18.9</td>
<td>6.2</td>
<td>1.9</td>
<td>45.6</td>
<td>0.09</td>
<td>0.08</td>
<td>0.10</td>
<td>0.03</td>
</tr>
<tr>
<td>Belgium and Luxembourg</td>
<td>28.8</td>
<td>122.3</td>
<td>86.4</td>
<td>100.6</td>
<td>12.3</td>
<td>38.9</td>
<td>33.5</td>
<td>22.9</td>
<td>0.02</td>
<td>0.02</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>Netherlands</td>
<td>36.5</td>
<td>57.6</td>
<td>75.6</td>
<td>50.6</td>
<td>32.0</td>
<td>44.2</td>
<td>17.3</td>
<td>119.5</td>
<td>0.09</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
</tr>
<tr>
<td>Spain</td>
<td>20.2</td>
<td>44.4</td>
<td>58.2</td>
<td>33.1</td>
<td>32.7</td>
<td>27.5</td>
<td>60.5</td>
<td>38.8</td>
<td>0.00</td>
<td>0.01</td>
<td>0.03</td>
<td>0.05</td>
</tr>
<tr>
<td>Italy</td>
<td>16.1</td>
<td>6.7</td>
<td>12.3</td>
<td>21.5</td>
<td>17.1</td>
<td>9.1</td>
<td>19.3</td>
<td>39.7</td>
<td>0.01</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Sweden</td>
<td>24.4</td>
<td>21.9</td>
<td>41.0</td>
<td>7.3</td>
<td>10.6</td>
<td>21.1</td>
<td>21.0</td>
<td>25.9</td>
<td>0.01</td>
<td>0.04</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>America</td>
<td>168.5</td>
<td>247.1</td>
<td>197.6</td>
<td>157.8</td>
<td>166.0</td>
<td>146.7</td>
<td>265.2</td>
<td>15.9</td>
<td>0.49</td>
<td>0.24</td>
<td>0.25</td>
<td>0.24</td>
</tr>
<tr>
<td>US</td>
<td>131.0</td>
<td>209.4</td>
<td>142.6</td>
<td>124.9</td>
<td>134.9</td>
<td>129.4</td>
<td>222.4</td>
<td>-12.7</td>
<td>0.44</td>
<td>0.19</td>
<td>0.21</td>
<td>0.19</td>
</tr>
<tr>
<td>Canada</td>
<td>34.4</td>
<td>17.2</td>
<td>44.7</td>
<td>36.0</td>
<td>26.8</td>
<td>21.5</td>
<td>43.3</td>
<td>34.1</td>
<td>0.05</td>
<td>0.05</td>
<td>0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>Asia</td>
<td>25.3</td>
<td>23.6</td>
<td>34.9</td>
<td>39.0</td>
<td>33.3</td>
<td>30.9</td>
<td>35.5</td>
<td>48.3</td>
<td>0.06</td>
<td>0.15</td>
<td>0.06</td>
<td>0.04</td>
</tr>
<tr>
<td>Japan</td>
<td>24.2</td>
<td>22.7</td>
<td>31.6</td>
<td>38.3</td>
<td>32.3</td>
<td>28.8</td>
<td>31.0</td>
<td>45.8</td>
<td>0.06</td>
<td>0.15</td>
<td>0.06</td>
<td>0.04</td>
</tr>
<tr>
<td>Developing economies</td>
<td>50.3</td>
<td>68.7</td>
<td>133.5</td>
<td>79.8</td>
<td>45.4</td>
<td>39.7</td>
<td>113.4</td>
<td>122.9</td>
<td>0.01</td>
<td>0.06</td>
<td>0.11</td>
<td>0.10</td>
</tr>
<tr>
<td>World</td>
<td>694.4</td>
<td>1,108.2</td>
<td>1,244.5</td>
<td>764.2</td>
<td>539.5</td>
<td>561.1</td>
<td>813.1</td>
<td>778.7</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Source:  UNCTAD database, authors' calculations.
Table 2.5  Outward stock of FDI for selected developing countries and transition economies (billions of US dollars)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hong Kong, China</td>
<td>0.1</td>
<td>2.3</td>
<td>11.9</td>
<td>78.8</td>
<td>388.4</td>
<td>352.6</td>
<td>309.4</td>
<td>339.6</td>
<td>403.1</td>
<td>470.5</td>
<td>264.7</td>
</tr>
<tr>
<td>Singapore</td>
<td>0.6</td>
<td>1.3</td>
<td>7.8</td>
<td>35.0</td>
<td>56.8</td>
<td>72.2</td>
<td>85.8</td>
<td>90.5</td>
<td>105.4</td>
<td>110.9</td>
<td>94.1</td>
</tr>
<tr>
<td>Taiwan, Province of China</td>
<td>13.0</td>
<td>13.3</td>
<td>30.4</td>
<td>42.6</td>
<td>66.7</td>
<td>70.8</td>
<td>76.9</td>
<td>84.1</td>
<td>91.3</td>
<td>97.3</td>
<td>28.1</td>
</tr>
<tr>
<td>China</td>
<td>na</td>
<td>0.9</td>
<td>4.5</td>
<td>17.8</td>
<td>27.8</td>
<td>34.7</td>
<td>37.2</td>
<td>33.2</td>
<td>35.0</td>
<td>46.3</td>
<td>2.1</td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.2</td>
<td>1.4</td>
<td>2.7</td>
<td>11.0</td>
<td>22.9</td>
<td>26.3</td>
<td>30.8</td>
<td>33.6</td>
<td>41.5</td>
<td>44.5</td>
<td>34.0</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>0.1</td>
<td>0.5</td>
<td>2.3</td>
<td>10.2</td>
<td>26.8</td>
<td>29.0</td>
<td>31.1</td>
<td>25.0</td>
<td>32.2</td>
<td>36.5</td>
<td>4.6</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
<td>5.9</td>
<td>6.9</td>
<td>7.1</td>
<td>7.2</td>
<td>7.3</td>
<td>10.7</td>
<td>13.7</td>
<td>5.0</td>
</tr>
<tr>
<td>India</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.5</td>
<td>1.9</td>
<td>2.6</td>
<td>4.0</td>
<td>5.8</td>
<td>7.1</td>
<td>9.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Turkey</td>
<td>na</td>
<td>1.2</td>
<td>1.2</td>
<td>1.4</td>
<td>3.7</td>
<td>4.6</td>
<td>5.8</td>
<td>6.1</td>
<td>7.1</td>
<td>8.1</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Africa</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>5.5</td>
<td>8.9</td>
<td>15.0</td>
<td>23.3</td>
<td>32.3</td>
<td>17.6</td>
<td>21.9</td>
<td>27.1</td>
<td>38.4</td>
<td>38.5</td>
<td>16.1</td>
</tr>
<tr>
<td><strong>Latin America</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>38.5</td>
<td>39.4</td>
<td>41.0</td>
<td>44.5</td>
<td>51.9</td>
<td>49.7</td>
<td>54.4</td>
<td>54.9</td>
<td>69.2</td>
<td>71.6</td>
<td>9.0</td>
</tr>
<tr>
<td>Mexico</td>
<td>1.6</td>
<td>2.0</td>
<td>2.7</td>
<td>4.2</td>
<td>8.3</td>
<td>12.1</td>
<td>12.9</td>
<td>16.6</td>
<td>22.2</td>
<td>28.0</td>
<td>3.6</td>
</tr>
<tr>
<td>Argentina</td>
<td>6.0</td>
<td>5.9</td>
<td>6.1</td>
<td>10.7</td>
<td>21.1</td>
<td>21.3</td>
<td>20.6</td>
<td>21.5</td>
<td>21.5</td>
<td>22.6</td>
<td>12.5</td>
</tr>
<tr>
<td>Chile</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
<td>2.8</td>
<td>11.2</td>
<td>11.7</td>
<td>12.2</td>
<td>13.7</td>
<td>17.4</td>
<td>21.3</td>
<td>18.7</td>
</tr>
<tr>
<td><strong>Central and South-East Europe</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russian Federation</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>2.4</td>
<td>20.1</td>
<td>44.2</td>
<td>62.3</td>
<td>90.9</td>
<td>107.3</td>
<td>120.4</td>
<td>15.7</td>
</tr>
<tr>
<td>EU 10 new member states</td>
<td>0.3</td>
<td>0.3</td>
<td>0.9</td>
<td>2.2</td>
<td>5.2</td>
<td>6.9</td>
<td>9.5</td>
<td>15.1</td>
<td>22.6</td>
<td>26.5</td>
<td>na</td>
</tr>
</tbody>
</table>

some details. Here it can be seen that the most dramatic increases over the past two decades have been recorded by Hong Kong, Singapore, Taiwan, China, Brazil and Russia.

It should also be noted that the dramatic rise in outward investment from Hong Kong can be attributed in part to the increase in round-tripping investment from mainland China. The estimates of the extent of round-tripping vary considerably, from a quarter to about a half of all Hong Kong investment in China (UNCTAD, 2006:12). Although its share of Chinese investment has declined somewhat in recent years, Hong Kong is still the single largest investor in mainland China. However, the extent of round-tripping investment is expected to decline as a result of new legislation in 2007 by the Chinese government, which is set to remove the concessions earlier available to foreign investors.53

2.3.2 The Significance of Outward Direct Investment to Home Countries

In general, over the past 40 years, there has been a gradual convergence between the share of outward direct capital stock of the leading industrial countries and their share of the exports of manufactured goods and services. In 1960, for example, the ratio between the US share of the world stock of FDI and that of her export of goods and services was 2.74, and the corresponding ratios for the UK, France, Germany and Japan were 2.01, 0.99, 0.12 and 0.20. By 1988, the ratios were 1.92, 2.54, 0.79, 1.05 and 1.57, and by 2000, they were 1.73, 3.35, 1.51, 0.89 and 0.61.

Table 2.3 also shows that, relative to the GDP of the leading developed market economies, the significance of the outward capital stock increased consistently between 1967 and 2005, although in some countries such as Japan, Sweden and the Netherlands, this measure dipped in 1980. The table also suggests that the comparative importance of the foreign activities of their own MNEs varies markedly between countries, with the smaller European economies, for example, Switzerland, Belgium/Luxembourg and the Netherlands, recording the highest significance ratios, and some of the larger industrial economies, such as the US, Japan and Italy, the lowest. The UK, whose FDI outward stock accounted for 56% of GDP in 2005, is something of an exception in this respect.

The effects of major currency fluctuations are also evident in the figures presented in Table 2.3. For example, between 1980 and 1985 the $/£ exchange rate depreciated from 2.39 to 1.45, that is, by 38%. This resulted in a fall in the dollar value of the UK GDP, but not that of the foreign capital stock (the initial value of which is expressed in non-UK currencies). As a consequence, the UK significance ratio rose more than it would otherwise have done. By contrast, in the case of countries whose currency appreciated vis-à-vis the dollar in the first half of the 1980s (for example, Germany and Japan), the rise in the significance ratio underestimates the growing importance of their FDIs. The Plaza Agreement in 1985 brought the appreciation of the yen to an end, but the 1990s saw high exchange rate volatility, which particularly affected the major developing economies, including Brazil, Mexico and South Korea.

Even so, the figures set out in Tables 2.4 and 2.5 paint an unmistakable picture. While the growth in absolute terms continues to be impressive, the significance of outward FDI in relative terms has greatly declined for the US, while several smaller European countries, as well as a growing number of developing economies, are making up for the difference. Indeed, the early 2000s have witnessed a second wave of outward direct investment by
MNEs from developing countries, the first one having taken place some two decades earlier.

The emergence of MNEs from developing countries in the late 1970s coincided with the generation of new competitive advantages, which were best exploited through foreign production (Lecraw, 1977; Lall, 1983). To start with, these advantages were usually based on the national resources of the home country. Examples included Indian shrimp canners, Argentine meat packing firms, Malaysian rubber companies, Brazilian and Nigerian coffee processing firms, Taiwanese pulp and paper producers, Thai timber firms and so on. This was followed a bit later on by MNEs from countries such as South Korea, Singapore, Taiwan, Brazil and India, who developed quite a sophisticated range of products and services, and began to actively participate in such sectors as consumer electronics, motor vehicles, aircraft and hotels, particularly within the Asian region. In the late 1980s, a number of Asian and Mexican MNEs also began to engage in cross-border M&A activity in sectors such as cement, glass, chicken and fish canning. Several state-owned MNEs from developing countries in the oil and steel industries were also an important part of the first wave of investment from these countries (Lall, 1983; Wells, 1983; Khan, 1987; Oman, 1989).

The rise of the new wave of investment from developing countries is reflected in the number of developing countries reporting outward flows of FDI, which rose from 70 in 1985 to 122 in 2003 (Sauvant, 2005:642). Like the investment originating from developed countries, outward FDI from developing countries is highly concentrated, with just six economies – Hong Kong (China), the British Virgin Islands, Russia, Singapore, Taiwan and Brazil – accounting for 71% of the outward stock in 2005 (UNCTAD, 2006). Intra-regional investment continues to be important, accounting for an estimated 40% of the investment of developing countries in Asia, and around 15% in Latin America and Africa (Sauvant, 2005).

A variety of different motivations underlie the investment patterns of the increasingly numerous group of developing economies (UNCTAD, 2006). Over the past few years, large resource-poor economies such as China and India have undertaken significant resource-seeking investments in the mining and petroleum industries, particularly in Africa, but also in West Asia and Latin America (ibid.). In addition to securing raw materials, large acquisitions of production capacity have also been concluded in 2007 by Indian steel companies such as Mittal Steel in its takeover of Arcelor (Luxembourg), and that of Corus (UK/Netherlands) by Tata Steel, where Tata emerged victorious over a rival bid by CSN of Brazil.

The ongoing commodity boom in the world economy that began in 2003 has also prompted investment by some large MNEs from the relatively resource-rich economies, such as Australia and Norway, as well as Brazil and Russia, to undertake FDI to secure resources and to facilitate their foreign expansion. Indeed, in 2007, the Financial Times identified the new seven sisters in the oil industry as Aramco of Saudi Arabia, Gazprom of Russia, CNPC of China, NIOC of Iran, PDVSA of Venezuela, Petrobras of Brazil and Petronas of Malaysia. These seven firms currently control some 30% of all the oil and gas production and reserves in the world. The original seven sisters, which were whittled down to four following industry consolidation in the 1990s, namely ExxonMobil, Chevron, BP and Royal Dutch/Shell, produce only about 10% of world output, and hold 3% of the reserves.

Furthermore, according to UNCTAD (2007), among the top 25 oil and gas companies in 2003 ranked by reserves and production, 15 were state-owned enterprises (SOEs) from
developing countries and Russia, while three others had minority state ownership, namely Petrobras (Brazil), ENI (Italy) and Lukoil (Russia). Out of the top 25 mining companies ranked by production in 2004, seven were from developing countries, and two from Russia. However, unlike in oil, private companies play the dominant role in mining.59

Outside the primary sector, a combination of market- and asset-seeking motivations are the main drivers influencing the outward FDI by developing country firms. The foreign expansion of these firms – especially in developed countries – is increasingly taking the form of M&As, as this gives the investing firm access not only to the technological and managerial assets of the acquired firm, but also to its brand names, knowledge of the local markets, and established channels of distribution. Recent examples include the Chinese Lenovo’s acquisition of IBM’s PC business, the expansion of the Mexican Cemex through multiple M&As in the cement industry in the US, the expansion of Turkey’s appliance maker Arçelik via multiple M&As within Europe, the merger of South African brewer SAB with Miller of the US, and that of the Brazilian AmBev with Belgium’s Interbrew (UNCTAD, 2006). Other examples provided by Nayyar (2007) include Indian information technology (IT) firms such as Infosys and Wipro, and generic pharmaceutical firms such as Ranbaxy, which have engaged in M&As abroad to acquire knowledge and brand names, but which have also invested in R&D facilities in several research ‘hot spots’ around the world.60 Of the cross-border M&As undertaken by Indian firms in 2000–06, three-quarters were in the US or Europe, 30% were in IT services, and 20% in pharmaceuticals (ibid.).

In addition to the acquisitions undertaken by the more established MNEs, some smaller firms from developing countries are also beginning to get involved in outward FDI. This is particularly the case with Chinese firms, whose efforts to seek markets and resources abroad are supported by the Chinese government’s ‘Go Global’ strategy, and large financial reserves (Sauvant, 2005). For example, in the US Midwest, Chinese firms have undertaken acquisitions of some of the financially distressed manufacturing firms in the area, with access to customers and sales and distribution networks being the primary reasons motivating the investment.61 At the same time, the investment promotion agencies (IPAs) of several countries and regions such as Denmark, Ireland, Scotland, Singapore and Sweden have set up satellite offices in China to encourage Chinese outward investment to locate in their country or region (ibid.:678).

Finally, we might note that in a survey of 1,216 foreign firms which had invested in 15 sub-Saharan countries in 2005, the median book value was $1.5 million; and half of the firms surveyed employed less than 15 people (UNIDO, 2007). The majority of these smaller investments were from other developing countries.

2.4 THE LEADING INWARD INVESTORS

2.4.1 The Facts

The structure of the accumulated stock of inward direct investment is less concentrated than that of the outward capital stock. Even so, in 2005, the five leading recipient countries – the US, the UK, Hong Kong (China), Germany and France – accounted for 40% of the total. More generally, the share of the developing countries as hosts to MNE
activity has always been much greater than their role as capital exporters. However, in contrast to the steady growth of outward investment from developing countries, their share of the total inward stock fell back from 39% in 1980 to 26% in 1990, rising to 30% in 2000 and back to 27% in 2005. However, the last dip is likely to have been partly the result of the boom in M&A activity in North America and Europe. At the same time, the share of Africa of the inward direct investment stock has remained very low at around 2.5%, but it is expected to rise in the next decade or more due to a marked increase by Chinese and Indian firms in the primary sector (UNCTAD, 2006, 2007).

These data and changes in the geographical distribution of the inward investment stock are set out in Table 2.6. Because of differences in coverage, definitions, reporting systems and the recording of errors and omissions, together with the fact that the data are based on that supplied by host countries rather than home countries (as in the case of Table 2.3), the estimates of the aggregate stock of inward and outward investment are not directly comparable with each other.

Table 2.6 also gives details of the significance of the inward capital stock relative to GDP of developed and developing countries, and how this has changed over the past four decades. Perhaps the most obvious conclusion to be drawn from this table is that while, as a group, developing countries have attracted a somewhat smaller share of MNE activity in recent years, such activity has become a more significant component in their domestic economies. No less significant, however, have been the very marked changes in the distribution of MNE activity within developed and developing countries. Within developed countries, for example, there has been a shift of interest of foreign investors away from some traditional resource-rich countries such as Canada and Australia, to the leading industrial nations, and especially the US and continental Europe. Japan is the main exception; for the past two decades, it has accounted for less than 1% of the global inward stock of FDI. However, in more recent years, Japan relaxed many of the earlier restrictions imposed on inward investors; and between 2003 and 2005 its share of global inbound investment flows was 7.7% (UNCTAD, 2006).

The recent surge in primary investment aside, this restructuring of FDI has reflected partly the growing significance of the secondary and tertiary sectors in most economies, and partly a realignment of exchange rates, which itself reflects changes in the attractiveness of countries to foreign investors. The US is by far and away the leading inward direct investor (having replaced Canada in this role in 1979), and in 1988 it accounted for no less than 27% of the stock of global inward investment (and 34% of that of developed countries) – more than that attracted either to all of Europe or to the developing countries. With the overall growth in FDI, the relative share of the US has declined, but in 2005, it still accounted for the largest (16%) share of the world’s inward FDI stock.

Within developing countries, the share of Asian countries (outside of the Indian subcontinent) of the capital stock of foreign multinationals rose from 15% in 1960 to 40% in 1988, and then to 62% by 2000. Most of the earlier growth was concentrated in the newly industrialising economies (NIEs) of South Korea, Taiwan, Hong Kong and Singapore. However, since the mid-1980s, the second generation of the manufacturing ‘tigers’ of South-East Asia, namely, Malaysia, Thailand and the Philippines, noticeably increased their share of new inward investment, especially from Japan. While the growth in inward investment to Malaysia and Thailand has continued, and countries such as Vietnam and Turkey have emerged as host countries, it has been dwarfed in the 1990s by investment
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>% of GDP</td>
<td>Value</td>
<td>% of GDP</td>
<td>Value</td>
<td>% of GDP</td>
</tr>
<tr>
<td>Developed economies</td>
<td>73.2</td>
<td>3.2</td>
<td>153.7</td>
<td>3.8</td>
<td>375.0</td>
<td>4.7</td>
</tr>
<tr>
<td>European Union</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>185.7</td>
<td>5.3</td>
</tr>
<tr>
<td>UK</td>
<td>7.9</td>
<td>7.2</td>
<td>24.1</td>
<td>13.9</td>
<td>63.0</td>
<td>11.7</td>
</tr>
<tr>
<td>France</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>22.9</td>
<td>3.4</td>
</tr>
<tr>
<td>Germany</td>
<td>3.6</td>
<td>1.9</td>
<td>13.1</td>
<td>3.8</td>
<td>36.6</td>
<td>4.0</td>
</tr>
<tr>
<td>Belgium and Luxembourg</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>7.3</td>
<td>5.9</td>
</tr>
<tr>
<td>Netherlands</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>19.2</td>
<td>11.1</td>
</tr>
<tr>
<td>Spain</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>5.1</td>
<td>2.4</td>
</tr>
<tr>
<td>Italy</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>8.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Ireland</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>3.7</td>
<td>19.5</td>
</tr>
<tr>
<td>EU 10 new member states</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>2.5</td>
<td>8.9</td>
</tr>
<tr>
<td>Other Western Europe</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>15.1</td>
<td>8.9</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2.1</td>
<td>8.4</td>
<td>4.3</td>
<td>9.8</td>
<td>8.5</td>
<td>8.4</td>
</tr>
<tr>
<td>North America</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>137.2</td>
<td>4.6</td>
</tr>
<tr>
<td>US</td>
<td>9.9</td>
<td>1.2</td>
<td>20.6</td>
<td>1.6</td>
<td>83.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Canada</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>54.1</td>
<td>20.6</td>
</tr>
<tr>
<td>Other developed economies</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>37.0</td>
<td>2.8</td>
</tr>
<tr>
<td>Australia</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>13.2</td>
<td>8.8</td>
</tr>
<tr>
<td>Japan</td>
<td>0.6</td>
<td>0.3</td>
<td>1.6</td>
<td>0.4</td>
<td>3.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Developing economies</td>
<td>32.3</td>
<td>6.4</td>
<td>54.7</td>
<td>5.4</td>
<td>240.8</td>
<td>10.2</td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>8.3</td>
<td>3.9</td>
<td>15.3</td>
<td>3.6</td>
<td>174.5</td>
<td>14.3</td>
</tr>
<tr>
<td>Hong Kong, China</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>138.8</td>
<td>487.0</td>
</tr>
<tr>
<td>China</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>6.3</td>
<td>3.1</td>
</tr>
<tr>
<td>Singapore</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>6.2</td>
<td>52.9</td>
</tr>
</tbody>
</table>
### Table 2.6  (continued)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>% of GDP</td>
<td>Value</td>
<td>% of GDP</td>
<td>Value</td>
<td>% of GDP</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>1.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Thailand</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>1.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Malaysia</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>5.2</td>
<td>21.1</td>
</tr>
<tr>
<td>India</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>1.2</td>
<td>0.7</td>
</tr>
<tr>
<td>Turkey</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Taiwan, Province of China</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>2.4</td>
<td>5.8</td>
</tr>
<tr>
<td>Vietnam</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>10.3</td>
<td>14.2</td>
</tr>
<tr>
<td>Africa</td>
<td>5.6</td>
<td>9.0</td>
<td>10.2</td>
<td>8.7</td>
<td>16.2</td>
<td>4.6</td>
</tr>
<tr>
<td>South Africa</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Nigeria</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>2.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Egypt</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>2.3</td>
<td>9.9</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>18.5</td>
<td>15.8</td>
<td>28.9</td>
<td>12.3</td>
<td>50.0</td>
<td>6.5</td>
</tr>
<tr>
<td>Mexico</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>8.1</td>
<td>3.6</td>
</tr>
<tr>
<td>Brazil</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>17.5</td>
<td>7.4</td>
</tr>
<tr>
<td>Chile</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>0.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Argentina</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>5.3</td>
<td>6.9</td>
</tr>
<tr>
<td>South-East Europe and CIS</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>World</td>
<td>105.5</td>
<td>3.8</td>
<td>208.4</td>
<td>4.1</td>
<td>615.8</td>
<td>6.0</td>
</tr>
</tbody>
</table>

**Note:** * Figure is for Belgium only.

directed at China. The share of Latin America and the Caribbean declined from 50% of
that attracted to all developing countries in the 1960s and 1970s, to just 21% in 1980, but
has since recovered to 34% in 2005.64 These geographical reconfigurations largely reflect
a shift of interest of foreign firms away from resource-based to manufacturing activities,
with NIEs in Latin America and East Asia recording growth rates in manufacturing
industry of well in excess of 10% per annum for much of the past 35 years. Furthermore,
Mexico’s membership of the North American Free Trade Area (NAFTA) was undoubt-
edly a critical factor in its increased share of the inbound FDI stock of developing coun-
tries from 1% in 1990 to 8% in 2005.

Finally, the significant increase in the activities of foreign-owned firms in mainland
China, and a concomitant increase in investment to Hong Kong since 1990, calls for some
explanation. As mentioned earlier, a notable proportion of this investment can be under-
stood in terms of round-tripping investment from China, whereby Chinese investors route
their investment through foreign tax havens in order to enjoy tax concessions and other
incentives afforded to foreign investors. While the full extent of round-tripping investment
is very hard to assess due to the many guises it can take, estimates suggest that it might
account for 25–40% of the inward FDI stock in China, where, in addition to Hong Kong,
the larger estimate includes financial capital that is routed through the tax havens of the
British Virgin Islands, Bermuda, Panama and the Cayman Islands (UNCTAD, 2004:26).
The expectation is, however, that China’s accession into the WTO in 2001, and the
removal of preferential treatment for foreign investors announced in 2007, might curb this
practice. However, even with round-tripping factored out, China has attracted an impres-
sive stock of inward investment in just over a decade, with much of the investment origin-
ating in other developing economies in East Asia, following a so-called ‘flying geese’
pattern of investment (see, for example, Ozawa, 1996, 2005).

2.4.2 The Significance of Inward Direct Investment for Host Countries

It would be incorrect to infer from the previous paragraphs that the economic impact of
foreign-owned MNEs on the least developed countries is unimportant. Far from it, some
of the poorer economies – especially in sub-Saharan Africa – strongly depend on inward
direct investment.

In 1980, as Table 2.6 shows, the inbound FDI stock as a proportion of the GDP of
developing countries as a group was 10.2%, compared with 4.7% in the case of developed
countries. In spite of the growth in FDI that exceeded the growth in GDP, particularly in
the late 1990s,65 the ratio of foreign inward investment stock to GDP grew considerably
in the early 2000s. The corresponding significance ratios for 1990 and 2005 were 9.8 and
27.0% and 8.5 and 22.7%, respectively, although within each group of countries there were
wide variations in the inbound FDI significance rations. While developed countries, on
average, had higher significance ratios than developing countries (FDI growth had
surpassed GDP growth by a wider margin), in 2000, more than half of the developing
countries had a ratio higher than 20%. While the upper-middle-income developing coun-
tries had the highest FDI significance ratios, almost half of even the lower-middle- and
low-income countries had a ratio in excess of 20%.

Beginning with the World Investment Report of 2002, UNCTAD has published, each
year, its estimate of what it calls the ‘Transnationality Index’ of host economies. This is
in many respects the host country equivalent of the TNI of firms, as it is a composite of four kinds of significance ratios: FDI inflows as a percentage of gross fixed capital formation (averaged for three years), FDI inward stock as a percentage of GDP, the value-added of foreign affiliates as a percentage of GDP, and employment of foreign affiliates as a percentage of total employment. The average of these ratios is intended to proxy the importance (and by implication the likely impact) of the activities of foreign affiliates on the host economy.

There are substantial differences in the TNI values of particular countries. As might be expected, the ratios tend to be highest for the smaller industrialised European countries, notably the Netherlands and Sweden, and more recently also Belgium/Luxembourg, Ireland and Denmark. They are notably below average for countries such as the US, Italy, Greece or Japan, whose domestic economies are large, or alternatively, who receive little inward investment (UNCTAD, 2006:11). We shall present more detailed data on the impact of MNE activity on home and host economies in Part III.

Finally, a separate mention should be made of the eight Central and Eastern European countries, along with the small economies of Cyprus and Malta, which joined the EU in 2004. Within the decade of 1995–2004, the inward FDI in this group of 10 countries grew fivefold, to reach $230 billion in 2004 (UNCTAD, 2005c:86). The three largest host countries – Poland, Hungary and the Czech Republic – accounted for some three-quarters of all the inflow of investment. As a percentage of GDP, the inward stock in the accession countries amounted to 39% in 2004, while the corresponding figure for the EU-15 was 31%.

For market-seeking investors, the growth rates of the accession countries at twice the EU average have undoubtedly been attractive, while efficiency-seeking investment has been drawn in by low wages, which even when adjusted for differences in productivity, are still well below the EU average. While in due course, the wage advantage can be excepted to disappear, there are signs that the new member states are also beginning to attract inbound MNE activity that utilises higher skill levels, including design, management and R&D. It is also expected that with the reduction in political and economic risk that resulted from the act of accession, small and medium-sized enterprises (SMEs) from the old member states might find it increasingly attractive to invest in Central and Eastern Europe (ibid.:86).

Such predictions aside, since 1995, the eight new member states from Central and Eastern Europe have attracted a declining share of the total inward investment directed at the EU-25, and in absolute terms, the annual flows of investment in 2003 and 2004 were below the level of 1995, although 2005 saw an increase in investment to the Czech Republic and Hungary (UNCTAD, 2004:72, 2006:299). The years 2003–05 also saw strong growth in inward investment to the Commonwealth of Independent States (CIS) and South-East Europe, with Russia, Kazakhstan, Romania and Ukraine accounting for three-quarters of the total inward stock of $256 billion in the region (UNCTAD, 2006:306).66

2.5 THE BALANCE BETWEEN OUTWARD AND INWARD DIRECT INVESTMENT

Combining the data presented in the previous two sections two outstanding conclusions emerge. First, the foreign activities of domestic MNEs and those of the affiliates
of foreign multinationals are becoming an increasingly important component of the GDP of both industrialised and industrialising market economies. In 1967, the value of the combined inward and outward direct investment stock of all countries was only 7.8% of world GDP; by 1980 it had risen to 11.5%, by 1990 to 17.3%, and by 2005 to 46.6%.

Second, there appear to be some signs of a growing symmetry between outward and inward foreign capital stock in the case of most countries. Particularly worthy of note is the change in the ratio of the outward to inward stock of the US – from 5.7 in 1967 to 2.6 in 1980, 1.1 in 1990 and 1.3 in 2005. With the exception of Belgium/Luxembourg, all the major developed investor nations had become net outward investors by 2000. Among the developing and transition economies, and apart from the tax haven countries, Taiwan was the only net outward investor in 2005, although Hong Kong, Singapore, South Korea, Malaysia, Indonesia and Russia have all witnessed relatively stronger growth in their outward FDI since 1980.

To some extent, these changes reflect a repositioning of the changing international competitiveness of countries, as suggested by the realignment of exchange rates which has taken place over the past 30 years. It is no coincidence that the industrial countries that have most improved their net international investment positions since 1960 (that is, Japan and Germany and some LDCs) are those whose currencies have appreciated the most. At the same time, the US, whose currency has depreciated the most, has had the greatest deterioration in its outward/inward capital stock. The fluctuating position of the UK as a net capital exporter also accords well with a currency which bought US $2.4 in the early 1970s, dropped to $1.1 in 1979, recovered to $1.9 by December 1991 and remained around $1.5 throughout the 1990s, and appreciated again to $1.9 by March 2007.

However, government policy and other changes in the macroeconomic climate and in the structure of production and trade, which are less readily reflected in exchange rate changes, are no less important reasons. Thus, in spite of a fall in the value of the Canadian dollar relative to the US dollar for most of the 1980s and 1990s, Canadian direct investment in the US has increased sharply – especially in the non-tradable service sectors, and particularly since NAFTA came into force in 1994. Also the rapid increase in the foreign value-added activities of Swedish MNEs has mirrored the higher (or expected higher) profitability of these activities relative to those in Sweden, and continuing doubts about the competitiveness of the Swedish economy, particularly in labour-intensive sectors. In all likelihood, the growth of strategic alliances has also contributed towards the cross-hauling of trade and production by MNEs.

2.6 THE SECTORAL COMPOSITION OF OUTWARD AND INWARD INVESTMENT

2.6.1 The Main Orders of Economic Activity

Just as there is a distinct geographical concentration of the countries supplying and receiving FDI, so is there a marked difference in the industrial sectors in which MNE activity is prevalent. While the pattern of this concentration differs among the home countries of the investing firms, as well as among the countries in which their affiliates are
located, some general conclusions may be drawn both from the data on the stock of FDI published by countries, and from those of the foreign assets, employment and production reported directly by the leading MNEs. This chapter will concern itself with the sectoral distribution of FDI, while that of the foreign assets, employment and production will be addressed in Part III, which deals with the impact of MNEs on the home and host economies in which they operate.

For the global economy as a whole, in 2004, the primary sector accounted for 4% of the outward stock of FDI, while the secondary (manufacturing) and tertiary (services) sectors accounted for 27 and 68%, respectively. Developing countries accounted for 3% of the primary investment stock, as compared to 4% in manufacturing and 10% in services. Table 2.7 sets out the broad sectoral distribution of the outward FDI stock of seven of the largest capital-exporting countries in 1975, 1987, 1997 and 2003. The table shows that, taking an unweighted average, in 2003 about 27% of outbound FDI was directed to the manufacturing sector, 67% to services and 8% to the primary product sector. In 1987, 35.6% of MNE activity was directed to the manufacturing sector, about 47.4% to services and 17.0% to the primary product sector, while the corresponding percentages for 1975 were 42.1, 33.4 and 24.5%, respectively. The table also reveals that there are some marked differences in the sectoral distribution of the capital stock between home countries. These differences largely reflect the stage of internationalisation and the structure of resource endowments and capabilities of the investing countries (compare, for example, Japan with Germany).

Other data – notably that published by UNCTAD in the various editions of the *World Investment Directory* – reveal that recipient countries also vary in their propensity to attract different kinds of FDI. Understandably nations rich in natural resources, but with small populations (for example, Canada, Australia, the oil-rich Middle Eastern and several African countries), tend to attract a higher percentage of inward investment in the primary sector. On the other hand, industrial or industrialising economies (for example, Germany, Japan, South Korea, Singapore, China and Mexico) attract an above-average share of inward investment in the secondary sector. The US, the UK, France, Switzerland, Hong Kong (China) and Fiji are among the countries that record the highest share of tertiary investments.

Generally speaking, the share of inbound MNE activity directed to the service sectors rises as income levels increase. However, it is also the case that FDI in infrastructural services, for example, public utilities, communications and financial services, has also increased as they have been privatised and/or deregulated, and as restrictions on the foreign ownership of such sectors has eased. In 1988, the services sector accounted for 45% of the inward investment stock of developed countries, and 27% of the stock of developing countries (UNCTAD, 1999:423). By 2004, the share of services in the inward stock of developed economies had increased to 63%, and that in developing countries (excluding the CIS countries) to 60% (UNCTAD, 2006:266). Indeed, FDI in the service sectors in developing countries has grown eightfold since 1990, as compared to a sixfold growth in the primary sector, and a fourfold growth in the manufacturing sector (ibid.).

The changing composition of international production so far outlined in this chapter reflects part of a longer-term trend, the features of which will be explored in more detail in Chapter 6. Suffice it to mention here that in the case of most industrialised developed countries, FDI was initially directed to the extraction of minerals and the harvesting of
raw materials and foodstuffs for consumption, or further processing, in the investing countries. Of the leading outward investors of the 19th century, Germany was the only nation that had few foreign interests in the primary goods sector. It is no coincidence that it was never a major colonising power. Of the foreign value-added activities of US, British, French and Dutch MNEs in developing countries, the great majority of these – probably four-fifths – was directed to the primary sector.

After the Second World War, this all changed. In the first place, foreign-owned production became more orientated towards the industrialised countries to supply markets which, for one reason or another, could not be serviced, or serviced as cheaply, by exports.

Table 2.7  Changes in the sectoral composition of the stock of outward FDI of investing countries, 1975–2003

<table>
<thead>
<tr>
<th>Home country</th>
<th>Year</th>
<th>Primary</th>
<th>Secondary</th>
<th>Tertiary</th>
<th>Unspecified</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>1975</td>
<td>26.4</td>
<td>45.0</td>
<td>28.6</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1989</td>
<td>16.7</td>
<td>40.9</td>
<td>42.3</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1997</td>
<td>7.4</td>
<td>34.5</td>
<td>58.1</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>4.9</td>
<td>21.5</td>
<td>73.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Canada</td>
<td>1975</td>
<td>21.1</td>
<td>50.5</td>
<td>28.4</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1987</td>
<td>13.1</td>
<td>43.3</td>
<td>43.4</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1997</td>
<td>24.8</td>
<td>6.4</td>
<td>43.1</td>
<td>25.7</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>10.1</td>
<td>30.9</td>
<td>58.5</td>
<td>0.6</td>
</tr>
<tr>
<td>Japan</td>
<td>1975</td>
<td>28.1</td>
<td>32.4</td>
<td>39.5</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1989</td>
<td>6.7</td>
<td>26.0</td>
<td>67.0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1996</td>
<td>6.2</td>
<td>29.7</td>
<td>62.2</td>
<td>1.9</td>
</tr>
<tr>
<td></td>
<td>2001</td>
<td>2.7</td>
<td>46.4</td>
<td>50.9</td>
<td>0.0</td>
</tr>
<tr>
<td>UK</td>
<td>1981</td>
<td>na</td>
<td>na</td>
<td>35.6</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1987</td>
<td>26.9</td>
<td>34.4</td>
<td>38.6</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1997</td>
<td>15.5</td>
<td>38.2</td>
<td>46.3</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>na</td>
<td>29.1</td>
<td>62.5</td>
<td>8.4</td>
</tr>
<tr>
<td>France</td>
<td>1975</td>
<td>22.1</td>
<td>38.2</td>
<td>39.7</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1988</td>
<td>15.0</td>
<td>36.6</td>
<td>48.3</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1997</td>
<td>6.4</td>
<td>36.1</td>
<td>57.0</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>1.8</td>
<td>16.0</td>
<td>81.8</td>
<td>0.5</td>
</tr>
<tr>
<td>Germany</td>
<td>1976</td>
<td>4.5</td>
<td>48.3</td>
<td>47.2</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1988</td>
<td>2.8</td>
<td>43.4</td>
<td>53.7</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1997</td>
<td>0.7</td>
<td>43.6</td>
<td>55.7</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>0.3</td>
<td>29.9</td>
<td>69.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1975</td>
<td>46.8</td>
<td>38.6</td>
<td>14.6</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1988</td>
<td>36.4</td>
<td>24.7</td>
<td>38.8</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>1997</td>
<td>24.4</td>
<td>24.6</td>
<td>50.9</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>22.5</td>
<td>17.2</td>
<td>60.4</td>
<td>0.0</td>
</tr>
</tbody>
</table>

In the second place, nationalisation and expropriation programmes of several host developing nations in the 1960s and 1970s drastically reduced the role of many MNEs, particularly in the natural resource sectors. Third, the growth of export-processing manufacturing investment since the early 1970s and, more recently, a rapid expansion in trade and preindustrialisation-related activities in both developed and developing economies has diminished the relative significance of FDI in the primary sector in almost all host countries.

2.6.2 The Composition of FDI within Broad Industrial Sectors

Comprehensive and comparable statistics on the industrial distribution of value-added activities by MNEs, or their affiliates, within the sectors identified in previous paragraphs are more difficult to obtain. Except in the case of a very few countries, they are not available beyond the three-digit level of (US) standard industrial classification (SIC). Table 2.8a sets out some details on the sectoral composition of the outward direct investment stock of MNEs from selected outward investors from developed countries, while Table 2.8b presents data for developing country investors. Tables 2.9a and 2.9b present the corresponding statistics for the activities of foreign affiliates in some leading host countries. Both sets of data are for 2003, or the latest year available, with figures for 1988 presented in brackets for comparative purposes.

The data in these tables lead to a number of broad conclusions. First, within the primary sector, investment by multinational petroleum and mining companies accounts for the vast majority of the outward investment stock of both the developed and developing countries, although relative to all MNE activities, that of the oil companies is more concentrated in the latter countries. Indeed, of the 50 largest non-financial MNEs from developing countries in 2004, seven were petroleum companies. While investment by petroleum MNEs dominates the foreign-owned primary sector of most host countries some, such as Spain, Ecuador, Indonesia, Morocco, Liberia, Thailand, Brazil, Botswana, Namibia and Cameroon, also attract substantial investments in agricultural sectors, including cash crops such as rubber, tobacco, sugar, palm oil, coffee, cocoa, pineapples and bananas. Still others, including Canada, Papua New Guinea, Chile, Malaysia, Democratic Republic of the Congo, Gabon, Zambia and Zimbabwe, are important sources of minerals and metals such as bauxite, copper, zinc and tin. There is also increasing FDI in aquaculture and horticulture in several African, Asian and Latin American countries.

Second, in the manufacturing sector there are two main groups of industries favoured by MNEs. The first are the capital-intensive processing industries, which are often based on foodstuffs, minerals and raw materials supplied by other, or the same, foreign investors in the primary sector. They produce both intermediate products and differentiated consumer goods. The most important of these are chemicals (including pharmaceuticals, which would fit more comfortably into our second category), food, beverages and tobacco, metals and metal products, and textiles and clothing. In Tables 2.8a and 2.8b, the importance of food, beverages and tobacco in outward MNE activity seems to be above average for the UK and the Netherlands, while that from the Netherlands and Canada is most noticeable in metals and metal products. Significant investment in chemicals also originates from Switzerland, Germany, the UK, Japan, Taiwan and the US.
The second group of industries favoured by MNEs are the technology and/or human capital-intensive sectors, those which can benefit from the economies of large-scale production and those whose value added predominantly consists of brand names. These are largely the fabricating industries, such as (mechanical) machinery and equipment, electrical and electronic equipment and motor vehicles; and consumer goods industries, for example, cigarettes, processed food and beverages, and some kinds of clothing and footwear. Within these sectors, notable outward investment (in relative as well as absolute terms) occurred in transportation equipment (motor vehicles) in the case of Germany and Japan, in electrical and electronic equipment in the case of Japan and Taiwan, and in a variety of processed foods and beverages in the case of the US.

In summary, within both groups of industries, outward MNE activity tended to be concentrated in:

1. the most technologically advanced and capital-intensive sectors,
2. those supplying products with an above-average income elasticity of demand and a high degree of product differentiation, and
3. those where there are substantial economies of scale or scope to be gained from plant specialisation, but a geographical diversification of activities.

Tables 2.9a and 2.9b set out the industrial structure of the inbound FDI stock for a selection of host countries. In the manufacturing sector, there is a concentration of chemical investment in the US, Canada, Japan, Germany, Switzerland, South Korea and Argentina, that of electrical machinery in Japan, Singapore and South Korea, that of motor vehicles in Japan, Canada and Mexico, and that in food/beverages and tobacco in Canada, Italy, Mexico, Argentina, South Korea and Russia.

In the service sectors which, as we have seen, are attracting an increasing share of MNE activity, the overwhelming amount of FDI has been concentrated in trade and financial services, although MNEs are taking an increasing interest in other services, including all kinds of business services, engineering and business consultancy, as well as construction, tourism and real estate investment (Borga and Mann, 2004; UNCTAD, 2004). Indeed, by 2004 business services were the largest individual sector in outward investment, with finance a close second, followed by trade and transport and communications. In the period since 1990, the value of outward FDI stock in business services had increased 45-fold, while that of transport and communications increased 17-fold (UNCTAD, 2006:267).

There are also considerable differences in the composition of activities of MNE affiliates within the service sectors of host countries. These differences largely reflect the economic structure of such countries, their stage of development, and the attitude of host governments towards foreign participation in sensitive sectors. Although, in all countries, trade- and finance-related services have accounted for the bulk of the inward direct investment stock, in the faster-growing developing countries, that directed to infrastructure services such as construction, transport, telecommunications and hotel accommodation is above average, while that in developed economies seems to be concentrated in financial and business services. Again the ownership of brand names in the hotel, fast food and car rental sectors offers foreign investors – particularly from the US – important competitive advantages. There are also significant inter-country differences in the role of particular services. Compare, for example, the overwhelming importance of tourism in Spain, the
Table 2.8a  Industrial distribution of outward FDI stock for selected developed economies, 2003 (percentages; figures for 1988 in brackets)

<table>
<thead>
<tr>
<th>Sector</th>
<th>US</th>
<th>Canada</th>
<th>Australia</th>
<th>Japan</th>
<th>UK</th>
<th>France</th>
<th>Germany</th>
<th>Netherlands</th>
<th>Italy</th>
<th>Switzerland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>4.9</td>
<td>10.1</td>
<td>3.0</td>
<td>2.7</td>
<td>na</td>
<td>1.8</td>
<td>0.3</td>
<td>22.5</td>
<td>14.4</td>
<td>na</td>
</tr>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>0.1</td>
<td>na</td>
<td>0.0</td>
<td>0.2</td>
<td>na</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Mining, quarrying, petroleum extraction</td>
<td>4.9</td>
<td>10.1</td>
<td>3.0</td>
<td>2.5</td>
<td>na</td>
<td>1.7</td>
<td>0.3</td>
<td>22.4</td>
<td>14.2</td>
<td>na</td>
</tr>
<tr>
<td>Secondary (of which)</td>
<td>21.5</td>
<td>30.9</td>
<td>58.1</td>
<td>46.4</td>
<td>29.1</td>
<td>16.0</td>
<td>29.9</td>
<td>17.2</td>
<td>29.3</td>
<td>33.7</td>
</tr>
<tr>
<td>Food, beverages and tobacco</td>
<td>2.5</td>
<td>2.5</td>
<td>na</td>
<td>2.1</td>
<td>7.0</td>
<td>1.1</td>
<td>0.6</td>
<td>6.2</td>
<td>2.5</td>
<td>na</td>
</tr>
<tr>
<td>Textiles, clothing and leather</td>
<td>0.2</td>
<td>na</td>
<td>na</td>
<td>1.1</td>
<td>6.5</td>
<td>0.2</td>
<td>0.8</td>
<td>na</td>
<td>1.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Wood and wood products</td>
<td>1.1</td>
<td>2.1</td>
<td>na</td>
<td>0.9</td>
<td>na</td>
<td>0.6</td>
<td>0.2</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Coke, petroleum products, nuclear fuel</td>
<td>0.9</td>
<td>na</td>
<td>na</td>
<td>0.2</td>
<td>na</td>
<td>0.3</td>
<td>0.0</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Chemicals and chemical products</td>
<td>5.1</td>
<td>3.0</td>
<td>na</td>
<td>6.8</td>
<td>8.4</td>
<td>2.6</td>
<td>6.2</td>
<td>na</td>
<td>4.4</td>
<td>14.7</td>
</tr>
<tr>
<td>Rubber and plastic products</td>
<td>0.7</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>0.1</td>
<td>0.9</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Metals and metal products</td>
<td>1.3</td>
<td>11.9</td>
<td>na</td>
<td>4.0</td>
<td>3.0</td>
<td>0.6</td>
<td>0.7</td>
<td>7.1</td>
<td>3.5</td>
<td>4.8</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>1.3</td>
<td>1.1</td>
<td>na</td>
<td>2.9</td>
<td>0.0</td>
<td>0.6</td>
<td>2.1</td>
<td>na</td>
<td>5.7</td>
<td>na</td>
</tr>
<tr>
<td>Electrical and electronic equipment</td>
<td>3.4</td>
<td>5.6</td>
<td>na</td>
<td>8.4</td>
<td>0.6</td>
<td>0.4</td>
<td>3.2</td>
<td>na</td>
<td>na</td>
<td>2.9</td>
</tr>
<tr>
<td>Motor vehicles and other transport eq.</td>
<td>2.5</td>
<td>4.6</td>
<td>na</td>
<td>16.3</td>
<td>2.1</td>
<td>5.0</td>
<td>14.0</td>
<td>na</td>
<td>4.4</td>
<td>na</td>
</tr>
<tr>
<td>Tertiary (of which)</td>
<td>73.6 (42.2)</td>
<td>58.5 (37.9)</td>
<td>34.9 (54.9)</td>
<td>50.9 (64.4)</td>
<td>62.5 (40.5)</td>
<td>81.8 (37.7)</td>
<td>69.8 (37.0)</td>
<td>60.4 (42.2)</td>
<td>56.3 (57.6)</td>
<td>66.3 (38.0)</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Electricity, gas and water</td>
<td>1.5</td>
<td>na</td>
<td>0.0</td>
<td>na</td>
<td>1.9</td>
<td>2.4</td>
<td>0.6</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Construction</td>
<td>0.1</td>
<td>1.9</td>
<td>1.3</td>
<td>0.9</td>
<td>0.4</td>
<td>0.5</td>
<td>0.2</td>
<td>0.6</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Trade</td>
<td>9.8</td>
<td>na</td>
<td>3.2</td>
<td>31.0</td>
<td>7.1</td>
<td>6.5</td>
<td>1.6</td>
<td>10.6</td>
<td>4.2</td>
<td>2.6</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>1.2</td>
<td>2.8</td>
<td>0.0</td>
<td>na</td>
<td>2.9</td>
<td>0.9</td>
<td>0.0</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Transport, storage and communications</td>
<td>0.7</td>
<td>6.0</td>
<td>2.2</td>
<td>na</td>
<td>25.4</td>
<td>4.8</td>
<td>1.3</td>
<td>6.6</td>
<td>-0.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Finance</td>
<td>20.3</td>
<td>42.2</td>
<td>26.9</td>
<td>na</td>
<td>16.1</td>
<td>21.4</td>
<td>20.3</td>
<td>6.6</td>
<td>37.0</td>
<td>60.6</td>
</tr>
<tr>
<td>Business services</td>
<td>38.2</td>
<td>4.5</td>
<td>1.3</td>
<td>2.9</td>
<td>6.4</td>
<td>43.9</td>
<td>44.9</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Unspecified</td>
<td>0.0 (2.0)</td>
<td>0.6 (32.1)</td>
<td>4.0 (0.7)</td>
<td>0.0 (0.3)</td>
<td>8.4 (neg)</td>
<td>0.5 (neg)</td>
<td>0.0 (neg)</td>
<td>0.0 (neg)</td>
<td>0.0 (neg)</td>
<td>0.0 (neg)</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Note:** neg – negligible.

**Sources:** World Investment Directory Online (UNCTAD). Figures for 1988 from UNCTAD (1999) and World Investment Directory Online (UNCTAD). Figures for Japan are for 2001, and 2002 for the UK.
Table 2.8b Industrial distribution of outward FDI stock for selected developing and transition economies, 1997–2003 (percentages; figures for 1987/88 in brackets)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>19.0</td>
<td>3.6 (3.1)</td>
<td>nsa (nsa)</td>
<td>0.6 (1.4)</td>
<td>7.7 (49.4)</td>
<td>0.6</td>
<td>0.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Mining, quarrying, petroleum extraction</td>
<td>1.0</td>
<td>na</td>
<td>nsa</td>
<td>0.4</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Secondary (of which)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food, beverages and tobacco</td>
<td>6.0</td>
<td>53.5 (81.7)</td>
<td>18.6 (17.6)</td>
<td>44.6 (77.5)</td>
<td>53.6 (33.7)</td>
<td>2.7</td>
<td>0.3</td>
<td>11.1</td>
</tr>
<tr>
<td>Textiles, clothing and leather</td>
<td>na</td>
<td>na</td>
<td>nsa</td>
<td>2.6</td>
<td>nsa</td>
<td>0.5</td>
<td>0.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Wood, wood products and paper</td>
<td>na</td>
<td>na</td>
<td>nsa</td>
<td>2.3</td>
<td>nsa</td>
<td>0.1</td>
<td>na</td>
<td>0.4</td>
</tr>
<tr>
<td>Coke, petroleum products, nuclear fuel</td>
<td>na</td>
<td>na</td>
<td>nsa</td>
<td>neg</td>
<td>nsa</td>
<td>0.5</td>
<td>na</td>
<td>0.0</td>
</tr>
<tr>
<td>Chemicals and chemical products</td>
<td>na</td>
<td>na</td>
<td>nsa</td>
<td>7.7</td>
<td>nsa</td>
<td>0.1</td>
<td>na</td>
<td>2.6</td>
</tr>
<tr>
<td>Rubber and plastic products</td>
<td>na</td>
<td>na</td>
<td>nsa</td>
<td>1.7</td>
<td>nsa</td>
<td>0.3</td>
<td>na</td>
<td>0.3</td>
</tr>
<tr>
<td>Metals and metal products</td>
<td>na</td>
<td>na</td>
<td>nsa</td>
<td>4.7</td>
<td>nsa</td>
<td>0.4</td>
<td>na</td>
<td>1.0</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>na</td>
<td>na</td>
<td>nsa</td>
<td>0.3</td>
<td>nsa</td>
<td>0.2</td>
<td>na</td>
<td>0.0</td>
</tr>
<tr>
<td>Electrical and electronic equipment</td>
<td>na</td>
<td>na</td>
<td>nsa</td>
<td>15.8</td>
<td>nsa</td>
<td>0.3</td>
<td>na</td>
<td>-0.1</td>
</tr>
<tr>
<td>Motor vehicles and other transport eq.</td>
<td>na</td>
<td>na</td>
<td>nsa</td>
<td>1.8</td>
<td>nsa</td>
<td>0.2</td>
<td>na</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>72.0</td>
<td>42.9 (15.3)</td>
<td>80.4 (80.4)</td>
<td>54.5 (17.0)</td>
<td>38.6 (16.9)</td>
<td>96.8</td>
<td>99.7</td>
<td>86.2</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Tertiary (of which)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity, gas and water</td>
<td>2.0</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>0.0</td>
<td>na</td>
<td>0.0</td>
</tr>
<tr>
<td>Construction</td>
<td>2.0</td>
<td>0.8</td>
<td>0.9</td>
<td>2.2</td>
<td>1.6</td>
<td>na</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>Trade</td>
<td>20.0</td>
<td>4.7</td>
<td>7.9</td>
<td>11.7</td>
<td>19.3</td>
<td>4.3</td>
<td>0.3</td>
<td>14.8</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>0.0</td>
<td>na</td>
<td>neg</td>
<td>neg</td>
<td>nsa</td>
<td>0.0</td>
<td>na</td>
<td>0.1</td>
</tr>
<tr>
<td>Transport, storage and communications</td>
<td>6.0</td>
<td>na</td>
<td>3.4</td>
<td>3.8</td>
<td>1.0</td>
<td>0.5</td>
<td>1.3</td>
<td>23.8</td>
</tr>
<tr>
<td>Finance</td>
<td>0.0</td>
<td>1.1</td>
<td>56.4</td>
<td>31.6</td>
<td>nsa</td>
<td>49.9</td>
<td>na</td>
<td>44.4</td>
</tr>
<tr>
<td>Business services</td>
<td>33.0</td>
<td>na</td>
<td>4.4</td>
<td>nsa</td>
<td>nsa</td>
<td>40.2</td>
<td>98.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Unspecified</td>
<td>3.0</td>
<td>0.0</td>
<td>1.0 (2.1)</td>
<td>0.3 (4.1)</td>
<td>0.1 (neg)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: nsa – not separately available.

Sources: Dunning (1993b); UNCTAD (2004); Sauvant (2005); World Investment Directory, Volume VII (UNCTAD); World Investment Directory Online (UNCTAD). For India, figures for 2004 reflect approved accumulated flows 1999–2005.
<table>
<thead>
<tr>
<th>Sector</th>
<th>US</th>
<th>Canada</th>
<th>Australia</th>
<th>Japan</th>
<th>UK</th>
<th>France</th>
<th>Germany</th>
<th>Netherlands</th>
<th>Italy</th>
<th>Switzerland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>1.4</td>
<td>17.3</td>
<td>19.2</td>
<td>na</td>
<td>11.5</td>
<td>0.2</td>
<td>1.4</td>
<td>20.1</td>
<td>4.1</td>
<td>na</td>
</tr>
<tr>
<td>Mining, quarrying, petroleum extraction</td>
<td>0.1</td>
<td>na</td>
<td>0.5</td>
<td>na</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.3</td>
<td>na</td>
</tr>
<tr>
<td><strong>Secondary (of which)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food, beverages and tobacco</td>
<td>36.7</td>
<td>50.9</td>
<td>25.7</td>
<td>66.5</td>
<td>24.8</td>
<td>19.2</td>
<td>36.3</td>
<td>15.0</td>
<td>40.0</td>
<td>16.5</td>
</tr>
<tr>
<td>Textiles, clothing and leather</td>
<td>2.7</td>
<td>10.7</td>
<td>na</td>
<td>1.1</td>
<td>2.1</td>
<td>1.5</td>
<td>2.5</td>
<td>4.5</td>
<td>6.3</td>
<td>na</td>
</tr>
<tr>
<td>Wood and wood products</td>
<td>0.2</td>
<td>na</td>
<td>na</td>
<td>0.1</td>
<td>na</td>
<td>0.2</td>
<td>0.4</td>
<td>na</td>
<td>2.1</td>
<td>na</td>
</tr>
<tr>
<td>Coke, petroleum products, nuclear fuel</td>
<td>2.3</td>
<td>na</td>
<td>na</td>
<td>3.6</td>
<td>na</td>
<td>0.8</td>
<td>1.6</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Chemicals and chemical products</td>
<td>8.9</td>
<td>9.3</td>
<td>na</td>
<td>11.2</td>
<td>5.3</td>
<td>5.4</td>
<td>7.6</td>
<td>na</td>
<td>6.3</td>
<td>5.8</td>
</tr>
<tr>
<td>Rubber and plastic products</td>
<td>1.0</td>
<td>na</td>
<td>na</td>
<td>0.0</td>
<td>na</td>
<td>0.6</td>
<td>1.8</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Metals and metal products</td>
<td>1.4</td>
<td>6.1</td>
<td>na</td>
<td>0.6</td>
<td>2.7</td>
<td>1.1</td>
<td>3.0</td>
<td>5.4</td>
<td>2.3</td>
<td>2.4</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>2.9</td>
<td>3.3</td>
<td>na</td>
<td>2.0</td>
<td>na</td>
<td>1.1</td>
<td>3.4</td>
<td>na</td>
<td>10.1</td>
<td>na</td>
</tr>
<tr>
<td>Electrical and electronic equipment</td>
<td>5.4</td>
<td>7.4</td>
<td>na</td>
<td>11.6</td>
<td>1.6</td>
<td>1.5</td>
<td>6.0</td>
<td>na</td>
<td>na</td>
<td>4.9</td>
</tr>
<tr>
<td>Motor vehicles and other transport eq.</td>
<td>4.6</td>
<td>9.9</td>
<td>na</td>
<td>34.2</td>
<td>3.9</td>
<td>2.3</td>
<td>4.7</td>
<td>na</td>
<td>6.2</td>
<td>na</td>
</tr>
<tr>
<td>Tertiary (of which)</td>
<td>61.9 (49.0)</td>
<td>31.8 (33.0)</td>
<td>53.3 (46.9)</td>
<td>33.5 (34.8)</td>
<td>63.6 (34.7)</td>
<td>80.5 (61.5)</td>
<td>62.2 (52.6)</td>
<td>64.9 (52.0)</td>
<td>55.9 (46.4)</td>
<td>83.5 (89.4)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Electricity, gas and water</td>
<td>2.9 na 3.6 na</td>
<td>3.8 1.0 0.3 na na na</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>0.4 3.0 1.9 na</td>
<td>0.8 0.2 0.4 0.2 na na na</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade</td>
<td>15.0 0.4 15.7 16.6 11.0 6.7 12.6 14.1 5.5 10.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>2.0 1.4 1.6 na</td>
<td>0.9 0.1 0.5 na na na</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport, storage and communications</td>
<td>3.9 3.0 8.7 13.2 10.3 2.4 6.4 3.5 4.4 3.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>19.8 19.0 13.6 na</td>
<td>23.6 15.3 8.7 6.2 27.7 67.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business services</td>
<td>13.3 1.1 8.1 na</td>
<td>11.2 52.5 31.4 na na na</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unspecified</td>
<td>0.0 (neg) 0.0 (neg) 1.8 (neg) 0.0 (neg) 0.0 (neg) 0.1 (neg) 0.0 (neg) 0.0 (neg) 0.0 (neg) 0.0 (neg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.9b  *Industrial distribution of inward FDI stock for selected developing and transition economies, 1997–2004* (percentages; figures for late 1980s or early 1990s in brackets)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>neg (neg)</td>
<td>1.6 (−0.9)</td>
<td>1.6</td>
<td>neg (neg)</td>
<td>0.9 (0.6)</td>
<td>31.6 (6.3)</td>
<td>2.0 (3.6)</td>
<td>2.3 (3.5)</td>
<td>34.5 (19.4)</td>
</tr>
<tr>
<td>Mining, quarrying, petroleum extraction</td>
<td>neg</td>
<td>neg</td>
<td>neg</td>
<td>neg</td>
<td>0.2</td>
<td>31.4</td>
<td>1.4</td>
<td>2.0</td>
<td>34.5</td>
</tr>
<tr>
<td>Secondary (of which)</td>
<td>4.9 (3.4)</td>
<td>58.5 (59.4)</td>
<td>34.7 (48.6)</td>
<td>55.8 (64.2)</td>
<td>31.4 (41.3)</td>
<td>62.8 (79.9)</td>
<td>33.7 (69.1)</td>
<td>34.7 (36.7)</td>
<td>33.6</td>
</tr>
<tr>
<td>Food, beverages and tobacco</td>
<td>0.5</td>
<td>nsa</td>
<td>0.5</td>
<td>6.9</td>
<td>na</td>
<td>14.9</td>
<td>5.2</td>
<td>8.3</td>
<td>19.1</td>
</tr>
<tr>
<td>Textiles, clothing and leather</td>
<td>0.2</td>
<td>nsa</td>
<td>0.1</td>
<td>1.5</td>
<td>na</td>
<td>3.3</td>
<td>0.8</td>
<td>0.3</td>
<td>na</td>
</tr>
<tr>
<td>Wood, wood products and paper</td>
<td>0.5</td>
<td>nsa</td>
<td>0.7</td>
<td>6.5</td>
<td>na</td>
<td>na</td>
<td>1.8</td>
<td>2.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Coke, petroleum products, nuclear fuel</td>
<td>nsa</td>
<td>nsa</td>
<td>5.2</td>
<td>2.8</td>
<td>na</td>
<td>14.9</td>
<td>0.0</td>
<td>na</td>
<td>0.5</td>
</tr>
<tr>
<td>Chemicals and chemical products</td>
<td>0.3</td>
<td>nsa</td>
<td>3.2</td>
<td>12.7</td>
<td>na</td>
<td>na</td>
<td>5.9</td>
<td>11.7</td>
<td>2.3</td>
</tr>
<tr>
<td>Rubber and plastic products</td>
<td>0.2</td>
<td>nsa</td>
<td>0.4</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>1.7</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Metals and metal products</td>
<td>0.2</td>
<td>nsa</td>
<td>0.8</td>
<td>0.8</td>
<td>na</td>
<td>7.9</td>
<td>3.0</td>
<td>4.7</td>
<td>2.4</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>0.0</td>
<td>nsa</td>
<td>2.3</td>
<td>5.2</td>
<td>na</td>
<td>2.7</td>
<td>3.2</td>
<td>1.8</td>
<td>4.0</td>
</tr>
<tr>
<td>Electric machinery and apparatus</td>
<td>2.4</td>
<td>nsa</td>
<td>19.4</td>
<td>11.4</td>
<td>na</td>
<td>na</td>
<td>3.3</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Motor vehicles and other transport eq.</td>
<td>0.3</td>
<td>nsa</td>
<td>0.7</td>
<td>5.5</td>
<td>na</td>
<td>15.1</td>
<td>6.5</td>
<td>5.0</td>
<td>na</td>
</tr>
</tbody>
</table>
Tertiary *(of which)*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity, gas and water</td>
<td>37.0 (51.4)</td>
<td>35.2 (52.4)</td>
<td>36.1 (12.2)</td>
<td>43.3 (35.2)</td>
<td>43.3 (35.2)</td>
<td>43.3 (35.2)</td>
<td>43.3 (35.2)</td>
<td>43.3 (35.2)</td>
<td>43.3 (35.2)</td>
</tr>
<tr>
<td>Construction</td>
<td>0.1  (neg)</td>
<td>0.0  (neg)</td>
<td>1.3  (neg)</td>
<td>0.0  (neg)</td>
<td>0.0  (neg)</td>
<td>0.0  (neg)</td>
<td>0.0  (neg)</td>
<td>0.0  (neg)</td>
<td>0.0  (neg)</td>
</tr>
<tr>
<td>Trade</td>
<td>96.6 (52.4)</td>
<td>64.0 (25.0)</td>
<td>56.1 (12.2)</td>
<td>63.3 (52.4)</td>
<td>63.3 (52.4)</td>
<td>63.3 (52.4)</td>
<td>63.3 (52.4)</td>
<td>63.3 (52.4)</td>
<td>63.3 (52.4)</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>0.4  (neg)</td>
<td>0.9  (neg)</td>
<td>1.2  (51.4)</td>
<td>1.0  (51.4)</td>
<td>1.0  (51.4)</td>
<td>1.0  (51.4)</td>
<td>1.0  (51.4)</td>
<td>1.0  (51.4)</td>
<td>1.0  (51.4)</td>
</tr>
<tr>
<td>Transport, storage and communications</td>
<td>7.5  (12.2)</td>
<td>10.0  (12.2)</td>
<td>7.5  (12.2)</td>
<td>7.5  (12.2)</td>
<td>7.5  (12.2)</td>
<td>7.5  (12.2)</td>
<td>7.5  (12.2)</td>
<td>7.5  (12.2)</td>
<td>7.5  (12.2)</td>
</tr>
<tr>
<td>Finance</td>
<td>0.0  (neg)</td>
<td>0.1  (neg)</td>
<td>0.1  (neg)</td>
<td>0.1  (neg)</td>
<td>0.1  (neg)</td>
<td>0.1  (neg)</td>
<td>0.1  (neg)</td>
<td>0.1  (neg)</td>
<td>0.1  (neg)</td>
</tr>
<tr>
<td>Business services</td>
<td>0.0  (neg)</td>
<td>0.0  (neg)</td>
<td>0.0  (neg)</td>
<td>0.0  (neg)</td>
<td>0.0  (neg)</td>
<td>0.0  (neg)</td>
<td>0.0  (neg)</td>
<td>0.0  (neg)</td>
<td>0.0  (neg)</td>
</tr>
<tr>
<td>Unspecified</td>
<td>100.0 (100.0)</td>
<td>100.0 (100.0)</td>
<td>100.0 (100.0)</td>
<td>100.0 (100.0)</td>
<td>100.0 (100.0)</td>
<td>100.0 (100.0)</td>
<td>100.0 (100.0)</td>
<td>100.0 (100.0)</td>
<td>100.0 (100.0)</td>
</tr>
</tbody>
</table>

Caribbean, Fiji and Tanzania, with those of trade and financial activities in the UK, Italy, Hong Kong and Singapore. Producer services are largely concentrated in the major cities of the Triad countries.

2.7 SOME COUNTRY-SPECIFIC DIFFERENCES IN THE GEOGRAPHY OF FOREIGN INVESTMENT

The previous section has shown that the industrial composition of MNE activity varies considerably between countries. Partly this reflects the geographical origin or destination of FDI and, related to this, the characteristics of the home and host countries. There is some evidence to suggest that the structure of inward and outward investment will be most divergent at the early stages of industrialisation but is likely to converge as economic development proceeds. Moreover, technological and communication advances in the past decade have encouraged an international division of labour and the specialisation of trade and foreign production within industrial sectors, and this has led to more intra-industry FDI.

Table 2.10a illustrates some differences between the geographical distribution of the major outward direct investors from developed countries, while Table 2.10b does the same for the most important developing economies. Due to space considerations, tables depicting the geographical pattern of inward investment have been omitted, but these data are generally available from the same sources as in the case of outward investment.

2.7.1 Outward Direct Investment

Although there are broad similarities in the geographical distribution of MNE activity by the leading investing countries, there is also some evidence of differences in the pattern of clustering. Such clustering or concentration, we believe, is of two kinds. The first reflects the fact that, ceteris paribus, in their initial venturing outside their national boundaries firms tend to prefer to invest in neighbouring territories or in those with which they have the closest economic, political, linguistic and cultural ties. In 2000, for example, 69% of Canadian investment was elsewhere on the American continent, while 50% of Indian investment was elsewhere in Asia. Spanish and Italian MNEs have a higher propensity to invest in Latin America than do other European MNEs, while there is some concentration of UK, French and Dutch FDI in their ex-African and Asian colonies. Scandinavian MNEs are more prone to invest in each other’s territories than are their other European or US counterparts. The great majority of Latin American and Asian FDIs are made elsewhere in the region. US MNEs have a much stronger propensity to invest in Mexico than do their European or Japanese counterparts, while European investment dominates in Brazil and Argentina. These geographical, historical and cultural preferences often overlap with regional trade and integration agreements, which makes it difficult to determine whether this kind of clustering is primarily driven by economic or cultural considerations, or indeed reflects the preferred locational strategies of MNEs (Rugman and Verbeke, 2004b).

The second kind of clustering is that which is more associated with large and established MNEs operating in global industries, and the extent to which they perceive that it
is in their economic or strategic interests to own or control production facilities in each of the main markets of the world. The clustering of high-value manufacturing and service MNE activity in the Triad of North America, Europe and Asia has increased noticeably in the past decade, and until very recently, the great majority of M&As have been intra-Triad in nature. According to the data presented by Rugman (2001), the intra-Triad outward FDI stock of the US, the EU and Japan was $2,442 billion, or 71% of the world total outward stock in 1997. Furthermore, intra-EU FDI accounted for $513 billion or 21% of the world total, while intra-NAFTA investment accounted for $197 billion, and Japanese FDI to elsewhere in Asia for $91 billion, or 8 and 4% of the world total respectively.

There is also some suggestion that MNEs from some developing countries (particularly from newly industrialising or emerging economies) are investing in Europe and the US both to service the local market, and to acquire assets which (they perceive) will strengthen their own competitive positions. In 1988, no less than 61% of Taiwanese direct investment stock was in the US. Similarly, South Korean direct investment stock in developed market economies increased from 32% in 1980 to 56% in 1988. However, from Table 2.10b, we can see that by 1998, only 22% of the stock of Taiwanese investment was located in the US, and 27% of that of South Korea. *Inter alia,* this reflected the increased interest of both countries in China. However, this is over a period in which the outward investment stock of Taiwan increased 38-fold, and that of South Korea eightfold, so in absolute terms, their investment in the Triad countries has indeed continued to rise.

As firms become more global in their production and marketing strategies, the structure of their domestic and foreign investments tends both to complement, and converge with, each other. Naturally, since home countries differ in their competitive strengths and weaknesses, MNE activity, such as trade, will reflect these strengths and weaknesses. Canada, Australia, New Zealand and Norway, for example, are resource-rich nations that also make some investments in resource-based activity in developing countries. On the other hand, their inbound investments tend to originate from advanced industrial nations and be concentrated in high-value processing or fabricating industries and in R&D activities. Japan, Belgium, Switzerland and Singapore are examples of countries that predominantly invest abroad to exploit their industrial competitiveness or to acquire resources not available domestically. Some developing countries, however, are engaging in cross-border M&As to augment their competitive strengths and to help reconfigure their long-term comparative advantages. Inward investment tends to be from countries that can offer advanced technologies, managerial skills or access to foreign markets.

## 2.7.2 Inward Direct Investment

Many of the characteristics of the geographical pattern of the outward direct capital stock are mirrored in that of the inward direct capital stock. A high proportion of the direct investment received by developed countries originated from other developed countries. Similarly, most of the inward FDI stock in the developing countries originated from other developing countries, generally within the same region.

Second, as perhaps one might expect, the dependency of host countries on particular home regions or countries as a source of inward investment varies considerably both between developed and developing countries. For example, with respect to the former,
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>43.8</td>
<td>46.4</td>
<td>52.5</td>
<td>2.8</td>
<td>5.1</td>
<td>4.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>72.1</td>
<td>73.7</td>
<td>70.5</td>
<td>19.7</td>
<td>17.9</td>
<td>17.0</td>
</tr>
<tr>
<td>Canada</td>
<td>18.1</td>
<td>16.2</td>
<td>25.9</td>
<td>0.4</td>
<td>0.4</td>
<td>2.3</td>
<td>62.2</td>
<td>65.1</td>
<td>41.3</td>
<td>84.2</td>
<td>83.8</td>
<td>71.6</td>
<td>11.4</td>
<td>10.5</td>
<td>20.3</td>
</tr>
<tr>
<td>Australia</td>
<td>14.1</td>
<td>41.0</td>
<td>24.2</td>
<td>neg</td>
<td>neg</td>
<td>0.2</td>
<td>15.3</td>
<td>15.9</td>
<td>46.3</td>
<td>44.0</td>
<td>72.3</td>
<td>83.8</td>
<td>neg</td>
<td>neg</td>
<td>0.2</td>
</tr>
<tr>
<td>Japan</td>
<td>11.7</td>
<td>17.6</td>
<td>26.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>24.3</td>
<td>41.1</td>
<td>41.4</td>
<td>44.8</td>
<td>65.7</td>
<td>72.7</td>
<td>16.9</td>
<td>14.5</td>
<td>6.5</td>
</tr>
<tr>
<td>UK</td>
<td>23.1</td>
<td>31.0</td>
<td>63.0</td>
<td>0.7</td>
<td>1.1</td>
<td>0.3</td>
<td>27.9</td>
<td>35.3</td>
<td>21.1</td>
<td>78.1</td>
<td>83.8</td>
<td>89.9</td>
<td>6.0</td>
<td>7.7</td>
<td>3.3</td>
</tr>
<tr>
<td>France</td>
<td>44.1</td>
<td>51.7</td>
<td>61.9</td>
<td>0.7</td>
<td>0.4</td>
<td>2.0</td>
<td>34.3</td>
<td>32.3</td>
<td>21.5</td>
<td>77.8</td>
<td>86.0</td>
<td>90.0</td>
<td>8.5</td>
<td>3.4</td>
<td>1.8</td>
</tr>
<tr>
<td>Germany</td>
<td>48.9</td>
<td>49.0</td>
<td>48.3</td>
<td>1.2</td>
<td>2.2</td>
<td>1.3</td>
<td>21.6</td>
<td>27.0</td>
<td>33.6</td>
<td>77.4</td>
<td>83.7</td>
<td>86.2</td>
<td>12.3</td>
<td>8.7</td>
<td>3.1</td>
</tr>
<tr>
<td>-------------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>52.6</td>
<td>45.6</td>
<td>63.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>neg</td>
<td>1.1</td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18.8</td>
<td>33.9</td>
<td>16.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>81.4</td>
<td>87.4</td>
<td>85.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11.3</td>
<td>7.8</td>
<td>4.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.4</td>
<td>3.9</td>
<td>5.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>na</td>
<td>na</td>
<td>1.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18.6</td>
<td>12.6</td>
<td>10.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>58.3</td>
<td>61.6</td>
<td>72.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>neg</td>
<td>0.4</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.6</td>
<td>11.4</td>
<td>8.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>66.9</td>
<td>74.4</td>
<td>82.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>neg</td>
<td>13.6</td>
<td>2.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>neg</td>
<td>neg</td>
<td>na</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>na</td>
<td>na</td>
<td>na</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>33.1</td>
<td>25.6</td>
<td>2.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>53.8</td>
<td>61.6</td>
<td>43.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>na</td>
<td>0.4</td>
<td>1.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>na</td>
<td>15.0</td>
<td>68.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>na</td>
<td>2.7</td>
<td>17.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>na</td>
<td>0.4</td>
<td>5.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>na</td>
<td>24.1</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Sources:* Figures for the 1980s are from UNCTC (1992c) and UNCTAD (1993); latest figures are from World Investment Directory Online (UNCTAD).
Table 2.10b  Geographical distribution of the outward FDI stock of selected developing economies (percentages)

<table>
<thead>
<tr>
<th>Home country</th>
<th>Investing in:</th>
<th>Developed economies</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Western Europe</td>
<td>Japan</td>
<td>US</td>
</tr>
<tr>
<td></td>
<td></td>
<td>na</td>
<td>43.4</td>
<td>56.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>na</td>
<td>na</td>
<td>60.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.6</td>
<td>1.0</td>
<td>22.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>1990</td>
<td>8.0</td>
<td>0.4</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>1997</td>
<td>16.1</td>
<td>0.8</td>
<td>4.2</td>
</tr>
<tr>
<td>Taiwan, Province of China</td>
<td>1980</td>
<td>na</td>
<td>na</td>
<td>43.4</td>
</tr>
<tr>
<td></td>
<td>1988</td>
<td>na</td>
<td>na</td>
<td>60.5</td>
</tr>
<tr>
<td></td>
<td>1998</td>
<td>3.6</td>
<td>1.0</td>
<td>22.2</td>
</tr>
<tr>
<td>China</td>
<td>1984</td>
<td>6.7</td>
<td>1.9</td>
<td>48.3</td>
</tr>
<tr>
<td></td>
<td>1987</td>
<td>6.5</td>
<td>1.2</td>
<td>13.8</td>
</tr>
<tr>
<td></td>
<td>1995</td>
<td>2.5</td>
<td>0.8</td>
<td>18.7</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>0.6</td>
<td>1.0</td>
<td>10.1</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>1980</td>
<td>7.4</td>
<td>7.4</td>
<td>20.5</td>
</tr>
<tr>
<td></td>
<td>1988</td>
<td>3.7</td>
<td>2.7</td>
<td>35.6</td>
</tr>
<tr>
<td></td>
<td>1998</td>
<td>10.0</td>
<td>1.9</td>
<td>26.7</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1987</td>
<td>11.3</td>
<td>9.7</td>
<td>3.9</td>
</tr>
<tr>
<td></td>
<td>1997</td>
<td>15.5</td>
<td>4.0</td>
<td>12.0</td>
</tr>
<tr>
<td></td>
<td>1998</td>
<td>15.0</td>
<td>1.9</td>
<td>26.7</td>
</tr>
<tr>
<td>India</td>
<td>1985</td>
<td>1.0</td>
<td>neg</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>1988</td>
<td>6.1</td>
<td>neg</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>1992</td>
<td>9.2</td>
<td>neg</td>
<td>27.7</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>9.5</td>
<td>na</td>
<td>18.8</td>
</tr>
<tr>
<td>South Africa</td>
<td>1994</td>
<td>87.4</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>76.4</td>
<td>0.3</td>
<td>7.1</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Brazil</td>
<td>11.0</td>
<td>25.1</td>
<td>14.5</td>
<td>45.4</td>
</tr>
<tr>
<td></td>
<td>0.8</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td></td>
<td>62.2</td>
<td>53.1</td>
<td>4.2</td>
<td>45.7</td>
</tr>
<tr>
<td></td>
<td>74.0</td>
<td>96.7</td>
<td>18.6</td>
<td>91.2</td>
</tr>
<tr>
<td></td>
<td>24.7</td>
<td>3.3</td>
<td>78.9</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>neg</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td></td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td></td>
<td>26.0</td>
<td>3.3</td>
<td>78.9</td>
<td>8.8</td>
</tr>
</tbody>
</table>

compare the Netherlands with the UK, and Canada with Australia, and with respect to the latter, for example, Zimbabwe with Gabon, Bangladesh with Indonesia, and Brazil with Colombia. These differences in the geography of inward investment reflect partly differences in its industrial structure, and partly the comparative needs and capabilities of investing countries to undertake such investment. It also reflects differences in the relative locational costs and benefits of home and host countries (compare, for example, the costs of shipping goods from Japan and the US to Brazil, the differential production costs between German and Hong Kong investors in Thailand, or differences in the institutional costs and benefits offered (say) by Singapore and Indonesia, or Chile and Columbia). Finally, it reflects the relative incentives of firms of different nationalities to own their value-added facilities in a particular foreign country, rather than license or subcontract a local producer to undertake the work. This is influenced by the psychic or cultural distance between countries, and the capability of individual MNEs to bridge or even exploit, such differences. A recent case of the latter is the transfer of Western (and particularly US-based) institutional practices to Japan (Ozawa, 2005). As might be expected, with the growing participation of firms from developing countries in international production, the origin of inward investment has become more pluralistic in character, particularly in the manufacturing and service sectors.

Third, the influence of regional integration agreements is often visible in the data. For example, following the entry into force of the NAFTA agreement in 1994, Mexico has experienced a fourfold increase in inward investment, while the proportion of US investment (75%) has remained virtually unchanged. At the same time, much of the growth in inward investment in Brazil has come from within Latin America, following the signing of the Mercosur agreement in 1991.

2.8 THE WORLD’S LEADING MNEs

Earlier we indicated that, according to UNCTAD (2006), in 2004 around 77,000 companies owned foreign affiliates that engage in value-added activities outside their national boundaries. The estimated number of foreign affiliates of 770,000 in that same year suggests that, on average, an MNE would have 10 affiliates, although it is likely that the majority have only one or two, while a small group of MNEs have far in excess of 10. Indeed, according to the same data source, the top 100 MNEs had an average of 216 foreign affiliates in 2004. The latter make up the comparatively small number of global enterprises which operate a network of affiliates and associated companies throughout the world. It is, perhaps, these enterprises that conform most readily to the popular image of an MNE. Table 2.1 lists the world’s top 50 non-financial MNEs in 2004 ranked by foreign assets, while Table 2.12 lists the world’s top 50 non-financial MNEs from developing countries.

Data on the 500 largest US and 500 largest non-US industrial corporations published in the mid-1980s (Dunning and Pearce, 1985) suggested that the largest 50 of these companies accounted for about 35% of total foreign production, the largest 100 for about 50%, the top 250 for 65% and the top 500 for 75%. However, according to UNCTAD (2006:30), in 2004, the top 100 non-financial MNEs ranked by foreign assets accounted for only 11% of the estimated foreign assets, 16% of the foreign sales and 12% of the employment held by all MNEs.
<table>
<thead>
<tr>
<th>MNE</th>
<th>Country</th>
<th>Industry</th>
<th>Assets</th>
<th>Sales</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Foreign (^a) Total</td>
<td>Foreign (^b) Total</td>
<td></td>
</tr>
<tr>
<td>General Electric</td>
<td>US</td>
<td>Electrical &amp; electronic eq.</td>
<td>448,901</td>
<td>750,507</td>
<td>142,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>45,981</td>
<td>57,378</td>
<td></td>
</tr>
<tr>
<td>Vodafone Group Plc</td>
<td>UK</td>
<td>Telecommunications</td>
<td>247,850</td>
<td>258,626</td>
<td>102,749</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>45,981</td>
<td>57,378</td>
<td></td>
</tr>
<tr>
<td>Ford Motor</td>
<td>US</td>
<td>Motor vehicles</td>
<td>179,856</td>
<td>305,341</td>
<td>102,749</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>45,981</td>
<td>57,378</td>
<td></td>
</tr>
<tr>
<td>General Motors</td>
<td>US</td>
<td>Motor vehicles</td>
<td>173,690</td>
<td>479,603</td>
<td>102,749</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>45,981</td>
<td>57,378</td>
<td></td>
</tr>
<tr>
<td>British Petroleum</td>
<td>UK</td>
<td>Petroleum expl./ref./distr.</td>
<td>154,513</td>
<td>193,213</td>
<td>85,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>285,059</td>
<td>102,749</td>
<td></td>
</tr>
<tr>
<td>ExxonMobil</td>
<td>US</td>
<td>Petroleum expl./ref./distr.</td>
<td>134,923</td>
<td>195,256</td>
<td>85,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>291,252</td>
<td>102,749</td>
<td></td>
</tr>
<tr>
<td>Royal Dutch/Shell</td>
<td>UK/NL</td>
<td>Petroleum expl./ref./distr.</td>
<td>129,939</td>
<td>192,811</td>
<td>85,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>265,753</td>
<td>102,749</td>
<td></td>
</tr>
<tr>
<td>Toyota Motor Corp</td>
<td>Japan</td>
<td>Motor vehicles</td>
<td>122,967</td>
<td>233,721</td>
<td>96,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>265,753</td>
<td>102,749</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>France</td>
<td>Petroleum expl./ref./distr.</td>
<td>98,719</td>
<td>114,636</td>
<td>62,227</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>152,355</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>France Télécom</td>
<td>France</td>
<td>Telecommunications</td>
<td>85,669</td>
<td>131,204</td>
<td>81,651</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>206,524</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>Volkswagen</td>
<td>Germany</td>
<td>Motor vehicles</td>
<td>84,042</td>
<td>172,949</td>
<td>165,152</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>342,502</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>Sanofi-Aventis</td>
<td>France</td>
<td>Pharmaceuticals</td>
<td>82,612</td>
<td>104,548</td>
<td>68,776</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>96,439</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>Deutsche Telekom AG</td>
<td>Germany</td>
<td>Telecommunications</td>
<td>79,654</td>
<td>146,834</td>
<td>73,808</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>244,645</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>RWE Group</td>
<td>Germany</td>
<td>Electricity, gas and water</td>
<td>78,728</td>
<td>127,179</td>
<td>42,370</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>97,777</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>Suez</td>
<td>France</td>
<td>Electricity, gas and water</td>
<td>74,051</td>
<td>85,788</td>
<td>100,485</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>160,712</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>E.O.N</td>
<td>Germany</td>
<td>Electricity, gas and water</td>
<td>72,726</td>
<td>155,364</td>
<td>32,819</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>72,484</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>Hutchison Whampoa</td>
<td>Hong Kong</td>
<td>Diversified</td>
<td>67,638</td>
<td>84,162</td>
<td>150,687</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>180,000</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>Siemens AG</td>
<td>Germany</td>
<td>Electrical &amp; electronic eq.</td>
<td>65,830</td>
<td>108,312</td>
<td>266,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>430,000</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>Nestlé SA</td>
<td>Switzerland</td>
<td>Food &amp; beverages</td>
<td>65,396</td>
<td>76,965</td>
<td>240,406</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>247,000</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>Electricite de France</td>
<td>France</td>
<td>Electricity, gas and water</td>
<td>65,365</td>
<td>200,093</td>
<td>50,534</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>156,152</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>Honda Motor Co Ltd</td>
<td>Japan</td>
<td>Motor vehicles</td>
<td>65,036</td>
<td>89,483</td>
<td>76,763</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>137,827</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>Vivendi Universal</td>
<td>France</td>
<td>Diversified</td>
<td>57,589</td>
<td>94,439</td>
<td>23,377</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>37,906</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>ChevronTexaco</td>
<td>US</td>
<td>Petroleum expl./ref./distr.</td>
<td>57,186</td>
<td>93,208</td>
<td>150,865</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>31,000</td>
<td>56,000</td>
<td></td>
</tr>
<tr>
<td>BMW AG</td>
<td>Germany</td>
<td>Motor vehicles</td>
<td>55,726</td>
<td>91,826</td>
<td>101,450</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>384,723</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>DaimlerChrysler</td>
<td>US/Germany</td>
<td>Motor vehicles</td>
<td>54,869</td>
<td>248,850</td>
<td>50,287</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>115,000</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>Pfizer Inc</td>
<td>US</td>
<td>Pharmaceuticals</td>
<td>54,055</td>
<td>123,684</td>
<td>50,287</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>115,000</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>ENI</td>
<td>Italy</td>
<td>Petroleum expl./ref./distr.</td>
<td>50,212</td>
<td>98,553</td>
<td>30,186</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>71,497</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>Nissan Motor Co Ltd</td>
<td>Japan</td>
<td>Motor vehicles</td>
<td>49,553</td>
<td>94,588</td>
<td>112,530</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>183,607</td>
<td>111,401</td>
<td></td>
</tr>
<tr>
<td>MNE</td>
<td>Country</td>
<td>Industry</td>
<td>Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>---------</td>
<td>-----------------------------------------------</td>
<td>---------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Foreign</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>IBM</td>
<td>US</td>
<td>Computer and related activities</td>
<td>47,928</td>
<td>109,183</td>
<td>60,656&lt;sup&gt;6&lt;/sup&gt;</td>
</tr>
<tr>
<td>ConocoPhillips</td>
<td>US</td>
<td>Petroleum expl./ref./distr.</td>
<td>46,321</td>
<td>92,861</td>
<td>40,945&lt;sup&gt;h&lt;/sup&gt;</td>
</tr>
<tr>
<td>Hewlett-Packard</td>
<td>US</td>
<td>Computer and related activities</td>
<td>45,816</td>
<td>76,138</td>
<td>50,543&lt;sup&gt;g&lt;/sup&gt;</td>
</tr>
<tr>
<td>Mitsubishi Corporation</td>
<td>Japan</td>
<td>Motor vehicles</td>
<td>43,867</td>
<td>87,879</td>
<td>5,476</td>
</tr>
<tr>
<td>Telefonica SA</td>
<td>Spain</td>
<td>Telecommunications</td>
<td>43,224&lt;sup&gt;e&lt;/sup&gt;</td>
<td>86,448</td>
<td>15,060&lt;sup&gt;g&lt;/sup&gt;</td>
</tr>
<tr>
<td>Roche Group</td>
<td>Switzerland</td>
<td>Pharmaceuticals</td>
<td>42,884</td>
<td>51,322</td>
<td>24,794&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td>Telecom Italia Spa</td>
<td>Italy</td>
<td>Telecommunications</td>
<td>41,747</td>
<td>104,349</td>
<td>8,231</td>
</tr>
<tr>
<td>Anglo American</td>
<td>UK</td>
<td>Mining &amp; quarrying</td>
<td>40,460&lt;sup&gt;f&lt;/sup&gt;</td>
<td>53,451</td>
<td>16,819&lt;sup&gt;f&lt;/sup&gt;</td>
</tr>
<tr>
<td>Fiat Spa</td>
<td>Italy</td>
<td>Motor vehicles</td>
<td>39,658</td>
<td>77,971</td>
<td>31,281</td>
</tr>
<tr>
<td>Unilever</td>
<td>UK/NL</td>
<td>Diversified</td>
<td>38,415</td>
<td>51,322</td>
<td>44,361</td>
</tr>
<tr>
<td>Carrefour</td>
<td>France</td>
<td>Retail</td>
<td>36,756</td>
<td>53,090</td>
<td>45,874</td>
</tr>
<tr>
<td>Procter &amp; Gamble</td>
<td>US</td>
<td>Diversified</td>
<td>36,128</td>
<td>61,527</td>
<td>31,399</td>
</tr>
<tr>
<td>Sony Corporation</td>
<td>Japan</td>
<td>Electrical &amp; electronic eq.</td>
<td>35,959</td>
<td>87,309</td>
<td>69,077</td>
</tr>
<tr>
<td>Mitsui &amp; Co Ltd</td>
<td>Japan</td>
<td>Wholesale trade</td>
<td>35,749</td>
<td>72,929</td>
<td>14,071&lt;sup&gt;k&lt;/sup&gt;</td>
</tr>
<tr>
<td>Wal-Mart Stores</td>
<td>US</td>
<td>Retail</td>
<td>34,525</td>
<td>120,223</td>
<td>56,277&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td>Deutsche Post AG</td>
<td>Germany</td>
<td>Transport and storage</td>
<td>33,178</td>
<td>208,888</td>
<td>25,560</td>
</tr>
<tr>
<td>Saint-Gobain SA</td>
<td>France</td>
<td>Non-metallic mineral products</td>
<td>31,952</td>
<td>42,071</td>
<td>27,144&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Veolia Environnement SA</td>
<td>France</td>
<td>Water supply</td>
<td>31,946</td>
<td>49,396</td>
<td>13,788</td>
</tr>
<tr>
<td>Philips Electronics</td>
<td>Netherlands</td>
<td>Electrical &amp; electronic eq.</td>
<td>30,330</td>
<td>41,848</td>
<td>36,155</td>
</tr>
<tr>
<td>Lafarge SA</td>
<td>France</td>
<td>Non-metallic products</td>
<td>30,127</td>
<td>33,742</td>
<td>15,146</td>
</tr>
<tr>
<td>Repsol YPF SA</td>
<td>Spain</td>
<td>Petroleum expl./ref./distr.</td>
<td>29,846</td>
<td>53,044</td>
<td>17,216</td>
</tr>
<tr>
<td>Novartis</td>
<td>Switzerland</td>
<td>Pharmaceuticals</td>
<td>29,081</td>
<td>54,469</td>
<td>27,917&lt;sup&gt;g&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Total foreign assets (millions): $3,783,192
Notes: The list covers non-financial MNEs only. In some companies, foreign investors may hold a minority share of more than 10 per cent.

a In a number of cases, companies reported only partial foreign assets. In these cases, the ratio of the partial foreign assets to the partial (total) assets was applied to total assets to calculate the total foreign assets. In all cases, the resulting figures were sent for confirmation to the companies.

b Foreign sales are based on the origin of the sales, unless otherwise stated.

c Data for outside North America.

d Foreign employment data are calculated by applying the share of foreign employment in total employment of the previous year to total employment of 2004.

e Foreign data are calculated by applying the share of the foreign into the total component of 2002 to the total component of 2004.

f Data for outside Europe.

g Foreign sales are based on customer location.

h In a number of cases companies reported only partial region-specified sales. In these cases, the ratio of the partial foreign sales to the partial (total) sales was applied to total sales to calculate the total foreign sales. In all cases, the resulting figures were sent for confirmation to the companies.

i Foreign employment data are calculated by applying the share of both foreign assets in total assets and foreign sales in total sales to total employment.

j Foreign employment data are calculated by applying the average of the shares of foreign employment in total employment of all companies in the same industry (omitting the extremes) to total employment.

k Data were obtained from the company in response to an UNCTAD survey.

l Data for outside Western Europe.

Source: UNCTAD database.
<table>
<thead>
<tr>
<th>MNE</th>
<th>Country</th>
<th>Industry</th>
<th>Foreign Sales (a)</th>
<th>Foreign Total (b)</th>
<th>Foreign Assets (c)</th>
<th>Foreign Employment (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hutchison Whampoa Limited</td>
<td>China</td>
<td>Diversified</td>
<td>67,638</td>
<td>84,162</td>
<td>23,080</td>
<td>11,426</td>
</tr>
<tr>
<td>Petronas – Petroliam</td>
<td>Malaysia</td>
<td>Petroleum expl./ref./distr.</td>
<td>22,647</td>
<td>62,915</td>
<td>10,567</td>
<td>36,065</td>
</tr>
<tr>
<td>National Bhd</td>
<td>Singapore</td>
<td>Electronics</td>
<td>18,641</td>
<td>66,665</td>
<td>61,524</td>
<td>70,184</td>
</tr>
<tr>
<td>Singtel Ltd.</td>
<td>Singapore</td>
<td>Telecommunications</td>
<td>14,609</td>
<td>66,665</td>
<td>41,083</td>
<td>21,295</td>
</tr>
<tr>
<td>Samsung Electronics</td>
<td>Republic of Korea</td>
<td>Electronics eq.</td>
<td>14,452</td>
<td>84,744</td>
<td>64,076</td>
<td>15,195</td>
</tr>
<tr>
<td>CITIC Group</td>
<td>China</td>
<td>Diversified</td>
<td>14,452</td>
<td>84,744</td>
<td>64,076</td>
<td>15,195</td>
</tr>
<tr>
<td>Cemex S.A.</td>
<td>Mexico</td>
<td>Construction</td>
<td>13,523</td>
<td>17,188</td>
<td>16,822</td>
<td>8,599</td>
</tr>
<tr>
<td>LG Electronics Inc.</td>
<td>Republic of Korea</td>
<td>Electronics eq.</td>
<td>10,420</td>
<td>28,903</td>
<td>24,193</td>
<td>32,000</td>
</tr>
<tr>
<td>China Ocean Shipping</td>
<td>China</td>
<td>Shipping</td>
<td>8,868</td>
<td>55,355</td>
<td>46,589</td>
<td>4,157</td>
</tr>
<tr>
<td>Petroleos De Venezuela</td>
<td>Venezuela</td>
<td>Petroleum expl./ref./distr.</td>
<td>8,868</td>
<td>55,355</td>
<td>46,589</td>
<td>4,157</td>
</tr>
<tr>
<td>Jardine Matheson Ltd.</td>
<td>Hong Kong, China</td>
<td>Diversified</td>
<td>7,141</td>
<td>10,555</td>
<td>5,830</td>
<td>8,988</td>
</tr>
<tr>
<td>Formosa Plastic Group</td>
<td>Taiwan, Province of China</td>
<td>Industrial chemicals</td>
<td>6,968</td>
<td>58,023</td>
<td>6,995</td>
<td>37,738</td>
</tr>
<tr>
<td>Petrobras – Petrobras</td>
<td>Brazil</td>
<td>Petroleum expl./ref./distr.</td>
<td>6,221</td>
<td>63,270</td>
<td>51,245</td>
<td>52,109</td>
</tr>
<tr>
<td>Hyundai Motor Company</td>
<td>Republic of Korea</td>
<td>Motor vehicles</td>
<td>5,899</td>
<td>56,387</td>
<td>51,300</td>
<td>4,954</td>
</tr>
<tr>
<td>China State Construction Engineering Corp.</td>
<td>China</td>
<td>Construction</td>
<td>5,862</td>
<td>56,387</td>
<td>51,300</td>
<td>4,954</td>
</tr>
</tbody>
</table>

Table 2.12 The world's top 50 non-financial MNEs from developing countries ranked by foreign assets, 2004
<table>
<thead>
<tr>
<th>Company Name</th>
<th>Country/Region</th>
<th>Industry/Activities</th>
<th>Sales (THB)</th>
<th>EBITDA (THB)</th>
<th>Net Income (THB)</th>
<th>Total Assets (THB)</th>
<th>Total Liabilities (THB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hon Hai Precision Industries (Foxconn)</td>
<td>Taiwan, Province of China</td>
<td>Electrical and electronic eq.</td>
<td>4,355</td>
<td>9,505</td>
<td>7,730</td>
<td>16,969</td>
<td>140,518</td>
</tr>
<tr>
<td>Shangri-La Asia Limited</td>
<td>Hong Kong, China</td>
<td>Hotels and motels</td>
<td>4,209</td>
<td>5,208</td>
<td>571</td>
<td>726</td>
<td>14,013</td>
</tr>
<tr>
<td>New World Development Co., Ltd.</td>
<td>Hong Kong, China</td>
<td>Diversified</td>
<td>4,202</td>
<td>15,567</td>
<td>891</td>
<td>2,865</td>
<td>12,687</td>
</tr>
<tr>
<td>Sappi Limited</td>
<td>South Africa</td>
<td>Paper</td>
<td>4,187</td>
<td>6,150</td>
<td>4,351</td>
<td>4,762</td>
<td>8,936</td>
</tr>
<tr>
<td>China National Petroleum Corporation</td>
<td>China</td>
<td>Petroleum expl./ ref./distr.</td>
<td>4,060</td>
<td>110,393</td>
<td>5,218</td>
<td>68,952</td>
<td>22,000</td>
</tr>
<tr>
<td>Companhia Vale do Rio Doce</td>
<td>Brazil</td>
<td>Mining &amp; quarrying</td>
<td>4,025</td>
<td>16,382</td>
<td>9,395</td>
<td>10,380</td>
<td>2,736</td>
</tr>
<tr>
<td>Oil And Natural Gas Corporation</td>
<td>India</td>
<td>Petroleum and natural gas</td>
<td>4,018</td>
<td>18,599</td>
<td>1,263</td>
<td>14,492</td>
<td>4,296</td>
</tr>
<tr>
<td>Kia Motors</td>
<td>Republic of Korea</td>
<td>Motor vehicles</td>
<td>3,932</td>
<td>14,085</td>
<td>6,858</td>
<td>17,150</td>
<td>9,004</td>
</tr>
<tr>
<td>Sinochem Corp.</td>
<td>China</td>
<td>Wholesale trade</td>
<td>3,801</td>
<td>7,031</td>
<td>13,950</td>
<td>20,853</td>
<td>407</td>
</tr>
<tr>
<td>CLP Holdings</td>
<td>Hong Kong, China</td>
<td>Electricity, gas and water</td>
<td>3,799</td>
<td>10,394</td>
<td>491</td>
<td>3,960</td>
<td>481</td>
</tr>
<tr>
<td>Asia Food &amp; Properties</td>
<td>Singapore</td>
<td>Food and beverages</td>
<td>3,691</td>
<td>3,860</td>
<td>1,511</td>
<td>1,538</td>
<td>33,511</td>
</tr>
<tr>
<td>Guangdong Investment Limited</td>
<td>Hong Kong, China</td>
<td>Diversified</td>
<td>3,582</td>
<td>3,924</td>
<td>639</td>
<td>657</td>
<td>3,391</td>
</tr>
<tr>
<td>YTL Corp. Berhad</td>
<td>Malaysia</td>
<td>Diversified</td>
<td>3,359</td>
<td>6,986</td>
<td>571</td>
<td>1,160</td>
<td>1,423</td>
</tr>
<tr>
<td>Metalurgica Gerdau S.A.</td>
<td>Brazil</td>
<td>Metal and metal products</td>
<td>3,358</td>
<td>6,842</td>
<td>3,423</td>
<td>6,973</td>
<td>7,110</td>
</tr>
<tr>
<td>Orient Overseas International Ltd</td>
<td>Hong Kong, China</td>
<td>Transport and storage</td>
<td>3,342</td>
<td>3,838</td>
<td>1,430</td>
<td>4,140</td>
<td>4,722</td>
</tr>
<tr>
<td>China Resources Enterprises</td>
<td>Hong Kong, China</td>
<td>Petroleum expl./ ref./distr.</td>
<td>3,335</td>
<td>5,061</td>
<td>3,613</td>
<td>6,162</td>
<td>81,480</td>
</tr>
<tr>
<td>Star Cruises</td>
<td>Hong Kong, China</td>
<td>Transport</td>
<td>3,224</td>
<td>4,305</td>
<td>1,208</td>
<td>1,619</td>
<td>11,158</td>
</tr>
<tr>
<td>Quanta Computer Inc</td>
<td>Taiwan, Province of China</td>
<td>Computer and related activities</td>
<td>3,181</td>
<td>5,434</td>
<td>1,046</td>
<td>10,403</td>
<td>6,624</td>
</tr>
<tr>
<td>Neptune Orient Lines Ltd.</td>
<td>Singapore</td>
<td>Transport and storage</td>
<td>3,112</td>
<td>4,379</td>
<td>5,498</td>
<td>6,752</td>
<td>10,344</td>
</tr>
<tr>
<td>United Microelectronics Corporation</td>
<td>Taiwan, Province of China</td>
<td>Electrical &amp; electronic eq.</td>
<td>3,037</td>
<td>11,790</td>
<td>1,677</td>
<td>4,048</td>
<td>1,052</td>
</tr>
<tr>
<td>MNE</td>
<td>Country</td>
<td>Industry</td>
<td>Assets</td>
<td>Sales</td>
<td>Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------------</td>
<td>----------------------------------------------------</td>
<td>----------</td>
<td>---------</td>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City Developments Limited</td>
<td>Singapore</td>
<td>Hotels</td>
<td>2,887</td>
<td>7,818</td>
<td>11,814c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTN Group Limited</td>
<td>South Africa</td>
<td>Telecommunications</td>
<td>2,819</td>
<td>5,216</td>
<td>2,713</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taiwan Semiconductor Manuf. Co.</td>
<td>Taiwan, Province of China</td>
<td>Computer and related activities</td>
<td>2,770</td>
<td>15,649</td>
<td>6,086</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steinhoff International Holdings</td>
<td>South Africa</td>
<td>Household goods</td>
<td>2,747</td>
<td>4,345</td>
<td>17,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCL Corporation</td>
<td>China</td>
<td>Electrical &amp; electronic eq.</td>
<td>2,708</td>
<td>3,748</td>
<td>47,231b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc Corp. Berhad</td>
<td>Malaysia</td>
<td>Transport</td>
<td>2,625</td>
<td>6,692</td>
<td>3,785</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore Airlines Limited</td>
<td>Singapore</td>
<td>Transport and storage</td>
<td>2,423d</td>
<td>13,368</td>
<td>2,367</td>
<td></td>
<td></td>
</tr>
<tr>
<td>China National Offshore Oil Corp</td>
<td>China</td>
<td>Petroleum and natural gas</td>
<td>2,269</td>
<td>18,517</td>
<td>1,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Pacific Company Limited</td>
<td>Hong Kong, China</td>
<td>Electrical &amp; electronic eq.</td>
<td>2,181</td>
<td>2,229</td>
<td>49,139c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barloworld Ltd</td>
<td>South Africa</td>
<td>Diversified</td>
<td>2,170</td>
<td>4,592</td>
<td>2,935</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FEMSA-Fomento Economico Mexicano</td>
<td>Mexico</td>
<td>Food &amp; beverages</td>
<td>2,110</td>
<td>10,713</td>
<td>31,133</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total foreign assets (millions): $336,902

Notes: The list covers non-financial MNEs only. In some companies, foreign investors may hold a minority share of more than 10%.

- In a number of cases, companies reported only partial foreign assets. In these cases, the ratio of the partial foreign assets to the partial (total) assets was applied to total assets to calculate the total foreign assets.
- Foreign sales are based on the origin of the sales. In a number of cases companies reported sales only by destination.
- Foreign employment data are calculated by applying the share of foreign employment in total employment of the previous year to total employment of 2004.
- Foreign assets data are calculated by applying the share of foreign assets in total assets of the previous year to total assets of 2004.
- Foreign sales data are calculated by applying the share of foreign sales in total sales of the previous year to total sales of 2004.
- Foreign employment data are calculated by applying the share of foreign assets in total assets to total employment.
- Data for foreign activities are outside Asia.
- Foreign employment data are calculated by applying the average of the shares of foreign employment in total employment of all companies in the same industry (omitting the extremes) to total employment.

Source: UNCTAD database.
2.8.1 The Transnationality Index

In Chapter 1 we introduced the transnationality index (TNI) of the 100 largest non-financial MNEs, as well as the 50 largest MNEs from developing countries, published annually by UNCTAD since 1995.74 This index consists of the average of three ratios, namely foreign sales to total sales, foreign assets to total assets and foreign employment to total employment.

Although there are considerable differences in the TNI between firms in any particular sector, sectors such as mining, paper and building materials, metals and food/beverages and tobacco had the highest average levels of transnationality, with TNI values of 68–81%. The average TNI for the primary sector as a whole was 63%, as compared to 62% for the secondary sector and 51% for the tertiary sector. Overall, the average TNI for the top 100 was 58%, as compared to 51% for the TNI of the top 100 MNEs from developing countries. For the leading 100 MNEs from developed countries, this represents an increase as compared to a TNI of 51% in 1995, while for the developing country MNEs, the increase in their transnationality has been much more dramatic, from 32% for the top 50 in 1995 to 49% in 2002 (Sauvant, 2005:645).

If the firms on the UNCTAD top 100 list are ranked by nationality, European firms are clearly the most transnational, with those from the UK, Switzerland and the Netherlands in the lead, while US firms are among the least transnational in relative terms. More than half (53) of the firms on the top 100 list for 2004 were European, 25 were from the US and five from developing countries. This is in contrast to the Fortune Global 500 list, where firms are ranked in terms of their size, as measured by revenue, and not by foreign assets. The Fortune list is dominated by firms from the US, and in 2006 it included 170 US MNEs.75

2.8.2 The Rise and Decline of State-owned Enterprises

In 1965, 19 of the world’s top 200 industrial enterprises outside the US were state-owned companies. By 1975, the same group were found to include 29 SOEs, nine of which were multinational. Ten years later, the number had risen to 38, including 18 with foreign direct investments. There were two main reasons for the growth of state-owned MNEs in the 20 years prior to 1985. The first was a spate of nationalisation of private firms, particularly by the French and UK governments in the 1970s. The second was that the sectors in which governments had a stock were among the fastest-growing ones: examples included aerospace, oil products and motor vehicles.

Since 1985, the renaissance of faith in the market economy led to the full or partial privatisation of several publicly owned corporations, particularly in Europe. Examples included British Telecom, British Steel, British Airways and British Leyland in the UK, Thomson and St. Gobain in France and ENI in Italy. This trend has continued, and in the past decade or so, a large number of former state monopolies in the telecommunications and utilities sectors have been privatised, in both developed and developing countries.

The second kind of former state-owned MNEs that are now private, are the industrial firms from the erstwhile socialist countries. As a result of the privatisation programmes carried out in Central Eastern Europe in the 1990s, in most cases private investors now control either all the stock in industrial enterprises, or at least a substantial majority.
At the same time, the past 20 years has also seen the emergence of significant numbers of MNEs from developing countries in which, generally speaking, the state tends to play a more dominant role. This is the case with China, where even after some efforts at privatisation, the state is thought to exercise considerable influence, either directly or indirectly, over the majority of large enterprises. It is also the case with a number of countries such as Singapore, Brazil, India and Argentina, for example, where the state has taken on an active developmental role.

Finally, following a recent wave of re-nationalisations reminiscent of the 1970s, state ownership of MNEs in the petroleum and mining sectors continues to be substantial. This is particularly notable in the petroleum sector, where 15 of the top 25 companies in 2003 ranked by reserves and production, were SOEs from developing countries and Russia, while three others had minority state ownership (UNCTAD, 2007).
3. The motives for foreign production

3.1 INTRODUCTION

The following three chapters consider the motivations for, and the determinants of, the foreign value-added activities by MNEs. The present chapter describes some of the reasons prompting firms to undertake FDI, and distinguishes between four main types of production financed by such investment. Chapter 4 describes and evaluates some of the theories and paradigms that have been put forward over the past 40 years to explain the existence and growth of MNEs, and of their foreign activities. Chapter 5 discusses the evolution of the eclectic or OLI paradigm, and presents an extension of this framework that incorporates the role of formal and informal institutions in the analysis of MNE activity.

3.2 WHY DO FIRMS WISH TO ENGAGE IN FOREIGN PRODUCTION?

Chapter 2 has shown that the great majority of MNE activity is undertaken by private business enterprises from market economies. This suggests that, like their domestic counterparts, MNEs are motivated primarily by what they perceive to be in the interests of their direct stakeholders, rather than that of the wider community of which they are part. These stakeholders include employees, managers and shareholders, all of whom must be recompensed for their contributions to the production process by an amount at least equal to the opportunity cost of the resources and capabilities they provide (that is, the highest return they could earn for their resources and capabilities if they were deployed differently). Most of the literature in the tradition of neoclassical economics asserts that any residual of income earned by a firm over and above the opportunity cost of the stakeholders will accrue to the owners of the business in the form of profits, and that it is the maximisation of these profits (net of tax and depreciation) in relation to the capital invested, which is the driving force of the modern business enterprise. This may be expressed in the following equation. Maximise:

$$\Pi = \frac{TR - TC}{K},$$

(3.1)

where $\Pi$ is the rate of return, $TR$ is the total sales revenue, $TC$ is the total cost of production and $K$ is the owner’s capital invested.

A modification of the above formula, which takes account of the fact that the value of a firm’s earnings will vary according to when they are earned, is set out below. Assuming that over a three-year period a firm will aim to maximise its total income, including that...
which is derived from reinvesting the profits earned in the first two years,\textsuperscript{78} the appropriate formula then becomes as follows. Maximise:

\[
\Sigma \Pi_{1 \rightarrow 3} = \Pi_1 (1 + r)^2 + \Pi_2 (1 + r) + \Pi_3,
\]  

where \( r \) is the maximum income a firm can earn through reinvesting profits earned in years 1 and 2. Each of these two formulae assume that the value of the owner’s investment stake does not change independently of the profits earned. However, once one allows for this possibility (perhaps as a result of an appreciation or depreciation of property values, or changes in future earning capacity of the firm), it may be more appropriate to think of the goal of the owners of a firm as maximising the value of their equity stake over a given period of time. Equation (3.2) would then need to be modified as follows. Maximise:

\[
\Sigma \Pi_{1 \rightarrow 3} + \Sigma \Delta K_{1 \rightarrow 3},
\]

where

\[
\Sigma \Delta K_{1 \rightarrow 3} = \Delta K (1 + r)^2 + \Delta K_2 (1 + r) + \Delta K_3.
\]

Alternatively, it is possible to conceive of the firm as a collection of assets, the value of which its owners wish to increase as much as possible over a given period of time. The formula to achieve the objectives of the wealth-maximising firms, as set out in most micro-economic textbooks, assuming a three-year time period, is as follows. Maximise:

\[
NPV_{(t=3)} = \frac{Y_1}{(1 + r)^3} + \frac{Y_2}{(1 + r)} + Y_3,
\]

where \( NPV \) is the net present value of the expected income of a firm at time \( t \), \( Y \) is the net expected income of the firm in time 1, 2 and 3, and \( r \) is the opportunity cost of \( K \) invested to earn that income.

The fact that an enterprise produces outside its national boundaries is not generally thought to affect the objectives of the owners of equity capital, except perhaps in the case of publicly owned or state-controlled companies. However, as with any multi-activity or multi-plant company, it may open up the possibility of a conflict of interests not only between the various groups of stakeholders, but also between the same group of stakeholders (for example, shareholders, management, labour, consumers) in one country and that in another. As Chapter 8 will suggest, the interests of the management and employees of an affiliate of an MNE will not necessarily coincide with those of the parent company. Conflicts may arise not only about the distribution of surplus profits, but also on decisions about the capital and institutional structure of the affiliate, the sharing of risks and responsibilities, the pricing of intra-firm transactions, the sourcing of inputs, the kind of markets served, the timing of income flows and the amount of production undertaken by the affiliate.

Post neoclassical theories of the firm assert that where output is supplied in other than perfectly competitive market conditions, the owners of enterprises need not necessarily be constrained to maximising the rate of return on their capital. Wherever the equity\textsuperscript{79}
stakeholders can earn above the opportunity cost of their capital, they have the freedom to pursue other objectives. These range from maximising the sales of the company or increasing its market share, to driving competitors out of business, undertaking risky investments which otherwise would not have been made and advancing the welfare of the other stakeholders. Alternatively, behaviourists such as Simon (1959) and Cyert and March (1963) argued that because of the difficulty of identifying the appropriate conditions for profit maximisation and to avoid attracting new competition or unwelcome government attention, firms will be content to earn ‘satisfactory’, rather than ‘maximum’ profits. Evolutionary economists (Nelson and Winter, 1982; Nelson, 2005) take a similar stance, arguing that bounded rationality and constant change in the range of options open to firms makes it difficult to identify a theoretical optimal performance. More recently, increasing attention has been focused on the extent to which the various stakeholders of the firm are able to, and in fact do, influence its objectives, and the means by which these may be achieved. Inter alia, the emergence of ethical investment, environmental sensitivity and security-related issues are requiring firms to modify their incentive structures and enforcement mechanisms.

Each of the above theories suggests that, if they should so desire, the owners of a firm may trade off part or all of surplus profits against other goals. At the same time, depending on their bargaining power, the other stakeholders (for example, the employees and consumers) might be able to appropriate part of these profits for themselves (Dunning and Stilwell, 1978). Increasingly the performance of firms – including MNEs – is being judged by multiple criteria.80

At a national level, and in corporate governance terms, economies can be broadly classified into ‘coordinated’ and ‘liberal market’ economies (Hall and Soskice, 2001). Germany and Japan are primary among the coordinated economies, although the group also includes the Scandinavian countries, the Netherlands, Belgium, Austria and Switzerland. Coordinated economies typically feature firms with high debt/equity ratios, cross-ownership of banks and industrial enterprises and interlocking directorates, and are generally sympathetic to the goals of stakeholder capitalism. By contrast, liberal market economies are typified by the US, but also include Canada, the UK, Ireland, Australia and New Zealand. These countries feature widespread share ownership, an active market for corporate control, flexible labour markets with the right to hire and fire, and education systems geared towards mobility. While it is not clear whether, in the long run, these differences result in differences in corporate performance, in the short run it is clear that corporate behaviour is affected by who owns the company, and who influences its institutions and behaviour.81

Publicly owned firms may operate under additional requirements, particularly in the domestic market. Similarly, private firms whose ownership is diverse, may nonetheless be influenced by large institutional investors such as pension funds, investing on behalf of their members. By contrast, closely held private firms, where large parts of equity are held by family members, may be able to pursue more independent strategies than more diversely held private firms. Indeed, in a study of 27 countries, La Porta et al. (1999a) found that the widely held firm was the exception rather than the rule. In a number of countries, governments and wealthy individuals hold substantial blocks of shares in large firms, leaving considerable scope for differences in corporate objectives.82

The introduction of risk and uncertainty into factor or product markets adds a further complication in evaluating the motivation of firms. Is a capital project with a 75% chance
of a 15% return being earned and a 25% chance of 12% being earned likely to interest a firm more or less than an investment with a 100% chance of a return of 13.5%? Economists can give no hard and fast answers without knowing the preference functions of the owners of the firm. In the above example, much will depend on the decision maker’s attitude to risk taking. Such an attitude is likely to vary between owners, and the goals and influence of the other stakeholders. This makes it difficult to give it an objective value, except in so far as it may be associated with certain (measurable) attributes of decision makers. Moreover, when it is impossible to calculate the risk, then one’s judgement of the nature of that risk may itself vary.

Later chapters will describe the various ways in which MNEs can and do evaluate risk and uncertainty, influence or react to the demands and pressures of their stakeholders and to those of the wider community. We shall see that much depends on the kinds of risk and uncertainty under consideration. While an increase in some risks, such as the possibility of expropriation of a firm’s foreign assets, is likely to reduce FDI, an increase in others, for example, acts of terrorism, or undue pressure from NGOs, the unreliability of foreign-owned suppliers or the inefficiency of independent foreign sales agents, may increase it.

Formal models, such as real option models which assign a value to flexibility under uncertainty, can be used to analyse certain kinds of sequential investment, where the investor makes a small initial investment but acquires rights to expand the investment project as further information becomes available. The real options framework has been found useful to explain many FDI-related decisions, such as those to do with the acquisition of drilling or mining rights (Damodaran, 2000), the setting up of joint ventures (Kogut, 1991), and the optimal investment in core capabilities (Kogut and Kulatilaka, 2001). However, if no usable proxy for the activity exists in the market, estimating the risk (volatility) of the investment, and consequently calculating the real option value, becomes difficult. A further complication of real option models is that, since the option value is always positive, this line of reasoning has a bias towards decisions that favour waiting instead of investment now, since it is always possible that with new information, a better decision can be reached. This logic of wait-and-see does not always fit well with the oligopolistic competition prevailing in the markets in which the larger and more powerful MNEs operate.

It is further worth observing that most economic and behavioural explanations of international (or foreign) production do not explicitly specify the motivation of firms engaging in that production, but only the variables likely to determine their behaviour. Moreover, most explanations are concerned with explaining what firms actually do rather than what they should do. In other words, rather than hypothesising that a fall in real wages in Thailand will increase FDI in Thailand because it will increase profits, most theories of FDI first attempt to establish whether labour costs are an important factor in influencing profits, and hence investment, and if they are, what is the nature of the relationship. A few analysts have used a composite variable, for example, some measure of profitability, growth of sales or market share, to explain the industrial or geographical distribution of FDI, but most have chosen to identify the variables that may be expected to influence these objectives.

In this volume, we shall assume that, for the most part, the principal objective of private enterprises in undertaking foreign production is to advance their long-term profitability.
(In Parts III and IV we shall consider other goals more explicitly.) However, it is important to note that long-term profitability is likely to be served by a combination of asset-exploiting and asset-seeking investment. Furthermore, it is made up of two components. First, there is the profitability of the foreign affiliate itself. Second, the effect that foreign production has on the profitability of the rest of the investing organisation. This latter effect might be positive, where, for example, FDI leads to an increase in the competitiveness, or lowering of the costs of, the global activities of the MNE. Alternatively, it might be negative where, for example, it replaces the production of another foreign affiliate.

Equation (3.1) may then be reinterpreted as follows. Maximise:

$$\Pi_{fp} = \frac{(TR_f + \Delta TR_f) - (TC_f + \Delta TC_f)}{K_f + \Delta K_r},$$

where \(fp\) are the profits as a result of MNE activity, \(f\) indicates the foreign affiliate and \(r\) is the other producing units of MNE. Equations (3.2)–(3.5) may be similarly reinterpreted. Thus maximising the NPV of the MNE by engaging in FDI makes it necessary to consider the effect of FDI on both the NPV of the foreign affiliate and the rest of the MNE’s operations.

In practice, MNEs operate in an environment in which both intermediate and final product markets are imperfect, where institutions are often second (or third) best, where cross-border learning is an integral part of a firm’s dynamic competitiveness, and where the outcome of business decisions is uncertain. This being so, it is even more difficult to generalise about the strategic behaviour of such firms than about that of their domestic equivalents. This is partly because of the greater range of options open to MNEs; partly because of the differences in perception of decision makers in the MNEs towards these options; and partly because of differences in attitudes towards incentive structures and risk taking. Thus, some firms may place a higher value on the risk-spreading opportunities or the cultural sensitivities of FDI than others; while MNEs that compete in oligopolistic markets may gauge the value of their foreign activities as much by their anticipated repercussions on their competitors’ market position as on any profits that the affiliate may earn. This suggests that some firms may produce outside their national boundaries as part of a coherent and coordinated global asset-exploiting and-seeking competitive strategy, rather than to earn profits on a specific FDI. This is, however, more likely to be the case with experienced and globally integrated MNEs rather than with smaller firms undertaking their first foreign venture.

With these introductory points in mind, we now turn to examine the main kinds of foreign production that firms undertake.

### 3.3 THE MAIN TYPES OF FOREIGN PRODUCTION

Broadly speaking, we might identify four types of MNE activity. Borrowing and extending from an earlier taxonomy used by Jack Behrman (1972) they are:

1. natural resource seekers;
2. market seekers;
3. efficiency seekers; and
4. strategic asset or capability seekers.

The characteristics of each are set out in the following subsections. It is, however, worth noting that in the early 2000s many of the larger MNEs are pursuing multiple objectives, and most engage in FDI that combines the characteristics of two or more of the above categories. Moreover, each type of MNE activity may be aggressive in the sense that the investing company is seeking to take proactive action to advance its strategic objectives, or defensive in the sense that its behaviour is in reaction to actions taken (or perceived likely to be taken) by its competitors or by foreign governments, which require it to protect its market position.

The motives for foreign production may also change as, for example, when a firm becomes an established and experienced foreign investor. Initially, most enterprises invest outside their home countries to acquire natural resources or gain (or retain) access to new markets. As they increase their degree of multinationality, however, they may use their foreign activities as a means by which they can improve their global market position by raising their efficiency or accessing new sources of competitive advantage.

### 3.3.1 The Natural Resource Seekers

These enterprises are prompted to invest abroad to acquire particular and specific resources of a higher quality at a lower real cost than could be obtained in their home country (if, indeed, they are obtainable at all). The motivation for the FDI is to make the investing enterprise more profitable and competitive in the markets it serves (or intends to serve) than it would otherwise be. Most, or all, of the output of the affiliates of resource seekers tends to be exported, mainly, although not exclusively, to developed industrialised countries.

There are three main types of resource seekers. First, there are those seeking physical resources of one kind or another. They include primary producers and manufacturing enterprises, from both developed and developing countries, who are driven to engage in FDI by the motives of cost minimisation and security of supply sources. The resources they seek include mineral fuels, industrial minerals, metals and agricultural products, but especially those whose production requires the kind of complementary capabilities and markets that MNEs are especially well equipped to provide. Chapter 2 has suggested that these include fossil fuels such as oil, coal and gas, metals such as copper, tin, zinc and diamonds; and agricultural products, such as rubber, tobacco, sugar, bananas, pineapples, palm oil, coffee and tea. In recent years, resource-seeking investment of this type by Chinese and Indian investors has been particularly notable in Africa. Some FDI in service activities is also intended to exploit location-bound resources. Examples include tourism, car rentals, oil drilling, construction, medical and educational services. One feature of this first kind of resource-intensive MNE activity is that it usually involves significant capital expenditure. Moreover, once the investment has been made, it is relatively location bound.

The second group of resource-seeking MNEs comprise those seeking plentiful supplies of cheap and well-motivated unskilled or semi-skilled labour. This kind of FDI is usually undertaken by manufacturing and service MNEs from countries with high real labour costs, which set up or acquire subsidiaries in countries with lower real labour costs, to supply labour-intensive intermediate or final products for export. Most of this type of MNE activity has been in the more advanced industrialising developing countries such as
Mexico, Taiwan and Malaysia. Within Europe there has been some labour-seeking investment in Southern, Central and Eastern European countries. However, as labour costs have risen, investment has shifted to other countries, such as China, Vietnam, Turkey, Morocco and Mauritius. Frequently, in order to attract such production, host countries have set up free trade or export processing zones (EPZs). The most recent example of the export of labour-intensive services which is directly the result of advances in communications technology is the widespread establishment of call centres in India and other developing countries. Home countries have sometimes allowed their own MNEs tariff concessions on products imported from their foreign subsidiaries. The economic implications of this kind of MNE activity are explored in some detail in Chapters 13 and 17.

The third type of resource-seeking FDI is prompted by the need of firms to acquire technological capability, management or marketing expertise and organisational skills. Examples include collaborative alliances concluded by Korean, Taiwanese and Indian companies with EU or US firms in high-technology sectors; executive search subsidiaries set up by US firms in the UK; and R&D listening posts established by UK chemical companies in Japan and French pharmaceutical companies in the US. Each of these value-added activities parallels the investment made, for example, by Belgian MNEs in Africa or Japanese MNEs in Australia and South-East Asia in the natural resources in which their home countries are deficient.

As Chapter 6 will show, much of the FDI by European, US and Japanese firms in the 19th century was prompted by the need to secure an economic and reliable source of minerals, primary products for the (then) investing industrialising nations of Europe and North America. Indeed, up to the eve of the Second World War, about three-fifths of the accumulated foreign direct capital stake was of this kind. By 1990, the primary sector accounted for only a tenth of the inward FDI stock, about 15% of which was in developing countries. However, by 2004, the share of developing countries as host to this type of FDI had again increased dramatically, to a third of the total capital stake in the primary sector, boosted in part by resource-seeking investment from emerging economies such as China and India (UNCTAD, 2006:161, 266).

The rising importance of other kinds of investment coupled with the voluntary or involuntary indigenisation of many primary sectors (for example, oil, rubber, tin, copper and so on) previously dominated by MNEs, is largely responsible for this development. Furthermore, the declining role of unskilled or semi-skilled labour in the value-added process of several manufacturing activities has reduced the incentives for MNEs to seek out cheap supplies of labour. On the other hand, there is an increasing tendency of both service and manufacturing MNEs to decentralise some of their routine service activities to low labour cost locations, while FDI to gain access to technology, information and specialised management skills is more important than it used to be. Not only are MNEs from emerging economies investing in the industrial nations to gain access to knowledge, there is increasing evidence of foreign investors in industrialised countries diversifying their R&D activities (UNCTAD, 2005c, 2006).

### 3.3.2 The Market Seekers

These are enterprises that invest in a particular country or region to supply goods or services to markets in these or in adjacent countries. In most cases, part or all of these
markets will have been serviced previously by exports from the investing company which, either because of tariff or other cost-raising barriers imposed by host countries, or because the size of the markets now justifies local production, are no longer best supplied by this route. Sometimes, however, an enterprise may seek to replace its exports to a foreign market by investing in a third country and exporting to that market from there.\textsuperscript{87} One scholar (Nicholas, 1986) found that no less than 94\% of the UK MNEs with foreign manufacturing investments in 1939, first supplied the countries in which they then produced by exports.

Market-seeking investment may be undertaken to sustain or protect existing markets, or to exploit or promote new markets. Apart from market size and the prospects for market growth, there are four main reasons which might prompt firms to engage in either sorts of market-seeking investment. The first is that their main suppliers or customers have set up foreign-producing facilities, and that to retain their business they need to follow them overseas. A classic example of this kind of FDI is that by some 500 Japanese auto-component suppliers which have set up manufacturing subsidiaries in the US, or concluded joint ventures with US firms, to supply US plants of the leading Japanese auto assemblers. In the services sector, cross-border M&As among accounting, auditing, law and advertising firms in the 1980s and 1990s were considerably stimulated both to improve their global competitive positions and by the need to offer their clients a presence in the leading markets of the world (Dunning, 1990), and this trend accelerated through the 1990s. For example, between 1990 and 2000 the number of cross-border M&As in the business services sector rose from 11,831 to 137,416 (UNCTAD, 2004:420). This growth was three times greater than that of such purchases in manufacturing industry.

The second reason for market-orientated FDI is that, quite frequently, products need to be adapted to local tastes or needs, to cultural mores and to indigenous resources and capabilities. In addition, without familiarising themselves with local language, business customs, legal requirements and marketing procedures, foreign producers might find themselves at a disadvantage \textit{vis-à-vis} local firms in selling consumer goods such as washing machines, audio/video equipment, some drugs and cosmetics, and a wide variety of food and drink products, as well as those supplying intermediate products such as construction machinery, petrochemicals and forestry products, financial and professional services.

The third reason for serving a local market from an adjacent facility is that the production and transaction costs of so doing are less than supplying it from a distance. Obviously, this decision will be highly activity and country specific. The production of goods that are relatively costly to transport and can be produced economically in small quantities is more likely to be located near the main centres of consumption than are those that cost relatively little to transport and yield substantial economies of scale in their production. Firms from countries that are geographically removed from important markets are more likely to engage in market-seeking FDI than those that adjoin those markets (compare French or Dutch investment with US investment in Germany). In some cases, government regulations, import controls or strategic trade policy may prompt firms to relocate their production facilities. For example, the Canadian telecommunications MNE, Northern Telecom, moved many of its production facilities to the US in the late 1980s so that it could win Japanese contracts. At the time, Japan favoured the US as a source of telecommunications equipment because of the politically sensitive US–Japan trade gap.
The fourth, and increasingly important, reason for market-seeking investment is that an MNE may consider it necessary, as part of its global production and marketing strategy, to have a physical presence in the leading markets served by its competitors. Thus, most of the larger MNEs in sectors dominated by international oligopolists (for example, oil, rubber tyres, autos, pharmaceuticals, semiconductors, accountancy and advertising) not only have operating units in each of the ‘Triad areas, but also are increasingly engaging in R&D.\(^8\) Such strategic market-seeking investment might be undertaken for defensive or aggressive reasons. Much of the ‘follow the leader’ or ‘bandwagon’ type of investments (which are analysed more fully in the following chapter) are of the former kind. For example, the sheer size of the potential market in China has attracted unprecedented inflows of foreign investment, some of which has followed the investments made by key customers, while some of it has followed the industry leaders.

Aggressive investments are those designed to advance the global interests of a firm by investing in an expanding market. The response of MNEs to the completion of Europe’s internal market in 1992, and to the opening up of Central and Eastern Europe to FDI was essentially of this kind, although the belief that the European internal market might be restrictive in its policies towards imports from non-EU countries also led to some defensive strategic investment by non-EU MNEs. Subsequent analysis on the impact of the European internal market programme on patterns of FDI and trade within and into the EU confirmed that much of the observed increase in FDI had come in the form of M&As, which were likely to have been strategic asset seeking in nature (Dunning, 1997b, 1997c).

However, undoubtedly the single most important reason for market-seeking investment remains the action of host governments encouraging such investment. The traditional instrument chosen by governments has been to impose tariffs or other import controls. History suggests that the majority of first-time manufacturing and service investments were undertaken to circumvent such trade barriers. Governments have also attempted to attract inward investment by offering a gamut of investment incentives ranging from tax concessions to subsidised labour and capital costs and favourable import quotas. More recently there has been an explosive growth of bilateral investment agreements (BITs) concluded by both developed and developing country governments and potential foreign investors.\(^9\) We shall discuss these measures in more detail in Chapter 20.

Unlike those engaging in other kinds of FDI, market-seeking MNEs tend to treat their foreign affiliates as self-contained production units rather than as part of an integrated network of cross-border activities. In consequence, they tend to be the most responsive to local needs and cultural sensitivities.\(^9\) The affiliates of market-seeking firms will normally produce similar products to those supplied by their parent companies, though usually a truncated range. Usually, too, the output will be sold in the country in which it is produced, although there may be some exports to adjacent markets. In regionally integrated markets such as the EU and NAFTA, however, production in one or a few countries might service all the countries in the region. At the end of the 1990s, market-seeking MNEs probably accounted for about 40% of all global direct investment and about 60% in the developing countries and transition economies.\(^9\)
3.3.3 The Efficiency Seekers

The motivation of efficiency-seeking FDI is to rationalise the structure of established resource-based or market-seeking investment in such a way that the investing company can gain from the common governance of geographically dispersed activities. Such benefits are essentially those of the economies of scale and scope and of risk diversification. They stem from cross-border product or process specialisation, the learning experiences that result from producing in different cultures, and the opportunities for arbitraging cost and price differentials across the exchanges. The intention of the efficiency-seeking MNE is to take advantage of different factor endowments, cultures, institutional arrangements, demand patterns, economic policies and market structures, by concentrating production in a limited number of locations to supply multiple markets.

Usually, the efficiency seekers will be experienced, large and diversified MNEs producing fairly standardised products and engaging in internationally accepted production processes. In the past, such FDI has usually occurred once resource-based or market-seeking investments have become sufficiently numerous and important to warrant some degree of rationalisation. Increasingly, however, investment by new entrants, such as by Japanese MNEs in the EU and NAFTA, by Korean firms in Central and Eastern Europe, and by Indian firms in several sub-Saharan African countries, have been undertaken on a product-by-product basis as part of a carefully orchestrated regional or global marketing strategy. In order for efficiency-seeking foreign production to take place, cross-border markets must be both well developed and open. This is why foreign production flourishes in regionally integrated markets.

Efficiency-seeking FDI is of two main kinds. The first is that designed to take advantage of differences in the availability and relative cost of traditional factor endowments in different countries. This explains much of the division of labour within MNEs producing in both developed and developing countries, with capital-, technology- and information-intensive value-added activities being concentrated in the former, and labour- and natural resource-intensive activities in the latter. The second kind of efficiency-seeking investment is that which takes place in countries with broadly similar economic structures and income levels and is designed to take advantage of the economies of scale and scope, and of differences in consumer tastes and supply capabilities. Here, traditional factor endowments play a less important role in influencing FDI, while ‘created’ competences and capabilities, incentive structures and the availability and quality of supporting institutions, the characteristics of the local competition, the nature of consumer demand and the macro and micro policies of governments play a more important role.

3.3.4 The Strategic Asset Seekers

The fourth group of MNEs comprise those which engage in FDI, usually by acquiring the assets of foreign corporations, to promote their long-term strategic objectives – especially that of sustaining or advancing their global competitiveness. The investing firms involved include both established MNEs pursuing an integrated global or regional strategy, and first-time foreign direct investors seeking to access or to buy some kind of competitive strength in an unfamiliar market. The motive for strategic asset-seeking investment is less to exploit specific cost or marketing advantages over their competitors
(although these may sometimes be important) and more to augment the acquiring firm’s global portfolio of physical assets and human competences, which they perceive will either sustain or strengthen their ownership-specific advantages or weaken those of their competitors. Increasingly, too, strategic and rationalised FDI are going hand in hand as firms restructure their assets to meet their objectives. Importantly, asset-seeking investment is also increasingly undertaken by MNEs from emerging economies, as was the case, for example, with the acquisition of IBM’s PC business by the Chinese firm Lenovo in 2005, and the Indian firm Tata’s purchase of the UK steel giant Corus in 2007.

Like the efficiency-seeking MNE, the strategic asset acquirer aims to capitalise on the benefits of the common ownership of diversified activities and capabilities, or of similar activities and capabilities in diverse economic and potential environments. Chapter 4 will analyse the nature of these benefits in more detail. They all arise from the imperfections of the intermediate product markets in which MNEs operate and the opportunities open to these companies to exploit, or indeed add to, these imperfections. In some cases, the strategic asset seeker is a conglomerate primarily concerned with the management of financial assets denominated in different currencies. Companies such as Hanson Capital Ltd, for example, are primarily institutional portfolio investors, even if they own a majority of equity shares in the companies they invest. At the same time such MNEs may, and often do, inject their own organisational systems and management styles into the companies they acquire, even if they do not involve themselves in the day-to-day management functions. Investment by private equity funds,92 which has grown considerably over the past decade, is a case in point, as such investment generally involves not just the purchase of a controlling share of equity, but also the provision of advice and guidance to management (UNCTAD, 2006:18). Indeed, in the case of the great majority of strategic investments (including those of some quite small MNEs) the expectation is that the acquisition, merger or joint venture will bring some benefits to the rest of the organisation of which it is part. This it might do, for example, by opening up new markets, creating R&D synergies or production economies, buying market power, lowering transaction costs, accessing new organisational skills, spreading administrative overheads, advancing strategic flexibility and enabling risks to be better spread.93

While some specialist multinational conglomerates tend to be service rather than goods-producing companies, and often their foreign investments are free-standing, most foreign M&As are currently undertaken by MNEs that fall into one of the other three categories just described. Strategic and economic good sense usually go hand in hand. However, on certain occasions and for certain purposes, strategic considerations may be the dominant motive for FDI. One company may acquire or engage in a collaborative alliance with another to thwart a competitor from so doing. Another might merge with one of its foreign rivals to strengthen their joint capabilities vis-à-vis a more powerful rival. A third might acquire a group of suppliers to corner the market for a particular raw material. A fourth might seek to gain access over distribution outlets to better promote its own brand of products. A fifth might buy out a firm producing a complementary range of goods or services so that it can offer its customers a more diversified range of products. A sixth might join forces with a local firm in the belief that it is in a better position to secure contracts from the host government that are denied to its exporting competitors. All these are examples of strategic FDI to protect or advance the investing firm’s long-term competitive position.
There are no statistical data on the significance of efficiency-seeking or strategic asset-acquiring FDI by MNEs, particularly as they cannot easily be separated from the other two kinds of value-adding activity. What does seem certain, however, is that most of the cross-border intra-Triad M&As which have been concluded since the early 1990s have been geared towards protecting or advancing the acquiring firm’s global competitive position. While around one-fifth of these M&As have been directed to the growth-orientated knowledge- and information-intensive sectors, notably telecommunications, electronics and business services, the main objective of a fair number, for example, in the food, beverages and tobacco, public utility, retail trade and financial services sectors, has been to exploit rationalising and cost-cutting advantages, and/or to defend or gain market share in an increasingly competitive market (UNCTAD, 2000b, 2006).  

3.3.5 Other Motives for MNE Activity

There are other reasons for MNE activity which do not easily fit into the four categories just described. We shall classify these into three groups, namely, escape investments, support investments and passive investments. Let us consider each of these in turn.

**Escape investments**

Some FDI is made to escape restrictive legislation or macro-organisational policies by home governments. We are not here concerned with ‘flight’ capital which may be associated with war, civil strife or dire economic circumstances, for example, as has occurred at one time or another in Argentina, Zimbabwe, Uganda, Liberia, South Africa, Malaysia and the Philippines over the last two decades. Examples of the kind of ‘escape’ investments we have in mind include the ‘round-tripping’ of investment between China and Hong Kong to exploit incentives granted only to foreign investors, investment by American biotechnology firms to undertake stem cell research in Europe, or cases where Swedish MNEs have relocated their headquarters elsewhere in Europe to escape high levels of taxation and/or a perceived lack of dynamism in the domestic economy (Birkinshaw et al., 2006). We might also include in this category the relocation of the environmentally sensitive European leather tanning sector to Eastern Europe and developing countries, although this has occurred largely through increased outsourcing rather than through new investment (Jenkins et al., 2002).

Escape investments, such as those just described, are clearly most likely to originate from countries whose governments adhere to ideologies and economic strategies unacceptable to the business community: and they tend to be concentrated in those sectors – especially service sectors – which are most highly regulated. With the renaissance of pro-market-orientated policies and the liberalisation of many markets, there is probably less ‘escape’ MNE activity in the early 2000s than a decade ago. In all of the cases outlined above, the escape motivation is likely to be one of the determining factors, but seldom the only one, in the decision to relocate specific activities.

**Support investments**

The purpose of these investments is to support the activities of the rest of the enterprise of which they are part. Such affiliates are rarely self-contained profit centres. Their
activities incur costs but the major benefits accrue to the rest of the MNE. Foremost among support investments are trade- and finance-related investments of MNEs, which are essentially designed to promote and facilitate the exports of goods and services from the investing (or other) companies, and/or to assist in the purchasing of foreign-produced goods and services from the investing (or other) companies.

The kinds of value-added activity undertaken by MNE trading affiliates include not only wholesale and retail distribution and marketing, but also a range of import facilitating which they undertake on behalf of the investing company. The Japanese *sogo shosha* and the Korean *chaebol* companies are trading MNEs *par excellence*. There are many others. Examples are the leading clothing wholesale and retail outlets in Europe and the US, such as Sears Roebuck, Kmart, Wal-Mart, and Hennes and Mauritz, which purchase substantial quantities of clothing and footwear from Asian suppliers, and often delegate the subcontracting arrangements (including the monitoring of quality control) to their buying subsidiaries. Similarly, the sale of sophisticated intermediate products and those which need regular after-sales maintenance and servicing may need the presence of trained personnel and of warehousing facilities for spare parts. Often trade-related subsidiaries also provide other marketing and public relations services for their parent companies. Finally, as Chapter 7 will show, such activities are frequently the first step to the setting up of market- or resource-seeking production facilities.

There are other kinds of support services which might be provided by the foreign affiliates of MNEs. These are usually undertaken by regional or branch offices. Regional offices act as an intermediate centre of control and administration between the head office and the foreign operating units. Various studies have shown that the functions performed by these offices vary a great deal. Typically they involve both the coordination of the activities of the operating units and the provision of financial and marketing information for the parent company. They may also undertake such services as personnel recruitment, the search for additional investment opportunities in the region in which they are situated, site selection, public relations and liaison with host governments and/or regional authorities.

Branch offices which are independent of trade and operating units are less common. However, the idea of setting up a listening and monitoring arm of the parent company has gained credence in recent years, particularly, for example, in the case of US firms contemplating investments in the EU, and of Japanese finance-based MNEs seeking a presence in the City of London.

**Passive investments**

Chapter 1 indicated that a foreign investment is treated as direct if the investing entity has a financial equity interest in a foreign company sufficient to give it some control or influence over the latter’s decision making. In practice, as we have seen, data collecting agencies assume this to be somewhere between 10 and 25%, although 10% is becoming the standard criterion. We have also suggested that direct investment is motivated differently from portfolio investment. The latter kind of investment is an expression of faith in the existing organisation and management of the company, and is undertaken to earn profits or to gain capital appreciation. By contrast, direct investment is designed to inject new resources, management skills and institutional forms into the company, or to acquire new assets to protect or increase the investor’s own profits or competitiveness.
Portfolio investment is presumed to involve passive management whereas direct investment is presumed to involve active management.

In practice, most direct investments vary in the degree of active management pursued by their owners, ranging from ‘complete’ to ‘non-existent’. Those which veer to the passive end of the spectrum are of two kinds. The first are those of large institutional conglomerates that specialise in the buying and selling of companies. Well-known examples are T. Boone Pickens (US) and Lonrho (UK); the latter, after the departure of business tycoon Tiny Rowland, was demerged into a mining group and a diversified group of holdings in Africa. However, although the investments are motivated by income potential or capital gain, some direct managerial input is usually involved, as is now being increasingly demonstrated by the cross-border investment by private equity companies (UNCTAD, 2006). Rarely is an acquired company left to its own devices. Such investments are undertaken to improve technological, marketing, financial or organisational capabilities; others may involve asset stripping.

Most real estate involvement (in land, hotels and so on) is based on some expectation of future land and property values, and if the motivation of such investment is primarily financial, the ‘foreignness’ impact on the use of the assets acquired may be very limited. This was particularly apparent in the investments made by Gulf investors into London hotel properties in the 1970s, and the acquisition of prestigious real estate in the US by Japanese MNEs in the late 1980s. However, since the early 2000s, the oil exporting countries with growing current account surpluses, such as Kuwait, Saudi Arabia and the United Arab Emirates (Dubai), which have traditionally been active in portfolio investment and more passive forms of FDI, have been increasingly allocating their petrodollars to more active forms of investment. In addition to expanding the range of their FDIs to include a variety of manufacturing and service operations in Asia and Africa, the state-owned investment firms have undertaken some notable M&As, including the purchase of the UK shipping company P&O by Dubai Ports World, which led to a conflict concerning their ownership of some US ports (UNCTAD, 2006).

The second kind of passive investment is that made by small firms and individual investors in real estate. Often this is simply to foster the foreign ownership of holiday or second homes. However, sometimes it is undertaken purely in anticipation of an appreciation in land and property prices. The boom in real estate both in the leading cities of the world, and in the tourist areas of emerging economies in the early 2000s are examples of such investment. Here, the mainstream theories of FDI described in the next chapter are left wanting. This is because, although classified as direct, these purchases have more the attributes of portfolio investment.

There is some suggestion that the passive element in the foreign operations by MNEs may be increasing. Certainly, this is more likely to be a feature of cross-border M&As than of greenfield investments; as shown in Chapter 2, the former escalated considerably in the 1990s. Moreover, the rate at which firms have changed ownership, particularly in real estate-, trade- and finance-related activities increased in that decade dramatically (UNCTAD, 2000b). The problem of identifying the passive or portfolio component of a direct investment is, of course, not unique to FDI. Indeed, one school of thought has viewed the growth of the firm as being motivated by the pursuance of profitable and wealth appreciation activities. While most firms would be reluctant to accept this perception, and prefer to follow an ‘every cobbler sticks to his last’ philosophy, most engage
in some kind of ancillary investments. Although there is not much that the academic scholar can do about separating the portfolio component of any direct investment, he/she should be aware of its relevance. At least for some kinds of investment, he or she should try to incorporate the kind of variables that influence such investment into his explanatory models (Dunning and Dilyard, 1999).

Finally, we might mention the emergence of so-called ‘born global’ firms. These are typically technology-intensive start-up firms that serve niche markets, and are able to reach suppliers and customers around the world from their inception (Madsen and Servais, 1997). To the extent that they normally supply a narrow range of products or services, have low levels of resources committed outside their domestic borders, and engage in exports as their primary cross-border activity, we would consider these ‘global’ firms to be relatively conventional market-seeking firms. However, the fact that ‘born global’ firms may also source various knowledge-intensive inputs globally, suggests that they may have efficiency and asset-seeking motivations as well. We shall return to ‘born global’ firms in Chapter 7.

3.4 THE POLITICAL ECONOMY OF OUTWARD FDI

The previous sections have dealt with some of the economic and strategic motives for FDI. However, in so far as the governments of the investing countries are also interested in the outcome of the activities of MNEs, then, by influencing the conduct of such firms or their affiliates, they may affect the amount and pattern of FDI. Chapter 6 will, indeed, show that, throughout history, much MNE activity has been undertaken either directly by nation states, or with their support and encouragement. But normally, such encouragement has only been forthcoming if the investment was perceived to advance the long-term economic and political goals of the home country.

Most early British investments in North America and 19th-century investments by European colonial powers in the developing countries were of this kind (Svedberg, 1982). History is replete with examples of private MNEs being used as instruments of the economic policy of metropolitan governments. Indeed, until the outbreak of the First World War, the UK and French colonies were sometimes forbidden to accept inward investment from other than the mother country, which at the same time might give incentives to its own firms. In the second half of the 20th century there were several cases of uneasy alliances being concluded between MNEs and their home governments; while in the first decade of the 21st there is increasing evidence of home governments supporting FDI, and the interests of their own MNEs, in the belief that it may further their own political, economic or strategic objectives. These issues will be explored in more detail in Chapters 6 and 19. Chapter 2 observed that although the numbers of state-owned MNEs have declined in the past decade due to policies favouring privatisation, there are still many large MNEs that are at least partly state owned. Indeed there is some evidence that SOEs – particularly those from Brazil and Russia – are becoming more active as foreign investors (Sauvant, 2005). The question of the tactics pursued by state-owned MNEs, and the extent to which home governments may affect the behaviour of private MNEs operating outside their home territories is an altogether different matter which is taken up in Chapters 19 and 20.
3.5 CONCLUSIONS

The above sections have demonstrated that the types of foreign value-added activities undertaken by MNEs may be very differently motivated. Because of this, it is difficult to perceive an all-embracing theory of the determinants of these activities in the sense of encompassing, within a single explanatory model, a set of variables that can fully explain each at the same time. The most, we believe, that the economist or business analyst can reasonably do is to formulate paradigms to provide an analytical framework which can incorporate theories designed to explain particular kinds of FDI and the determinants of the various types of MNE activity.

The consensus of scholarly research and business case histories over the past 30 years support this contention. Thus, the factors that explain Rio Tinto’s investment in copper mines in New Guinea or Geest’s investment in a banana plantation in the Windward Islands are totally different from those that explain Coca-Cola’s investment in a bottling plant in Arusha, Tanzania, Bata’s investment in a shoe factory in Belgium, the purchase of the Rockefeller Center in New York by the Mitsubishi Estate Corporation of Japan, or an investment by the Indonesian company Summa in the first foreign-owned bank in Vietnam. Likewise, each of these investments is motivated by a different set of considerations from those driving IBM’s, Royal Dutch Shell’s or ABB’s strategies towards the globalisation of their R&D facilities, or Nokia’s attempts to build up an international network of communication facilities, or Cemex’s strategy to become one of the leading global players in the cement industry, or Club Méditerranée’s objective to own or franchise hotels in each of the world’s major tourist regions.

However, it is one thing to argue that different explanatory variables are required to explain different kinds of foreign production, but quite another to assert that it is not possible to formulate a general paradigm or, as Kuhn (1962) puts it, ‘a disciplinary matrix’ which seeks to set out a common analytical approach to explaining all kinds of MNE activity. A reading of the literature suggests that there is some division of opinion as to the nature of the distinction between a theory and a paradigm. As we see it, a theory is a set of propositions about the nature and form of the behavioural relationships between a set of phenomena, the validity of which can be empirically tested. In some cases there may be alternative theories to explain the same phenomena; these may be called ‘competing’ theories. In others, different phenomena may (and usually do) require different explanations, in which case the theories would be ‘non-competing’. Most partial theories of the MNE or FDI fall into one or other of these categories.

A paradigm, on the other hand, seeks to present a general framework for analysing the relationship between phenomena from which it is possible to formulate a variety of competing or non-competing theories. Perceived in this way, a theory is a derivative of a paradigm, but one paradigm may be able to accommodate several theories.104

The following two chapters will take up these points in more detail with respect to some of the theories and paradigms that have been put forward to explain the determinants of the existence and growth of MNEs and of their global value-added activities.
4. Theories of foreign direct investment

4.1 INTRODUCTION

This chapter seeks to review some of the leading economic and behavioural explanations of the existence and growth of MNEs and of the foreign value-added activities they own or control. Chapter 1 identified MNEs as multi-activity firms that engage in FDI. At the same time, it acknowledged that many MNEs also participate in a variety of cross-border non-equity alliances and/or clusters of value-adding activities over which they may exert considerable influence. Chapter 1 further suggested that MNEs have two near relatives. First, like international trading companies, they undertake cross-border transactions outside their home countries, but unlike them, they own and/or control foreign production facilities. Second, like multiplant domestic firms, MNEs operate two or more production units and internalise the transactions between these units. Unlike them, however, at least one of these production units is located in a foreign country, and the markets internalised are transnational rather than domestic.

The theory of the determinants of MNE activity must then seek to explain both the location of value-adding activities, and the ownership and organisation of these activities. As such, it needs to draw upon and integrate two strands of economic thought. The first is the theory of international resource allocation based upon the spatial distribution of factor endowments and capabilities. This theory chiefly addresses itself to the location of production. The second is the theory of economic organisation, which is essentially concerned with the ownership of that production and the ways in which the transactions relating to it (including those which may impinge on its location) are managed and organised.

In traditional (classical or neoclassical) models of trade, which were the dominant paradigms in international economics until the 1950s, only the first issue, namely, the ‘where’ of production, was addressed. Questions relating to the ownership and organisation of economic activity were ignored. This was because the market for the cross-border exchange of goods and services was assumed to be a costless mechanism. Resources were assumed to be immobile across national boundaries but mobile within national boundaries. Firms were assumed to possess unbounded rationality and engage in only a single activity. Entrepreneurs were assumed to be profit maximisers. Institutional differences were assumed not to matter. Managerial strategy was assumed to be confined to identifying the optimum level of output, and minimising the costs of supplying and marketing that output.

However, once one allows for imperfections in goods or factor markets, the possibility of alternative patterns of ownership of firms and/or organising transactions arises. For example, in place of one firm selling its product through the market to another firm which then adds value to it, the same firm may coordinate both sets of activity and, in so doing, replace the market as a mechanism for allocating resources between the two firms, or for any
transactions in which they were both previously involved. Foreign production occurs when at least one of these activities spans national boundaries. The factors influencing the modality of organising cross-border activities are therefore at the heart of the theory of the MNE; indeed, some scholars go as far as to assert that it is the only real question of interest.

Taking a different starting-point, one might equally ask why, given the ownership of firms and the way in which they organise their production and transactions, they should choose to locate at least some of their value-added activities in a foreign country. In this case, the spatial distribution of factor endowments may be as relevant as it is in explaining some kinds of trade. Put another way, the introduction of market imperfections and multiple activities not only opens up the possibility of foreign production, but also requires a reappraisal of traditional trade theory. Indeed, some types of international transactions, such as intra-industry and intra-firm trade, can only be explained by drawing upon the theory of industrial organisation.

From the above paragraphs, it should be evident that any attempt to theorise about the extent and pattern of MNE activity crucially rests on the type of question one wishes to answer. Is it primarily ‘Why do firms own foreign production facilities?’ or ‘Why do firms locate their activities in one country rather than another?’; or ‘What specific attributes demarcate MNEs from uninational enterprises?’; or ‘Why does the participation of foreign, relative to indigenous, firms differ between countries and sectors?’; or ‘Under what conditions will firms finance their foreign activities in the currencies of their home country rather than in those of another (that is, engage in FDI)?’. Even a cursory review of the literature on international production suggests that, frequently, researchers address themselves to related, but very different questions.

Similarly, scholars differ in their choice of the unit of analysis. At the one end of the spectrum are the political economists in the Marxist tradition who view the internationalisation of firms as an inevitable outcome of the capitalist system, and as a means of increasing the monopoly power of the investing firms and/or countries (Baran and Sweezy, 1966; Hymer, 1972; Newfarmer, 1985; Cowling and Sugden, 1987, 1994). At the other end, business analysts and organisational theorists have sought to identify the main factors that determine the foreign investment decision process of firms (Aharoni, 1966; Ghoshal and Westney, 1993 [2005]). In between these two extremes, it is possible to identify three main theoretical streams of thought. The first emanate from a group of scholars who have taken a macroeconomic perspective to MNE activity and have concerned themselves with why countries engage in FDI. These economists, such as Kojima (1973, 1978, 1982, 1990), usually take neoclassical type trade models as their starting-point and then extend them to explain the extent and pattern of, and rationale for, foreign production. Not surprisingly, they tend to focus on location-specific variables and why firms of particular nationalities have different propensities to engage in different kinds of trade and foreign production. A rather different perspective on the why and how of MNE activity has been offered by James Markusen (1984, 1995, 1998, 2001, 2002b), a leading international economist, who argues that the tools of trade theory need to incorporate firm-specific characteristics, for example, size, degree of diversification, economies of scale and scope, and cross-border market failure in intermediate products, if international economists are to embrace MNEs.

A second group of scholars, more interested in the behaviour of the individual business enterprise, draw upon the theory of the domestic firm (which seeks to answer very

A third group of analysts, more closely allied in background to the second than the first, address the question of why firms of one nationality are better able to penetrate foreign markets than indigenous firms located in those markets, and why they wish to control value-added activities outside their national boundaries. Stephen Hymer (1960, 1968) was the progenitor of this type of explanation of foreign production – later taken up (though from a somewhat different perspective) by John Dunning (1977, 2000a) and Richard Caves (1982 [1996]) – which, he argued, could not occur without the investing firms possessing some kind of monopolistic advantage over and above that possessed by indigenous competitors. In his explanation, he drew not so much on the theory of the firm as on the theory of industrial organisation, which had been developed a few years earlier by Bain (1956) to explain the pattern and ownership of US domestic industry (Dunning and Pitelis, 2008).

In reviewing the literature on the determinants of MNE activity, it is important to distinguish between these three approaches, because what may be an exogenous variable in one may be endogenous in another. It follows that there is no all-embracing explanation of international production, only a correct answer to particular questions, each of which may add to our understanding about the cross-border organisation of economic activity.

Finally, as previous chapters have demonstrated, the nature of FDI undertaken by MNEs is extremely varied. Because of this, both the motives for and the determinants of international production will differ. The parameters influencing a Finnish pulp and paper company investing in a mill in Indonesia are unlikely to be the same as those influencing the purchase of a French food processing company by a Canadian MNE. Similarly, those determining the pattern of rationalised production in the EU by a large and geographically diversified US motor vehicle MNE will be quite different from an investment by a Korean construction management company in Saudi Arabia, a Chinese state-owned oil company seeking new reserves in the Sudan, or a UK bank a call centre facility in India.

In summary, we would argue that it is not possible to formulate a single operationally testable theory that can explain all forms of foreign-owned production any more than it is possible to construct a generalised theory to explain all forms of trade, or the behaviour of all kinds of firms. It is fully accepted in the literature that inter-industry trade needs different explanations from intra-industry trade, and that any theory of the MNE critically depends on the presumed motivation and intentions of the enterprises involved. At the same time, as the previous chapter has indicated, we believe that it is possible to formulate a general paradigm of MNE activity that sets out a conceptual framework, and
seeks to identify clusters of variables relevant to an explanation of all kinds of foreign-owned output. Within this framework, we believe that most of the partial micro- and macro theories of international production can be accommodated. Also, while the relevance and significance of the variables identified by each theory will differ, they should be more properly viewed as complementary, rather than substitutable, explanations for the cross-border activity of firms (Dunning, 2000a).

The rest of this chapter proceeds in the following way. Section 4.2 identifies and briefly reviews a selection of the leading theories of international production which were put forward by economists between 1960 and the mid-1970s. These theories were primarily focused on explaining the initial decision of firms to engage in FDI. In the following 15 years or so, attention was switched to explaining the added investment of firms, and to formulating more general explanations of MNE activity and the emergence of the global corporation. The past decade has seen substantial new work on the systemic characteristics of multinational firms and their network of activities, the equity and non-equity relationships that comprise that network, and on the creation, accessing and management of all kinds of knowledge by its members. There has also been a renewed interest in the location-bound resources that give rise to the clustering of certain kinds of economic activity; and the role played by institutions and incentive structures in influencing inbound and outbound FDI. Some of these issues will be further taken up in Part II, which deals with recent scholarly thinking about the organisation, strategy and structure of MNEs.

Section 4.3 will introduce the eclectic paradigm of international production, which is the explanatory framework applied throughout this book. The eclectic paradigm is, perhaps, the most ambitious attempt to integrate each of the main theoretical strands described earlier, which has over the past 20 years become one of the pre-eminent paradigms within the field of international business (Cantwell and Narula, 2003). This paradigm will then be compared and contrasted with two of the more influential economic theories of the MNE or MNE activity, namely, internalisation theory, and the macroeconomic theory of FDI propounded by Kiyoshi Kojima. This discussion is complemented by a brief note on the dynamics of MNE activity, which brings in the seminal contribution of Richard Nelson and Sidney Winter (1982) on the evolutionary theory of the firm. The chapter concludes by identifying the main empirical challenges and theoretical developments over the past 15 years that need to be incorporated to our explanatory framework, which is done in Chapter 5.

4.2 THEORIES OF THE MNE AND MNE ACTIVITY: 1960–76

4.2.1 Prior to the 1960s

Prior to the 1960s there was no established theory of the MNE or of FDI. Attempts to explain the activities of firms outside their national boundaries represented an amalgam of:

1. a fairly well-formalised theory of (portfolio) capital movements (Iversen, 1935);
2. a number of empirical and largely country-specific studies on the factors influencing the location of FDI (Southard, 1931; Marshall et al., 1936; Barlow, 1953; Dunning, 1958);
3. a recognition by some economists, notably Williams (1929), that the internationalisation of some industries required a modification to neoclassical theories of trade;
4. an appreciation that the common ownership of the cross-border activities of firms could not only be considered as a substitute for the international cartels and combines (Plummer, 1934), but could also be explained, in part at least, by the perceived gains of vertical or horizontal integration (Penrose, 1956; Bye, 1958); and.
5. an extension of the extant theory of international capital movements to embrace the role of entrepreneurship and business competence (Lund, 1944). Lund refers to this combination of entrepreneurial ideas and financial capital as an ‘international wandering combination’.¹⁰⁸

Bye’s contribution, which was (and still is) generally neglected by economists was particularly perceptive. It was he who coined the expression ‘the multi-territorial firm’ and used the case of the international oil industry to demonstrate that ‘real and financial size enables firms to cross varying thresholds of growth either by extension or integration, and so assure them of a certain bargaining position’ (Bye, 1958:161).

The 1960s saw two influential and pathbreaking contributions to the theory of the MNE and MNE activity. Each was put forward quite independently of the other, and approached its subject matter from a very different perspective. The following subsections briefly describe the main features of the two approaches.

4.2.2 The Contribution of Hymer

The first contribution was that of Hymer (1960, 1968) who, in his PhD thesis,¹⁰⁹ expressed his dissatisfaction with the theory of indirect (or portfolio) capital transfers to explain the foreign value-added activities of firms. In particular, he identified three reasons for his discontent. The first was that once risk and uncertainty, volatile exchange rates and the cost of acquiring information and making transactions were incorporated into classical portfolio theory, many of its predictions, for example, with respect to the cross-border movements of money capital in response to interest rate changes, became invalidated. This was because such market imperfections altered the behavioural parameters affecting the conduct and performance of firms and, in particular, their strategy in servicing foreign markets.

Second, Hymer asserted that FDI involved the transfer of a package of resources (technology, management skills, entrepreneurship and so on), and not just finance capital which portfolio theorists such as Iversen (1935) had sought to explain. Firms were motivated to produce abroad by the expectation of earning an economic rent on the totality of their resources, including the ways in which they were organised. The third and perhaps most fundamental characteristic of FDI was that it involved no change in the ownership of resources or rights transferred, whereas indirect investment, which was transacted through the market, did necessitate such a change. In consequence, the organisational modality of both the transaction of the resources (for example, intermediate products) and the value-added activities linked by these transactions was different.

In this connection, it is perhaps worth observing that Hymer was only interested in FDI in so far as this was the means by which firms were able to control the use of property rights transferred to their foreign subsidiaries. In his thesis, Hymer broached many other
issues which were subsequently taken up more rigorously by other scholars. For example, Aliber (1970, 1971) developed a formal model of FDI based on the failure of international financial and currency markets to perform efficiently, while Hymer’s (1960:48, 60) identification of the international firm as a firm that ‘internalises or supersedes the market’ provided a useful prologue to the theory of internalisation as a means for transferring knowledge, business techniques and skilled personnel (Yamin, 2000; Pitelis, 2002a; Dunning and Pitelis, 2008).

However, Hymer’s (early) work is, perhaps, best known for its application of an industrial organisational approach to the theory of foreign production. His argument ran as follows. For firms to own and control foreign value-adding facilities they must possess some kind of innovatory, cost, financial or marketing advantages – specific to their ownership – which is sufficient to outweigh the disadvantages they faced in competing with indigenous firms in the country of production.\(^\text{110}\) These advantages, which he assumed to be exclusive to the firm owning them (hence the expression ‘ownership’ advantages), imply the existence of some kind of structural market failure.

In seeking an explanation of these imperfections, Hymer turned to Bain’s (1956) classic treatise on the barriers to competition in domestic markets. In extending this analysis to explain the cross-border activity of firms, he argued that such firms had to possess some kind of proprietary or monopolistic advantage. However, in so far as some ownership advantages may arise from the ability of firms to improve the allocation of resources or organise transactions more efficiently than markets, the word ‘monopolistic’ is an inappropriate one, even though the advantage(s) may, but not necessarily will, allow the owning firm to enjoy a temporary economic rent. Hymer then went on to examine the kind of ownership advantages that firms contemplating FDI might possess or acquire, as well as the kind of industrial sectors and market structures in which foreign production was likely to be concentrated.\(^\text{111}\)

Elsewhere in his thesis, Hymer examined other issues germane to MNE activity. In particular, like Bye, he was interested in the territorial expansion of firms as a means of exploiting or fostering their monopoly power. And, although his writings show a clear awareness of the failure of markets to perform efficiently, he always seemed to compare the welfare implications of resource allocation by international hierarchies with those of Pareto optimality offered by perfect markets. In consequence, Hymer overlooked the fact that increased profits from the superior efficiency of foreign firms is not necessarily a social loss if the prices of the final products are not higher than they would otherwise be (Teece, 1985). The emphasis placed by Hymer on the organisation of economic activity by MNEs as a means of advancing monopoly power, rather than of reducing costs, improving product quality or long-term competitiveness, also led him to consider the alternatives between FDI and other forms of international involvement in normative terms, rather than by a reasoned analysis of the costs and benefits of these options.

In a later paper, first published in French, Hymer (1968) took a rather different approach to explaining international production. Here, he sought to consider things from the firm’s point of view and the reasons for it to become multinational, as well as the obstacles it may encounter on the way. In developing his analysis, Hymer drew very heavily on the ideas of Coase (1937), whose work he appeared to be unaware of in his thesis. Hymer applied the analysis of Coase to suggest reasons why firms might wish to engage in cross-border vertical integration. Although he did not fully develop his
argument, Hymer did appear to acknowledge that MNEs might help to improve international resource allocation by circumventing market failure. To this extent at least, his 1968 contribution is a natural point of departure for the more rigorous work of the internationalisation economists in the following decade.112

4.2.3 The Product Cycle

If Hymer used industrial and organisational economics to explain MNE activity, Vernon and his colleagues at Harvard were the first to acknowledge the relevance of some of the newer trade theories put forward in the 1950s and 1960s113 to help explain this phenomenon. In a classic article published in 1966, Vernon used a microeconomic concept – the product cycle – to help explain a macroeconomic phenomenon, namely, the foreign activities of US MNEs in the post-war period. His starting-point was that, in addition to immobile natural endowments and human resources, the propensity of countries to engage in trade also depended on the capability of their firms to upgrade these assets or to create new ones, notably technological capacity. He also hypothesised that the efficiency of firms in organising these human and physical assets was, in part at least, country specific in origin.

Drawing upon some earlier work by Posner (1961), Vernon (1966) argued that the competitive or ownership advantages of US firms – particularly their willingness and capabilities to innovate new products and processes – was determined by the structure and pattern of their home country factor endowments, institutions and markets. However, it was quite possible that any initial competitive advantage enjoyed by innovating enterprises might be eroded or eliminated by the superior competence of firms in other countries to supply the products based on them. Without explicitly bringing market imperfections into his analysis, Vernon then switched his unit of analysis to the firm, and particularly to the location of its production. Initially, the product (or more correctly, the value-added activities based on the firm’s proprietary assets) was produced for the domestic consumption in the home country, near to its innovatory activities and/or markets. At a later stage of the product cycle, because of a favourable combination of innovating and production advantages offered by the US, it was exported to other countries most similar to it in their demand patterns and supply capabilities. Gradually, as the product becomes standardised or mature, the competitive advantages of the supplying firms were seen to change from those to do with the uniqueness of product per se, to their ability to minimise the costs of value-adding activities and/or their marketing expertise. The pressure to ensure cost efficiency mounts as imitators start making inroads into the market. At the same time, as consumer demand becomes more price elastic, as labour becomes a more important ingredient of costs and as foreign markets expand, the attractions of siting value-added activities in a foreign rather than domestic location increase. This might be hastened by the imposition of trade barriers or in anticipation of competitors setting up in these markets. Eventually, Vernon argued, if conditions in the host country were right, the affiliate might replace exports from the parent company or even export back to it.

This approach to explaining foreign production was essentially an extension of the neo-classical theory of the spatial distribution of factor endowments to embrace intermediate products. It also acknowledged that strategic factors, arising from an oligopolistic
market structure in which MNEs were observed to compete, influenced the response of firms to these endowments. It did not, however, address organisational or institutional issues. Since the competitive advantages of firms were assumed to be country specific, little attention was paid to the benefits that arose specifically from the internalisation of cross-border markets. In a later contribution, however, Vernon (1983) did explicitly identify the reduction of organisational risk as a motive for, and determinant of, FDI.

The product cycle model was introduced in the 1960s to explain market-seeking production by firms of a particular nationality or ownership. As Vernon (1979) himself acknowledged, by the late 1970s, the increasing geographical reach of MNEs coupled with a growing convergence in the advanced markets of the world reduced its general applicability. Furthermore, it did not explain, or purport to explain, resource-based, efficiency-seeking or strategic-asset-acquiring FDI. Like Hymer, Vernon offered a theory which was partial in that it addressed itself to only some of the issues surrounding MNE activity. On the other hand, the product cycle was the first dynamic interpretation of the determinants of, and relationship between, international trade and foreign production. It also introduced some novel hypotheses regarding demand stimuli, technology leads and lags, and information and communication costs, which have subsequently proved useful tools in the study of foreign production and exchange.

4.2.4 Follow-up Developments

Since the early 1970s there have been various attempts by economists to refine and test the theories of Hymer and Vernon. Of the former, the work of industrial economists such as Johnson (1970), Caves (1971, 1974a, 1974b, 1982), Horst (1972a, 1972b), Magee (1977a, 1977b), and a second generation of researchers such as Lall (1979, 1980a), Swedenborg (1979), Calvet (1980), Pugel (1981), Lall and Siddharthan (1982), Owen (1982) and Kumar (1990), is particularly worthy of note. Essentially, this group of scholars have sought to identify the kind of ownership advantages possessed by MNEs. Why is it (as we showed in Chapter 2) that FDI tends to be concentrated in certain primary, manufacturing and service sectors? Why does the share of the domestic output of a particular country accounted for by foreign-owned affiliates vary so much between sectors of activity?

Most of the above studies concentrated on trying to identify and evaluate the significance of specific intangible assets, such as technological capacity, labour skills, product differentiation, marketing skills and organisational capabilities, which afford a firm of one nationality a competitive advantage over that of another. Not surprisingly, they found that the relevant variables varied between industries and countries, and, sometimes between firms as well. Thus, whereas the privileged possession of, or access to, IT and human capital explained much of US direct investment in producer goods and intermediate service industries, product differentiation and quality, as proxied by brands and advertising intensity, was revealed as the dominant ownership advantage of US MNEs in consumer goods industries. A favoured access to markets explained much of early UK investment in the mining and agribusiness industries (Hennart, 1986a); just as it was later to attract a flood of Japanese investment into the European banking and finance sector in the 1980s, and US-owned manufacturing activity to China in the 1990s. Advantages specific to European- and Japanese-owned MNEs were perceived to differ from each other and from those of their US counterparts – mainly because the economic, social and
cultural characteristics of their countries of origin were different (Franko, 1976). Hypotheses intended to explain the structure of outward and inward FDI in the 1960s and 1970s were frequently found to be unsatisfactory in explaining that of the 1980s and 1990s (UNCTAD, 1998, 2003b).

Stephen Magee (1977a, 1977b), in a more detailed examination of technology as a valued intangible asset, took a rather different line. He was primarily interested in why the incentive of firms to internalise the market for technology varied over time. He coined the concept of the industry technology cycle, which built upon the Vernon hypothesis that the competitive advantages of firms were likely to change over the life of the product. He argued that firms were unlikely to sell their rights to new and idiosyncratic technology for two reasons. First the fear that, as a result of information asymmetries, the buying firm was unlikely to pay the selling firm a price that would yield at least as much economic rent as it could earn by using the technology itself. Second, the concern that the licensee might use the technology to the disadvantage of the licensor, and even become a competitor to it. As the technology matured, however, and lost some of its uniqueness, the need to internalise its use evaporated and the firm would consider switching its modality of transfer from FDI to licensing.

Around the same time, another group of scholars began to focus more specifically on the variables influencing the decision of firms to license their property rights as an alternative to FDI (Telesio, 1979; Contractor, 1981). However, although these scholars began to identify, more carefully, the circumstances in which firms might wish to control the use of the technological assets that they possessed, they did not really grapple with the more fundamental issue of the organisation of transactional relationships as part of a general paradigm of market failure. This task was left to another group of economists (see Section 4.3).

Other researchers – mainly from a business school tradition, and often from Harvard itself – built on the Vernon approach. A monograph summarising some empirical research on the product cycle appeared in 1972 (Wells, 1972). Work on UK, continental European and Japanese MNEs closely paralleled that on US MNEs (Franko, 1976; Stopford, 1976; Tsurumi, 1976; Yoshino, 1976). Perhaps of greater significance for the development of the theory of foreign production at this time were the findings of a group of Vernon’s students, notably Knickerbocker (1973), Graham (1975, 1978) and Flowers (1976), that it was not just locational variables that determined the spatial distribution of the economic activity of firms, but their strategic response to these variables, and to the anticipated behaviour of their competitors. In a perfectly competitive market situation, strategic behaviour (like the firm itself) is a black box. This is simply because the firm has no freedom of action if it is to earn at least the opportunity cost of its investments. Its maximum and minimum profit positions are one and the same thing. However, once markets become imperfect as a result of structural distortions, uncertainty, externalities or economies of scale, then strategy begins to play an active role in affecting business conduct (Dunning, 1993a).

Nowhere is this more clearly seen than in an oligopolistic market situation. For more than a century, economists have acknowledged that output and price equilibrium depends on the assumptions made by one firm about how its own behaviour will affect that of its competitors, and how, in turn, this latter behaviour will impinge upon its own profitability. Knickerbocker (1973) argued that, as risk minimisers, oligopolists wishing to avoid
destructive competition would normally follow each other into new (for example, foreign) markets, in order to safeguard their own commercial interests. An analysis of the timing of FDI by US MNEs in manufacturing industry prior to 1971 seemed to support this proposition (ibid.), as indeed has the more recent bunching by Japanese MNEs in the US and European auto and consumer electronics industries, and that of US and European computer software MNEs in Bangalore, India (Balasubramanyam and Balasubramanyam, 2000). In another study, Flowers (1976) showed that the Knickerbocker proposition also held good for Canadian and European investment in the US, whereas Graham (1975) viewed European investment in the US as a reaction by European firms to the incursion of their own territories by US MNEs. In particular, Graham argued that an MNE oligopolist which found its home territory invaded by a foreign MNE would, more than likely, retaliate by penetrating the invader’s home turf. A frequently quoted example of the so-called ‘exchange of threats’ hypothesis is the entrance by Royal Dutch Shell in the US in the 1900s in response to Standard Oil’s entry into East Asian markets which were previously dominated by Shell. Others include the cross-border activities of leading MNEs in the rubber tyre, automobile, colour television, advertising, telecommunications, banking and hotel sectors; and in the establishment of off-shore call centres (Graham, 2002; UNCTAD, 2004).

Mention at this point should also be made of the pioneering work of Aharoni (1966) in his attempt to trace and evaluate the decision-making process of firms contemplating FDI. His was primarily a micro-organisational study of the factors influencing: first, whether or not a firm is likely to contemplate making a foreign investment; second, the kind of feasibility study it undertakes to evaluate the costs and benefits of such investments; third, the decision to commit resources to a foreign investment; fourth, the terms negotiated with reviewing bodies in host countries; and fifth, the implications of the foreign commitment for the global organisational structure and strategy of the firm. Based on data provided by some 38 US MNEs that had undertaken foreign investments in the 1950s and 1960s, Aharoni identified both the kind of enterprise most likely to become an MNE and some unique properties of FDI. These include the relatively high information, search, negotiating and learning costs, and the risks associated with them. Inter alia, Aharoni suggested that these properties could explain why proportionately fewer small firms undertake foreign than domestic investment, and why licensing was sometimes a preferred modality of international involvement.

In retrospect, the work of these scholars and of Vernon himself (1974), who acknowledged that the nature of a firm’s foreign investment strategy would depend on its position in the product cycle, was pathbreaking not only in that it emphasised the behavioural interaction between firms, but also because it pinpointed a particular type of market failure, which was later formalised and incorporated into the economic and organisational theories of the late 1970s.

To summarise, by the mid-1970s the two streams of explaining MNE activity pioneered by Hymer and Vernon were beginning to converge, although their respective foci of interest remained very different. The industrial organisation approach, which was concerned with identifying the main ownership-specific advantages of MNEs, was beginning to recognise that the way in which assets were created, acquired and organised was an advantage in its own right. By the mid-1970s, the trade/location approach had also begun to acknowledge the role of market imperfections, not only in affecting the ownership of firms, but also of the way in which firms chose to organise their cross-border activities.
But, whereas Hymer viewed FDI primarily as an aggressive strategy by firms to advance their monopoly power, Vernon and his colleagues perceived it more as a defensive strategy by firms to protect their existing market positions.

### 4.2.5 Other Theoretical Contributions: A Selected View

To complete this short historical review, we briefly consider three other approaches to explaining MNE activity which, when reinterpreted in terms of contemporary theorising, offered (and still offer) valuable insights into both the location and ownership of international economic activity. Two of the approaches were developed by financial or macro economists, while the third one relies on a behavioural explanation of MNE activity.

#### The risk diversification hypothesis

The risk diversification hypothesis was first put forward by Lessard (1976, 1982), Rugman (1976, 1977, 1979) and Agmon and Lessard (1977). Building on some earlier work by Grubel (1968) and Levy and Sarnat (1970), these scholars argued that the MNE offered individual or institutional equity investors a superior vehicle for geographically diversifying their investment portfolios than did the international equity market. This, in their view, partly reflected the failure of equity markets to efficiently evaluate the risks or the benefits of risk diversification, and partly the fact that, compared with their domestic counterparts, MNEs possessed certain non-financial advantages that enabled them to manage the risks of international diversified portfolios more effectively.

Scholars such as Rugman and Lessard further argued that, given that firms deem it worthwhile to engage in FDI, the location of that investment would be a function of both their perception of the uncertainties involved and the geographical distribution of their existing assets. In the absence of country-specific hazards (foreign exchange risk, political and environmental instability, and so on) firms would simply equate the returns earned on their assets in different countries at the margin, even if this meant concentrating these assets in only one country. However, it was likely that the uncertainty attached to the returns would vary with the amount and concentration of assets and this would affect the geographical distribution of their foreign investments. In a later contribution, Rugman (1980) acknowledged that the risk diversification hypothesis was best considered as a special case of a more general theory of international market failure, based upon the desire and ability of MNEs to minimise cross-border production and transaction costs.

Two related, but somewhat different questions emerged regarding risk diversification. One was whether the profit performance of multinationals on a risk-adjusted basis was superior to that of domestic firms; the other was the extent to which investing in an MNE might serve as a substitute for an internationally diversified portfolio of assets. At the time, empirical research seemed to support the idea that investors did recognise the benefits of diversification provided by MNEs (Agmon and Lessard, 1977). Rugman (1979) also found that the variance of US corporate earnings in the 1960s was inversely related to the ratio of their foreign to domestic operations; while Michel and Shaked (1986) later demonstrated that MNEs were less likely to become insolvent than were domestic corporations. They also discovered that, while domestic firms sometimes recorded superior risk-adjusted market performances, MNEs were likely to benefit from lower systematic risk (beta). Kim and Lyn (1986) showed that shareholders paid a
premium for investing in multinational firms, but that such a premium was not related to the spread of foreign activities, but rather to the degree of monopoly power and R&D and advertising intensity. Similarly, Morck and Yeung (1991) found that R&D spending increased with multinationality, but that multinationality per se was not of value to investors as measured by a firm’s q ratio. Thus the authors concluded that there still remains considerable doubt as to the extent to which the gains of international risk diversification are reflected in the cost of equity to, or the share prices of, the investing firms.

**Macro-financial and exchange rate theories**

The starting-point in the work of Aliber (1970) was the failure of financial markets identified by Hymer in his PhD thesis. However, unlike Hymer, Aliber was not concerned with why firms produce abroad but why they should finance their foreign assets in their domestic currencies. He explained this in terms of the ability of firms from countries with strong currencies to borrow or raise capital in domestic or foreign markets more cheaply than could those from countries with weak currencies, which, in turn, enabled them to capitalise their expected income streams at different rates of interest. Aliber further argued that structural imperfections in the foreign exchange market allowed firms to make foreign exchange gains through the purchase or sales of assets in an under- or overvalued currency.

Aliber’s theory does not attempt to deal with many of the questions tackled by other scholars, and should not therefore be judged by the same criteria. But nor does it have strong claim to be a general theory of FDI. For example, it is difficult to see how it explains the industrial structure of foreign production or the cross-hauling of direct investment between weak and strong currency areas. It does, however, present some interesting ideas about the timing of FDI, particularly that of foreign M&As (UNCTAD, 2000b), and of its fluctuations around a long-term trend. It also offers some reasons as to why countries might shift their international investment status over time.

In many respects, Aliber’s theory is better regarded as an extension of portfolio capital theory to incorporate market failure, rather than as a theory of FDI per se. Indeed, his whole thesis rests on the presence and characteristics of imperfections in the capital and/or exchange markets. He asserts that such market failure tends to confer advantages on firms whose assets are denominated in certain currencies rather than others, and, as a result, affects the location of where they invest these assets. It is, however, unclear why firms should wish to control these assets. Hence, so is the distinction between the motives for direct rather than portfolio investment. Finally, in practice, it is the difference in the non-financial assets owned by enterprises that enables them to exploit imperfections in the financial markets. To this extent, Aliber’s theory is best regarded as one that is complementary to other explanations of FDI.

To the best of our knowledge, Aliber has never subjected his theory to rigorous empirical testing. However, an examination of the pattern of British direct investment in the US in the 1980s and in the latter 1990s during which periods there were substantial fluctuations in US and UK interest rates and the $/£ exchange rate, reveals that there is only limited support for his thesis – at least as the predominant explanation for such investment.

At the same time, the role of exchange rates in influencing the location of MNE activity has been acknowledged by several economists and business analysts. And yet it is only
comparatively recently that the relationship has been systematically explored using macroeconomic data. For example, Froot and Stein (1991) presented a model in which currency movements were shown to affect the geography of MNEs by altering the relative wealth of countries; and demonstrated a significant negative correlation between the value of the US dollar and the propensity of foreign firms to invest in the US in 1973–87.

However, earlier writers, such as Cushman (1985) and Culem (1988), argued that, rather than reflecting relative wealth, exchange rate movements mirrored changes in relative real labour costs, and it was these that determine FDI. In a test of these alternative propositions, Klein and Rosengren (1994) found that the correlation between the exchange rate and US inbound direct investment during the 1980s supported the former rather than the latter hypothesis. Another study exploring the impact of exchange rates and their volatility on both inward and outward investment is that by Görg and Wakelin (2002). Using data on FDI (affiliate sales) in the US in the 1983–95 period, they found no effect for exchange rate variability (risk), but they did discover a positive relationship between outward investment and host currency appreciation. However, they also found a negative relationship between inward investment and dollar appreciation, which though confirming the earlier findings by Froot and Stein (1991), contradicted their own earlier research on outward investment. Put very simply, they found that in a period of a generally depreciating dollar, both inward and outward investment increased in a similar manner.

Such results cast doubt on the previous studies which considered only unidirectional investment, since cross-investment both between countries and within industries characterises much of FDI. The results also depend on whether one focuses on the initial investment outlay (in which case exchange rates may affect its timing), or on the expected income stream from any FDI, in which case expectations about future exchange rates are critical. Furthermore, the extent to which the output is intended to be exported or sold in the local market may introduce another currency into the equation.

Another way of viewing the influence of exchange rates on irreversible investments under uncertainty is within a real options framework. In this framework, FDI consists of a sequence of decisions to invest or to wait, where increased uncertainty (for example, exchange rate volatility) increases the value of the option to wait. Using real options reasoning, Campa (1993) concluded that exchange rate volatility had a significant negative effect on inward investment to the US in the wholesale sector in the 1980s. Other studies that have focused on the flexibility of MNEs in response to changes in exchange rates include that by Kogut and Chang (1996), who discovered that in addition to being influenced by previous investment, Japanese investment to the US was sensitive to changes in the exchange rate, and that by Rangan (1998), who found that MNEs adjusted their mix of inputs in response to changes in exchange rates, although to a lesser extent than might have been expected.

The behavioural theory of the Uppsala school
One of the first evolutionary models of the internalisation process of firms was that of Johanson and Vahlne (1977, 1990). Essentially the model predicted increasing resource commitment to foreign markets over time as a result of organisational learning and the accumulation of experience. It also predicted that, provided it was economic to do so, firms would diversify their investments into countries with progressively higher levels of
‘psychic distance’. 125 Psychic distance can be defined as ‘the factors preventing or disturbing firms learning about and understanding of a foreign environment’ (Vahlne and Nordstrom, 1992:3). Essentially, it represents a transaction cost of doing business between countries, although psychic distance costs may also be expected to vary between any two countries according to the nature of the economic activity conducted in each.

The Uppsala model is both an evolutionary and a behavioural one, and relies on the system of decision making, as well as the personal characteristics of the decision makers to influence, if not determine, the process of internationalisation. Its intellectual origins owe much to the work of Cyert and March (1963), in that it employs the concept of a problemistic search, where gaining knowledge and competence narrows the search for further information in the decision-making process. 126 The learning argument also retains Penrose’s (1959) emphasis of the importance of experiential (non-communicable) information in the decision-making process. 127

The empirical studies of the model by Hornell et al. (1973), Vahlne and Wiedersheim (1973), Johanson and Vahlne (1977) and Nordstrom (1991) with respect to Swedish MNEs have each shown there to be a positive and significant correlation between the actual or perceived psychic proximity between Sweden and other countries, and the geographical distribution of Swedish manufacturing and sales subsidiaries. In particular, the association was found to be most pronounced in the early stages of the firm’s internationalisation process. The kind of explanatory variables used by the Swedish scholars included differences in the levels of economic development, education, culture and languages; while the Hornell study focused on the perceptions of Swedish managers. The latter also showed that the rankings of the two sets of data were similar to each other, and also to Hofstede’s ranking of the cultural similarities of countries, based on a composite of four dimensions: power distance, uncertainty avoidance, individualism–collectivism and masculinity–femininity (Hofstede, 1980, 2001).

The fact that the stages or process model of internationalisation also received empirical support in several studies outside of Scandinavia, allowed Johanson and Vahlne (1990) to reject the notion that this is specifically a Nordic model, applicable only to small, open, and wealthy home countries. 128 Indeed, in Chapter 7, we use a model of gradual commitment similar to the Uppsala model to describe the early evolution of the internationalisation process. However, even in doing so, we recognise that any stages model risks appearing deterministic and rigid in light of the variety of different approaches adopted by firms as they internationalise.

If a limited search for alternatives and consequent reliance on psychically close locations is the result of organisational and individual constraints on information processing, it is entirely plausible that, over time, some firms would be able to develop organisational routines to overcome the search constraints, and to reduce the costs of further information. With improved information, the firm would also be able to reduce uncertainty surrounding the investment, and hence, it would be more likely to be able to engage in direct investment in distant locations. The process of gradually increasing commitment would still be expected to be the norm, but there would certainly be firms with superior capabilities (whether related to organisational routines, incentive structures or managerial talent), and even industries, within which opening up the locational search is accomplished with greater ease than in others.
Indeed, built into a model of gradual learning is the idea that the increasing resource commitment predicted by the model is likely to have less influence the more information and experience the firm acquires in the marketplace (Forsgren, 1989). This would make the process model of internationalisation more applicable to initial internationalisation, but less to subsequent investments by established multinationals (Kogut, 1983; Barkema et al., 1996). We also think that the Uppsala model might be particularly suited to explaining the internationalisation of relatively small and inexperienced firms from developing countries, whose ability to learn via imitation or observation is limited, and who might lack the resources to undertake asset-seeking M&As (Lundan and Jones, 2001).

One of the main limitations of the various versions of the Uppsala model was that they largely confined their attention to explaining market, and some subsequent horizontal efficiency-seeking, FDI. It is difficult to see, for example, how the model can explain the current growth of Chinese FDI in oil exploration in Angola, or the relocation of routine office operations from the UK to India. Nor can it easily account for much of the asset-augmenting FDI now occurring – particularly by way of M&As. In other words, its contribution as a general evolutionary theory of internationalisation is somewhat deficient. Such a theory, which IB scholars have still not fully addressed, had to wait on the classic work of Nelson and Winter (1982), to which we shall give some attention later in this chapter.

4.3 GENERAL EXPLANATIONS OF MNE ACTIVITY

By the mid-1970s, it was becoming increasingly clear that none of the theories so far put forward to explain the foreign activities of MNEs could claim to explain all such activities, and that most were not trying to answer the same questions. Of all the explanations, Hymer’s original thesis and his 1968 article offered the most promise as a general paradigm, although those parts of it, to which later researchers were to give the most attention, were primarily concerned with identifying the reasons why some firms, and not others, engaged in foreign production, rather than why cross-border value-added activities were organised in one way rather than in another.

In the mid-1970s, three attempts were made to offer more holistic explanations of the foreign activities of firms, each of which has attracted widespread attention in the literature. Each uses a different unit of analysis; two are quite similar in approach, but the third is very different. These are, respectively, the internalisation theory of the MNE, the eclectic paradigm of international production and the macroeconomic theory of FDI.

4.3.1 Internalisation Theory

Internalisation theory is essentially directed to explaining why the cross-border transactions of intermediate products are organised by hierarchies rather than determined by market forces. It was first put forward in the mid-1970s by a group of Swedish, Canadian, British and US economists working largely independently of one another. Its basic hypothesis is that multinational hierarchies represent an alternative mechanism for coordinating related value-added activities across national boundaries to that of the market; and that firms are likely to engage in FDI whenever they perceive that the net benefits of
their common ownership of domestic and foreign activities, and the transactions arising from them, are likely to exceed those offered by external trading relationships. The core contention of internalisation theory is that, given a particular distribution of factor endowments, the extent and content of MNE activity will be positively related to the costs of organising cross-border markets in intermediate products.

The theory is primarily concerned with identifying the situations in which the cross-border markets for intermediate products are likely to be internalised within hierarchies, and hence those in which firms are likely to own and control value-adding activities outside their national boundaries. Drawing upon the earlier insights of Coase (1937, 1960) and Penrose (1959), it seeks to explain the intra-firm international division of labour in terms of the relative costs and benefits of this form or organisation relative to that of inter-firm, that is, market transactions. Certain types of transaction between certain types of buyers and sellers incur higher costs than others. Hierarchical organisational costs are also likely to be activity, country and firm specific.

Internalisation theory may be considered a general theory in so far as it is able to predict the situations in which firms choose to internalise foreign markets. In many respects, however, as one of its protagonists, Buckley (1990), has himself suggested, it is better described as a paradigm than a theory, in as much as the kinds of market failure that determine one form of foreign added-value activity may be quite different from that of another. For example, in some consumer goods or service industries, the inability of the market to ensure a seller of an intermediate product sufficient control over the quality of the final product, which may bear the seller’s name, may be a reason for replacing that market by forward integration. By contrast, backward integration, for example, into natural resources, may be motivated by a perceived need to reduce the risk of interrupted supplies or price hikes, while the common governance of multiple activities in dispersed locations may be prompted by the desire to gain economies external to the activities in question but internal to the firm owning them. Such a focus of interest leads us to suggest that internalisation theory, in general, and that put forward by Buckley and Casson (1976) in particular, is more concerned with explaining a firm’s exchange function and the internalisation of intermediate product markets, than its transformation or value-added function, which is achieved by coordinating diverse activities within a single firm (Dunning, 2003b).

We shall discuss the concept of market failure in more detail in the following subsection, which sets out the eclectic paradigm. This paradigm, while accepting the logic of internalisation theory, argues that it is not, in itself, sufficient to explain the level and structure of the production of a country’s own firms outside their national boundaries, or of the production of foreign-owned firms in its midst. To a certain extent, this criticism is accepted by some of the internalisation theorists. Both Buckley (1987) and Casson (1987) have acknowledged the need to integrate location-specific variables with internalisation variables (which we admit, if considered from a dynamic or evolutionary viewpoint, are not independent of each other) to fully explain the amount and direction of MNE activity. The role of ownership-specific variables set out by Hymer is rather more contentious. In the static model of internalisation, these variables, which are the outcome of structural market imperfections and exist prior to the foreign investment being made, are taken to be exogenous. Others, which are the direct result of a firm engaging in foreign production may be said to be the outcome of the act of the internalisation of cross-border markets.
However, viewing the growth of the firm as a time-related process, the legitimacy of this assumption is questionable. For a firm’s current core competences, for example, its innovative strengths, systemic organisational skills, marketing strategy, institutional form, executive development or its ability to raise and manage finance capital, are the outcome of past decisions which, at the time they were taken, were endogenous to the firm. Here, once again, strategic considerations enter the picture (Buckley, 1991). We shall give more attention to this point in the final sections of this chapter.

### 4.3.2 The Eclectic or OLI Paradigm

The eclectic paradigm seeks to offer a general framework for determining the extent and pattern of both foreign-owned production undertaken by a country’s own enterprises, and that of domestic production owned or controlled by foreign enterprises. Unlike internalisation theory, it does not purport to be a theory of the MNE per se, but rather a paradigm which encompasses various explanations of the activities of enterprises engaging in cross-border value-adding activities (Dunning, 2001a). Nor is it a theory of foreign direct investment in the Aliber sense of the word, as it is concerned with the foreign-owned output of firms rather than the way that output is financed. At the same time, it accepts that the propensity of firms to own foreign income-generating assets may be influenced by financial and/or exchange rate variables. Finally, the eclectic paradigm addresses itself primarily to positive rather than normative issues. It prescribes a conceptual framework for explaining ‘what is’, rather than ‘what should be’, the level and structure of the foreign value activities of enterprises.

The theory of MNE activity stands at the intersection between a macroeconomic theory of international trade and a microeconomic theory of the firm. It is an exercise in macro resource allocation and organisational economics; and in its dynamic form, in evolutionary economics. The eclectic paradigm starts with the acceptance of much of traditional trade theory in explaining the spatial distribution of some kinds of output (which might be termed Heckscher–Ohlin–Samuelson (H–O–S) output). However, it argues that, to explain the ownership of that output and the spatial distribution of other kinds of output which require the use of resources, capabilities and institutions that are not equally accessible to all firms, two kinds of market imperfection must be present. The first is that of structural market failure which discriminates between firms (or owners of corporate assets) in their ability to gain and sustain control over property rights or to govern multiple and geographically dispersed value-added activities. The second is that of the intrinsic or endemic failure of intermediate product markets to transact goods and services at a lower net cost (or higher net benefit) than those which a hierarchy might incur (or achieve).

Such variables as the structure of markets, transaction costs and the managerial strategy of firms then become important determinants of international economic activity. The firm is no longer a black box; nor are markets the sole arbiters of transactions. Both the geographical distribution of natural and created factor endowments, and the modality of economic organisation, are relevant to explaining the structure of trade and production. Moreover, firms differ in organisational systems, innovatory and institutional abilities, and in their appraisal of and attitude to commercial risks; and, indeed, in their strategic response to these (and other) variables. This framework is no less applicable to explaining
certain kinds of trade where the advantages of the trading firms are not country but firm specific.

The economics of the paradigm

The economic involvement by one country’s enterprises in those of another may be for the purpose of supplying foreign or domestic markets, or both. Production for a particular foreign market may be wholly or partly located in the home country, in the foreign market, in a third country, or in a combination of the three. Similarly, production for the home market may be serviced from a domestic or a foreign location.

The capability and willingness of one country’s enterprises to supply either a foreign or a domestic market from a foreign location depends on their possessing, or being able to acquire, certain assets not available, or not available at such favourable terms, to another country’s enterprises. Such assets we have already referred to as ownership-specific (O) advantages because they are assumed to be unique to firms of a particular nationality of ownership. The word ‘assets’ is used in the Fisherian sense (Johnson, 1968) to mean resources and capabilities capable of generating a future income stream. They include not only tangible assets, such as natural endowments, manpower and capital, but intangible assets such as technology and information, managerial, marketing and entrepreneurial skills, organisational systems, incentive structures, and favoured access to intermediate or final goods markets. Alternatively, or in addition, Fisherian assets might be specific to a particular location (hereafter referred to as location-specific (L) advantages) in their origin and use, but available to all firms. These include not only Ricardian-type endowments, but also the cultural, legal, political, financial and institutional environment in which they are deployed. Alternatively, the assets may be owned by (that is, be proprietary to) particular enterprises of the home country, but capable of being used with other resources and capabilities in the home country or elsewhere. Such assets may take the form of a legally protected property right or a commercial monopoly. They may arise from the size, diversity or technical characteristics of firms, and the economies of joint production, sourcing and marketing. They may embrace natural resource availability, knowledge capital, financial strength, entrepreneurial vision, managerial expertise and institutional competence.

For some kinds of trade, it is sufficient for the exporting country to have only an L advantage over the importing country. That is to say, it is not necessary for the exporting firms to possess any O-specific assets over their indigenous competitors in the importing country. Much of the trade between developed and developing countries (which is of the Ricardian or H–O–S type) is of this kind. Other trade, such as intra-industry trade which mainly takes place among developed industrialised countries, involves innovatory or Schumpeterian type products, and is based more on the O advantages of the exporting firms. However, this presupposes that it is better to use these advantages in combination with L-bound assets in the exporting rather than in the importing (or in a third) country. Where, however, these latter assets favour the importing (or a third) country, foreign-owned production will replace trade.

To summarise, an act of MNE activity combines the export of intermediate products, requiring inputs in which the home country is relatively well endowed, with the use of resources in which the host country is relatively well endowed. But if this were all there were to it, we would not need a separate theory of international production: an extension
of international trade theory to incorporate trade in intermediate products, allowing for
the mobility of at least some resources, would be sufficient. On the other hand, attempts
to explain patterns and levels of MNE activity without taking account of the distribution
of L-bound endowments and capabilities are like throwing the baby out with the
bathwater!

We have argued that the failure of the factor endowment approach to explain inter-
national production completely or, in some cases, even partially, arises simply because it
predicates the existence of perfect markets both for final and intermediate goods. In neo-
classical trade theory, this leads to all sorts of restrictive assumptions, such as atomistic
competition, equality of production functions, the absence of risk and uncertainty and,
implicitly at least, that technology is a free and instantaneously transferable good between
firms and countries. Since the 1950s, economists have grappled to incorporate market
imperfections into trade theory but, in the main, their attention has been directed to the
final rather than the intermediate goods markets. Partly because of this, little attention
has been paid to the organisation of production and transactions across, or indeed within,
national boundaries. Exceptions have included the work of Batra and Ramachandran
Markusen (1996) and Markusen and Venables (1998, 2000). In situations where firms
have some locational choice in the production of intermediate products, this is generally
assumed to influence their export versus licensing decision, rather than their export versus
foreign production decision.131

We have suggested that the lack of interest by traditional trade economists with own-
ership or governance questions arises because they have tended to assume – again implic-
itly rather than explicitly – that firms engage in only a single value-added activity. The
effect on trade patterns of the vertical integration or horizontal diversification of firms or
their reaction to uncertain markets or government intervention is rarely discussed in the
literature.132 Since the option of internalising domestic markets for intermediate products
within a country has not generally interested trade economists, it is hardly surprising that
they have been relatively unconcerned with issues of international production. Yet the
unique characteristics of the MNE is that it is both multi-activity and engages in the inter-
nal transfer of intermediate products across national boundaries. To an extent, the latter
aspect is present in the work of Markusen (2001) who has incorporated MNEs into a two-
sector, two-country two-factor general equilibrium model. A key feature of this model is
that MNEs are intensive in their use of knowledge-based assets, and that knowledge is a
joint input or a ‘public good’ within the firm.

Indeed it is the difference between domestic and international market failure that dis-
tinguishes a multinational from a uninational multi-activity firm. It is the inability of the
market to organise a satisfactory deal between potential contractors and contractees of
intermediate products, and to deal with the implications of increasing returns to scale,
that explains why one or the other should choose the hierarchical rather than the market
route for exploiting differences in L-specific assets between countries. It is the presence
of structural and cognitive market failure that causes firms to pursue different strategies
towards the exploitation of the O and L assets available to them.

Several types of market failure are identified in the literature by such scholars
In their assessment of the contribution of Hymer’s thesis to the theory of the MNE, Dunning and Rugman (1985) distinguished between structural and transactional market failure. The former, which Hymer tended to emphasise, gives rise to monopoly rents (or value capture) as a result of entry barriers which the constituent firms may seek to erect or increase by a variety of means, including the acquisition of competitors (which is itself a form of internalisation) (Dunning and Pitelis, 2008).

However, a no less important, but very different, type of market imperfection (later acknowledged by Hymer, 1968) reflects the inability of the market qua market to organise transactions in an optimal way. There are three reasons for this. The first is that buyers and sellers do not enter the market with complete (or symmetrical) information, or perfect certainty about the consequences of the transactions they are undertaking. Cognitive deficiencies, alone or combined with other forms of institutional failure, give rise to bounded rationality, opportunism, adverse selection, moral hazard and information impactedness, which are the innate characteristics of some markets (Teece, 1981b, 1985; Williamson, 1985, 2000). This kind of market failure is particularly likely to be associated with cross-border transactions. For example, recent inward investment in the transition economies of Central and Eastern Europe has been limited by both cognitive deficiencies on the part of the investors as well as institutional failures on the part of the host economies (Meyer, 2001a; Bevan et al., 2003; Grosse and Trevino, 2005). The MNE may also engage in foreign production to protect itself against the opportunities exploited by foreign buyers and sellers, as well as to counteract (and in some cases exploit) political and environmental volatility (Kogut, 1985). Such risks are particularly noteworthy in capital-intensive extractive and high-technology industries that typically incur high development costs; where there is a danger of disruption of supplies; where there is a likelihood of property rights being dissipated or abused by foreign licensees; and where a threat of hostile action by governments or the pre-emption of markets or sources of supplies by rival oligopolists will encourage a follow-my-leader strategy by firms (Vernon, 1983; UNCTAD, 2007).

The second reason for transactional market failure is that the market cannot, by itself, take account of the benefits and costs that arise as a result of a particular transaction, but which are external to that transaction. Where products are normally supplied jointly with others or are derived from a common input or set of inputs, this may provide a good reason for different stages of the value-added chain, or the same stage of different value-added chains, to be coordinated under a single governance (Markusen, 1995, 2002b). Cross-border transactions may give rise to additional advantages of common ownership such as those that exploit the imperfections of international capital and exchange markets and different national fiscal policies.

The third cause of transactional market failure arises wherever the demand for a particular product, while infinitely elastic, is insufficiently large to enable the producing firms fully to capture the economies of size, scope and geographical diversification. In other words, there is an inherent trade-off between the overall costs of a set of value-added activities and the opportunities they offer for synergistic economies (Galbraith and Kay, 1986). Such economies may be in direct production, or in the sourcing, marketing, innovatory and financial activities of firms or, indeed, in their institutional competences, and their strategies towards risk reduction and the behaviour of competitors.
It is these and other market deficiencies which may cause enterprises, be they unina-
tional or multinational, to diversify their value-adding activities, and, in so doing, realign
their ownership and organisation of these activities. They do so partly to maximise the
net benefits of lower production or transaction costs arising from common governance,
and partly to ensure that they gain the maximum economic rent (discounted for risk) from
the O advantages they possess. We shall refer to such perceived advantages of hierarchical
control as internalisation (I) advantages. Again, the only difference between the actions
of multinational and uninational producers in this respect are the added dimensions of
market failure when a particular transaction or diversification of economic activity is
undertaken across national borders, for example, those arising from exchange and polit-
ical risks, increased information asymmetry and institutional, social and environmental
differences. Moreover, market failure may vary according to the characteristics of the
parties engaging in the transactions. Here, too, country-specific factors may enter the
equation. Returning to our parallel between firms engaged in international trade and
international production, it is quite possible that while both may engage in exactly the
same value-added activities, the former will do so within a single country and export their
final products, whereas the latter will locate at least part of their production outside their
national boundaries.

The distinctive characteristic of MNE activity is, then, that it marries the cross-border
dimension of value-added activities of firms with the common governance of those activ-
ities. While the former draws upon the economics of the spatial distribution of immobile
resources and the theory of market structures to explain the location of production inde-
dependently of its ownership, the theory of market failure helps to explain the organisation
and ownership of production independently of its location. The precise form and pattern
of the resulting international production will then be a function of the configuration of
the O-specific assets of firms and the L-specific assets of countries, and the extent to which
firms perceive that they (rather than markets) can better organise and coordinate these
O and L assets. Given these variables, it will also depend upon the strategic options open
to firms and how they evaluate the consequences of these options.

The main tenets of the paradigm
The principal hypothesis on which the eclectic paradigm of international production is
predicated is that the level and structure of a firm’s foreign value-adding activities will
depend on four conditions being satisfied. These are:

1. The extent to which it possesses unique and sustainable ownership-specific (O) advan-
tages vis-à-vis firms of other nationalities, in the servicing of particular markets or
groups of markets. These O advantages largely take the form of the privileged pos-
session of or access to intangible assets, including institutions, and those which arise
as a result of the common governance and coordination of related cross-border
value-added activities. These advantages and the use made of them (see 2 and 3
below) are assumed to increase the wealth-creating capacity of a firm, and hence the
value of its assets.133

2. Assuming that condition (1) is satisfied, the extent to which the enterprise perceives
it to be in its best interest to add value to its O advantages rather than to sell them, or
their right of use, to independent foreign firms. These advantages are called market
internalisation (I) advantages. They may reflect either the greater organisational efficiency or superior incentive structures of hierarchies, or their ability to exercise monopoly power over the assets under their governance.

3. Assuming that conditions (1) and (2) are satisfied, the extent to which the global interests of the enterprise are served by creating, accessing or utilising, its O advantages in a foreign location. The spatial distribution of L-bound resources, capabilities and institutions is assumed to be uneven and, hence, will confer a competitive advantage on the countries possessing them over those that do not.

4. Given the configuration of the ownership, location and internalisation (OLI) advantages facing a particular firm, the extent to which a firm believes that foreign production is consistent with the long-term objectives of its stakeholders and the institutions underpinning its managerial and organisational strategy.

The generalised predictions of the eclectic paradigm are straightforward. At any given moment of time, the more a country’s enterprises – relative to those of another – possess desirable O advantages, the greater the incentive they have to internalise rather than externalise their use, the more they find it in their interest to access or exploit them in a foreign location, then, the more they are likely to engage in outbound FDI. By the same token, a country is likely to attract inbound investment by foreign MNEs when the reverse conditions apply. Similarly, the paradigm can be expressed in a dynamic form. Changes in the outward or inward direct investment position of a particular country can be explained in terms of changes in the O advantages of its enterprises relative to those of other nations, changes in its L assets relative to those of other countries, changes in the extent to which firms perceive that these assets (and any others it may acquire) are best organised internally rather than by the market, and changes in the strategy of firms which may affect their reaction to any given OLI configuration.

Box 4.1 sets out a selection of the more commonly identified OLI advantages. Some of these can best explain the initial act of FDI. Others, and particularly those which are to do with the common governance of geographically dispersed activities, are more helpful in explaining sequential acts of foreign production (Kogut, 1983). Industrial organisation theory mainly explains the nature and composition of the O advantages that arise from the possession of particular intangible assets. Elsewhere (Dunning, 1988a) we have called these asset-specific advantages (Oa). They are to be distinguished from those that arise from the ability of a firm to coordinate multiple and geographically dispersed value-added activities and to capture the gains of risk diversification. These we refer to as transaction cost-minimising advantages (Ot). The theory of property rights and the internalisation paradigm explain why firms engage in foreign activity to exploit or acquire these advantages. Theories of location and trade explain the factors determining the siting of production. Theories of oligopoly and business strategy explain the likely reaction of firms to particular OLI configurations. The institutional assets (Oi) are a new addition to the paradigm, and cover the range of formal and informal institutions that govern the value-added processes within firms. These will be examined further in Chapter 5.

The eclectic paradigm suggests that all forms of foreign production by all countries can be explained by reference to the above conditions. It makes no a priori predictions about which countries, industries or enterprises are most likely to engage in FDI, but it does hypothesise that at least some of the advantages identified in Box 4.1 will not be evenly
BOX 4.1 THE ECLECTIC (OLI) PARADIGM OF INTERNATIONAL PRODUCTION

Ownership-specific Advantages (O) of an Enterprise of one Nationality (or Affiliates of Same) over Those of Another

(a) *Property rights and/or intangible asset advantages (Oa)*
The resource (asset) structure of the firm. Product innovations, production management, organisational and marketing systems, innovatory capacity, noncodifiable knowledge; accumulated experience in marketing, finance, etc. Ability to reduce costs of intra- and/or inter-firm transactions (also influenced by Oi).

(b) *Advantages of common governance, that is, of organising Oa with complementary assets (Ot)*
(i) Those that branch plants of established enterprises may enjoy over *de novo* firms. Those resulting mainly from size, product diversity and learning experiences of enterprise (e.g., economies of scope and specialisation). Exclusive or favoured access to inputs (e.g., labour, natural resources, finance, information). Ability to obtain inputs on favoured terms (e.g., as a result of size or monopsonistic influence). Ability of parent company to conclude productive and cooperative inter-firm relationships. Exclusive or favoured access to product markets. Access to resources of parent company at marginal cost. Synergistic economies (not only in production, but in purchasing, marketing, finance, etc. arrangements).

(ii) Which specifically arise because of multinationality. Multinationality enhances operational flexibility by offering wider opportunities for arbitraging, production shifting and global sourcing of inputs. More favoured access to and/or better knowledge about international markets (e.g., for information, finance, labour, etc.). Ability to take advantage of geographic differences in factor endowments, government regulation, markets, etc. Ability to diversify or reduce risks. Ability to learn from societal differences in organisational and managerial processes and systems (also influenced by Oi).

(c) *Institutional assets (Oi)*
The formal and informal institutions that govern the value-added processes within the firm, and between the firm and its stakeholders. Codes of conduct, norms and corporate culture; incentive systems and appraisal; leadership and management of diversity.

Location-specific Factors (L) (These May Favour Home or Host Countries)

Spatial distribution of natural and created resource endowments and markets. Input prices, quality and productivity (e.g., labour, energy, materials, components, semifinished goods).
spread across countries, industries and enterprises. It accepts that such advantages are not static and that a firm’s strategic response to any particular OLI configuration may affect the nature and pattern of its O and I advantages in a later period (Dunning, 1993a). It also accepts that, viewed from a dynamic perspective, the OLI components may be interdependent of one another. Thus a firm’s response to the L attractions of a particular country or countries in time 't' may affect the extent and composition of its O advantages in time t + 1. Similarly the power and strategic use of a firm’s O and I advantages in time ‘t’ may affect the L advantages of at least some of the countries in which it invests in time t + 1.

However, we would aver that although the three strands in the explanation of international production interact with one another, conceptually there is something to be said for

International transport and communication costs.
Investment incentives and disincentives (including performance requirements, etc.).
Artificial barriers (e.g., import controls) to trade in goods and services.
Infrastructure provisions (educational, transport and communication).
Cross-country ideological, language, cultural, business, political differences.
Economies of agglomeration and spillovers.
Economic system and strategies of government; the institutional framework for resource allocation.
Legal and regulatory system (e.g., protection of propriety rights, credible enforcement).

**Internalisation Advantages (I) (i.e., to Circumvent or Exploit Market Failure)**

To avoid search and negotiating costs.
To avoid costs of moral hazard and adverse selection, and to protect the reputation of the internalising firm.
To avoid cost of broken contracts and ensuing litigation.
Buyer uncertainty about nature and value of inputs (e.g., of technology being sold).
When market does not permit price discrimination.
Need of seller to protect quality of intermediate or final products.
To capture economies of interdependent activities (influenced by Ot).
To compensate for the absence of future markets.
To avoid or exploit government intervention (quotas, tariffs, price controls, tax differences, etc.).
To control supplies and conditions of sale of inputs (including technology).
To control market outlets (including those which might be used by competitors).
To be able to engage in practices, such as cross-subsidisation, predatory pricing, leads and lags, and transfer pricing as a competitive (or anticompetitive) strategy.

*Sources:* These variables are culled from a variety of sources, but see especially Dunning (1981 1988a) and Ghoshal (1987).
considering them separately. Certainly the location and mode of foreign involvement are
two quite distinct decisions which a firm has to take, even though the final decision on
where to locate its production will itself depend on the extent and characteristics of its
O advantages (including those of its affiliates), and the extent to which it perceives that
that location might help it to internalise intermediate product markets better than
another. It may also depend on the extent to which, as a result of any bargaining power
it may have, for example *vis-à-vis* a foreign government, it is able to raise its O advantages
or the advantages of the country in which it is contemplating an investment (Grosse and
Behrman, 1992).\textsuperscript{135} Take also the distinction between O and I advantages. O advantages
may be internally generated (for example, through product diversification or innovation)
or acquired (for example, through M&As or via contractual agreements with other enter-
prises). If accessed, for example, by way of a purchase (be it domestic or foreign) of
another enterprise, the presumption is that this will add to the acquiring firm’s O advan-
tages *vis-à-vis* those of its competitors. Elsewhere (Dunning, 1988a) we have argued that
it is useful to distinguish between the *capacity* to organise value-added activities in a par-
ticular way and the *willingness* to opt for one mode of organisation rather than another.

We have suggested that the eclectic paradigm offers the basis for a general explanation
of international production. We illustrate this point by reference to Table 4.1 which relates
the main types of foreign activities by MNEs, set out in Chapter 3, to the presence or
absence of the OLI advantages underpinning these activities. Such a matrix can be used
as a starting-point for an examination of both the industrial and geographical composi-
tion of FDI.

In seeking to test the kind of hypotheses implied in Table 4.1, it is useful to distinguish
between three contextual or structural variables that will influence the OLI configuration
affecting any MNE activity. These are first those which are specific to particular countries
(or regions); second those which vary according to particular types of activities under-
taken by firms; and third those which are specific to particular firms. In other words, the
propensity of enterprises of a particular nationality to engage in FDI will vary according
to the economic-, institutional- and cultural-specific characteristics of their home coun-
tries, and those of the country(ies) in which they propose to invest, the range and types of
products (including intermediate products) they intend to produce, and their underlying
management and organisational strategies. Some of these characteristics are set out in
Table 4.2.

Combining Box 4.1 and Table 4.1, as well as Table 5.1 in the following chapter, we have
the core of the eclectic paradigm, which, we believe, offers a rich conceptual framework
for explaining not only the level, form and growth of MNE activity, but the way in which
such activity is organised. Furthermore, as Parts III and IV will seek to demonstrate, the
paradigm offers a robust tool for analysing the role of FDI as an engine of growth, devel-
opment and structural change; for predicting the economic consequences of MNE activ-
ity for the countries in which it operates; and for evaluating the extent to which the policies
of home and host governments are likely both to affect and be affected by that activity.

**The eclectic paradigm and other explanations of MNE activity**

What, then, is the unique value of the eclectic paradigm? The paradigm avers that, given
the distribution of specific assets, enterprises that have the most pronounced O advan-
tages and perceive they can best exploit these by combining them with others in a foreign
**Table 4.1 Types of international production: some determining factors**

<table>
<thead>
<tr>
<th>Types of international production</th>
<th>(O) Ownership advantages (the ‘why’ of MNE activity)</th>
<th>(L) Location advantages (the ‘where’ of production)</th>
<th>(I) Internalisation advantages (the ‘how’ of involvement)</th>
<th>Strategic goals of MNEs</th>
<th>Illustration of types of activity that favour MNEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural resource seeking</td>
<td>Capital, technology, access to markets; complementary assets; size and bargaining strengths</td>
<td>Possession of natural resources, and related transport and communications infrastructure; tax and other incentives</td>
<td>To ensure stability of supplies at right price; to control markets</td>
<td>To gain privileged access to resources <em>vis-a-vis</em> competitors</td>
<td>(a) Oil, copper, bauxite, bananas, pineapples, cocoa, hotels</td>
</tr>
<tr>
<td>Market seeking</td>
<td>Capital, technology, information, management and organisational skills; surplus R&amp;D and other capacity; economies of scale; ability to generate brand loyalty</td>
<td>Material and labour costs; market size and characteristics; government policy (e.g. with respect to regulations and to import controls, investment incentives, etc.)</td>
<td>A desire to reduce transaction or information costs, buyer ignorance or uncertainty; to protect property rights</td>
<td>To protect existing markets, counteract behaviour of competitors; to preclude rivals or potential rivals from entering new markets</td>
<td>(b) Export processing, labour-intensive products or processes (c) Offshoring of some services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Computers, pharmaceuticals, motor vehicles, cigarettes, processed foods, airlines, financial services</td>
<td></td>
</tr>
<tr>
<td><strong>Efficiency seeking</strong></td>
<td>As above, but also access to markets; economies of scope, geographical diversification and/or clustering, and international sourcing of inputs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) of products</td>
<td>(a) Economies of product or process specialisation and concentration (b) Low labour costs; incentives to local production by host governments; a favourable business environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) of processes</td>
<td>(a) As for second category, plus gains from economies of common governance (b) The economies of vertical integration and horizontal diversification</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>As part of regional or global product rationalisation and/or to gain advantages of process specialisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(a) Motor vehicles, electrical appliances, business services, some R&amp;D (b) Consumer electronics, textiles and clothing, pharmaceuticals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Strategic asset seeking</strong></td>
<td>Any of first three that offer opportunities for synergy with existing assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Any of first three that offer technology, organisational, and other assets in which firm is deficient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economies of common governance; improved competitive or strategic advantages; to reduce or spread risks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To strengthen global innovatory or production competitiveness; to gain new product lines or markets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge-intensive industries that record a high ratio of fixed to overhead costs and which offer substantial economies of scale, synergy or market access</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.2 Some illustrations of how OLI characteristics may vary according to country-, industry- and firm-specific circumstances

<table>
<thead>
<tr>
<th>OLI variables</th>
<th>Structural variables</th>
<th>Firm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ownership</strong></td>
<td>Degree of product or process technological intensity; nature of innovations; extent of product differentiation; production economies (e.g. if there are economies of scale); transaction economies (e.g. if there are economies of scope); importance of favoured access to inputs and/or markets</td>
<td>The structure of the asset (resource) base, size, extent of production, process or market diversification; extent to which enterprise is innovative, marketing orientated or values security and/or stability (e.g. with respect to sources of inputs and markets); extent to which there are economies of joint production and entrepreneurial vision; attitudes to risk taking and the strategy of asset accumulation and usage</td>
</tr>
<tr>
<td>Country or region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ownership</td>
<td>Factor endowments (e.g. resources and skilled labour) and market size and character; government policy towards innovation, protection of proprietary rights, competition, education and training, and industrial structure; government attitudes towards internalisation of business and cross-border alliances; the organisational culture and wealth-creating ethos of a country; the nature of corporate governance and inter-firm rivalry and/or cooperation; quality of financial institutions; role of the state in favouring national champions</td>
<td></td>
</tr>
<tr>
<td>Firm</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Origin and distribution of immobile resources; transport costs of intermediate and final goods; industry-specific tariff and non-tariff barriers; nature of competition between firms in industry; significance of ‘sensitive’ locational variables, e.g. tax incentives, energy and communication costs</td>
<td>Management strategy towards foreign involvement; age and experience of foreign involvement; psychic distance variables (culture, language, legal and commercial framework); attitudes towards centralisation of functions such as R&amp;D; geographical structure of asset portfolio and attitudes to risk diversification</td>
</tr>
<tr>
<td>Physical, psychic and institutional distance between countries; government intervention (e.g. tariffs, quotas, taxes, assistance to foreign investors or to own MNEs); availability/promotion of clusters of related activities, science parks etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry or activity</th>
<th>Firm</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor endowments (e.g. resources and skilled labour) and market size and character; government policy towards innovation, protection of proprietary rights, competition, education and training, and industrial structure; government attitudes towards internalisation of business and cross-border alliances; the organisational culture and wealth-creating ethos of a country; the nature of corporate governance and inter-firm rivalry and/or cooperation; quality of financial institutions; role of the state in favouring national champions</td>
<td>The structure of the asset (resource) base, size, extent of production, process or market diversification; extent to which enterprise is innovative, marketing orientated or values security and/or stability (e.g. with respect to sources of inputs and markets); extent to which there are economies of joint production and entrepreneurial vision; attitudes to risk taking and the strategy of asset accumulation and usage</td>
<td></td>
</tr>
<tr>
<td>Degree of product or process technological intensity; nature of innovations; extent of product differentiation; production economies (e.g. if there are economies of scale); transaction economies (e.g. if there are economies of scope); importance of favoured access to inputs and/or markets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Origin and distribution of immobile resources; transport costs of intermediate and final goods; industry-specific tariff and non-tariff barriers; nature of competition between firms in industry; significance of ‘sensitive’ locational variables, e.g. tax incentives, energy and communication costs</td>
<td>Management strategy towards foreign involvement; age and experience of foreign involvement; psychic distance variables (culture, language, legal and commercial framework); attitudes towards centralisation of functions such as R&amp;D; geographical structure of asset portfolio and attitudes to risk diversification</td>
<td></td>
</tr>
<tr>
<td>Internalisation</td>
<td>Government intervention and extent to which policies encourage MNEs to internalise cross-border transactions; government policy towards mergers; differences in market structures between countries with respect to transaction costs, enforcement of contracts, buyer uncertainty etc.; adequacy of technological, educational, communications, and institutional infrastructure in host countries, and their ability to absorb contractual resource transfers.</td>
<td>Extent to which vertical or horizontal integration is possible/desirable (e.g. need to control sourcing of inputs or markets); extent to which internalising advantages can be captured in contractual agreement (cf. early and later stages of product cycle); use made of ownership advantages; extent to which local firms have complementary advantages to those of foreign firms; extent to which opportunities for output specialisation and international division of labour exist.</td>
</tr>
</tbody>
</table>
territory are likely to be the most successful international or global players. Enterprises will engage in the type of internationalisation most suited to the factor combinations, market situations and government intervention with which they are faced. For example, our analysis would suggest not only that R&D-intensive industries would tend to be more globally managed and controlled than others, but also that the incentive for internalisation of foreign-based raw material markets is likely to be greater for enterprises from economies that have few indigenous natural resources than for those that are self-sufficient; that the most efficient MNEs will exploit the most profitable foreign markets; and that the participation of foreign affiliates is likely to be greatest in those sectors of host countries where there are substantial economies of enterprise size. These conclusions are consistent with the conclusion of several researchers that most of the explanatory variables of FDI may be captured in the size of an enterprise. Indeed, one would normally expect a firm’s size and its propensity to internalise intermediate product markets to be closely correlated, and for MNEs to be better equipped than national multiproduct firms to spread risks.

What does the eclectic paradigm predict that the other theories of international production do not? Taking the theories as a group, probably very little, except in so far as the independent variables identified by these theories fail to capture the advantages of internalisation. Indeed, it could be argued that the paradigm is less an alternative theory of international production than one which pinpoints the essential and common characteristics of each of the mainstream explanations. For this reason, it may be regarded as an ‘envelope’ of complementary and context-specific economic and business theories (Dunning, 2000a). At the same time, it is more holistic in its analysis and propositions. The eclectic paradigm, for example, argues that it is not only the possession of technology per se that gives an enterprise selling goods embodying the technology to foreign markets (irrespective of where they are produced) an edge over its competitors, but also the gains that follow from internalising the use made of the technology. It is not the orthodox type of monopoly advantages that give the enterprise an edge over its rivals – actual or potential – but the gains that may accrue from internalising the use of these advantages, for example, by transfer price manipulation and control over market access. It is not surplus entrepreneurial resources per se that lead to FDI, but the ability of enterprises to combine these resources with others to take advantage of the economies of scale and scope. It is not just the avoidance or reduction of political or exchange risks that influences the location of MNE activity, but the wider benefits that arise from operating in diverse environments. It is not just the sum of the value of each of the individual determinants of FDI but the consequences arising from their interdependence. One of the unique features of the eclectic paradigm is its assertion that the value of the whole of the OLI variables is greater than the sum of the parts (Dunning, 2001a).

In other words, without the incentive to internalise the markets for intangible assets and without the economies of scale and scope offered by the common governance of activities, FDI in technology-based industries would normally give way to cross-border licensing agreements and/or the outright sale of knowledge on a contractual basis. Without the incentive to lower the transaction costs of cross-border markets, there would be much less reason to engage in vertical or horizontal integration, and again trade would take place between independent firms. This, it could be argued, is a further distinct attribute of the eclectic paradigm.
At the same time, the main difference between the determinants of intra-national and international production lies in the particular economic, political, institutional and cultural characteristics of separate sovereign states (Behrman and Grosse, 1990; Grosse, 2005b). Any theory of MNE activity must then seek to identify and evaluate those OLI advantages which specifically arise from foreign production; and how the strategic response of firms to these advantages might differ because they are operating within and between different environments. For example, why do US auto affiliates in some countries buy out a higher proportion of their components than in others? Why do airline and mail order firms prefer to establish call centres in India rather than (say) Colombia? What are the particular common governance advantages which arise by producing in different currency areas? What is the role of government regulation in affecting the choice between foreign and domestic investment? Why, in some sectors, do state-owned MNEs tend to be more active than in others?

Finally, we would observe that the various components of the eclectic paradigm are similar (though rarely identical) to those used by scholars interested in explaining the globalisation of markets and production. To give just one example, the O advantages of the paradigm embrace the competitive advantages of firms as identified by Michael Porter in his various studies (Porter, 1980, 1985, 1986). However, we prefer our nomenclature, as a firm may possess intangible assets which are better described as monopolistic rather than competitive. An exclusive access to a critical raw material is one such case in point. Similarly, Porter’s ‘diamond’ of competitive advantages (Porter, 1990) offers a useful framework for analysing the interaction between some of the main L-specific assets of countries, while his analysis of the factors influencing the extent to which an enterprise coordinates its value activities across national boundaries (that is, the way it utilises its I advantages) draws heavily on the work of internalisation scholars.

In the course of this volume, we shall not hesitate to make use of the work of Porter, and that of several other scholars from various disciplines as and when it helps to illuminate our understanding of the internationalisation of economic activity, and its impact on the competitiveness of nation states. Chapter 10, in particular, will set forth a general model of the interaction between FDI, asset accumulation and economic development, which is eclectic both in its approach and its sources of inspiration.

4.3.3 A Macroeconomic Approach to Understanding MNE Activity

Both the internalisation and eclectic paradigms of international production are essentially microeconomic or behavioural explanations in the sense that they attempt to identify and evaluate the variables that determine the foreign activities of particular firms or groups of firms. Using the same data to explain the determinants of a country’s propensity to engage in foreign production is legitimate only in so far as the actions of individual producers do not affect the value of the variables that they – the producers – take to be endogenous. After this point, the scholar not only has to move from a partial to a general equilibrium perspective, but also has to reappraise the kind of questions he or she seeks to answer. Thus, rather than trying to explain why firms choose to undertake a particular value-added activity in a particular country, the macro economist is more interested in explaining which activities of firms are best undertaken in particular countries. In the former case, a comparison is made between the absolute costs and benefits of
producing in different locations. In the latter, the distribution of value-added activity both within a country and between countries can only be explained in terms of comparative costs and benefits.

With this important distinction between micro and macro explanations of foreign production in mind, let us now consider Kiyoshi Kojima’s macroeconomic theory of FDI. This theory is essentially an extension of the neoclassical theory of factor endowments to explain trade in intermediate products, notably technology and management skills. But Kojima is as much interested in normative as in positive issues. A major part of his thesis, set out in Kojima (1973, 1978, 1982, 1990) and in Kojima and Ozawa (1984), is that, whereas Japanese direct investment is primarily trade orientated and responds to the dictates of the principle of comparative advantage, US direct investment is mainly conducted within an oligopolistic market structure, is anti-trade orientated, and operates to the long-term disadvantage of both the donor and recipient countries.

Kojima essentially believes that FDI should act as an efficient conduit for trading intermediate products, but that the timing and direction of such investment is best determined by market forces rather than by hierarchical control. His prescription is that outbound direct investment should be undertaken by firms producing intermediate products that require resources and capabilities in which the home country has a comparative advantage, but that generate value-added activities that require resources and capabilities in which that country is comparatively disadvantaged. By contrast, inbound direct investment should import intermediate products that require resources and capabilities in which the recipient country is disadvantaged, but the use of which requires resources and capabilities in which it has a comparative advantage. To this extent, the Kojima thesis is quite consistent with any macroeconomic inferences that might be drawn from the eclectic paradigm – at least in respect of some kinds of FDI.

The point at which Kojima’s theory ceases to be satisfactory as a general explanation of MNE activity is precisely that at which neoclassical theories fail to explain much of modern trade. That is because they countenance neither the possibility of market failure nor the fact that firms are both producing and transacting economic agents. This means that they cannot explain the kind of trade flows (including trade in intermediate products) that are based less on the distribution of factor endowments and more on the need to exploit the economies of scale, product differentiation and other manifestations of market failure. Nor can they explain trade in intermediate products based upon the advantages of common governance, which themselves reflect the inability of the market mechanism to ensure the first-best international allocation of economic activity in situations in which the costs and benefits of transactions extend beyond those who are parties to the exchange; where there is uncertainty of the outcome of such exchanges; and where there is an asymmetry of knowledge between buyers and sellers.

To the extent that Kojima uses trade models to explain patterns of FDI, he follows the Vernon tradition. To the extent that he regards MNEs as creators or sustainers of market imperfections whose impact on resource allocation must be less beneficial than that predicted by perfect competition, the genealogy of this thought can be traced back to Hymer. The result is that whereas he formulates a useful analysis of the cross-border transactions in intermediate products and correctly identifies some activities of MNEs as being the result of structural market distortions, he pays little attention to the impact of transaction costs on international resource allocation, and hence fails to appreciate that, in
conditions of market failure, multinational hierarchies may improve rather than worsen such an allocation. The means by which this is accomplished, which include geographical diversification, exploitation of the economies of joint supply, better commercial intelligence and the avoidance of costs of enforcing property rights, have been well spelled out by Gray (1982, 1999).

In one of his later writings, Kojima (1992) acknowledges that MNEs may sometimes need to internalise intermediate product markets to promote their economic efficiency. However, rather than seeking to identify and evaluate the significance of the particular forms of market failure likely to determine different kinds of FDI, he chooses to analyse the circumstances in which firms will use internal or external markets to optimise their transactions of intermediate products. He finds that the key determinant of the sourcing strategy of firms lies in the relative strength of the internal and external economies facing the firms, which, in turn, reflect the technical characteristics of their production functions.138

4.4 A NOTE ON AN EVOLUTIONARY APPROACH TO EXPLAINING MNE ACTIVITY

Looking first at the simple dynamics of MNE activity in terms of the eclectic paradigm, a firm’s strategy acts as a dynamic force that bridges its internationalisation posture at different periods of time. The argument runs as follows. At any given moment of time, a firm is faced with a configuration of OLI variables and strategic objectives, to which it will respond by engaging in a variety of actions relating to technology creation, market positioning, inter-firm networking, organisational structure, political lobbying, intra-firm pricing and so on. These actions, together with changes in the value of the exogenous variables it faces, will influence its global competitive position, and hence its OLI configuration at a future date. An explanation of the strategy of MNEs then becomes central to an understanding of the dynamics of international production. Not only will the kind of firm-specific O advantages set out in Table 4.2 be important, but also how the firm perceives that its competitors will react to any change in its own internationalisation strategy. Here economic and behavioural theories of the firm interact with each other.139

In a seminal article, Kogut (1983) persuasively argued that, although the possession of superior intangible assets may give rise to the initial act of foreign production, once established abroad the advantages of multinationality per se, that is, those gained from the spreading of environmental risks and the common governance of diversified activities in dispersed locations, become more significant. In later papers, Kogut has also related the international strategy of MNEs to the source of these sequential advantages140 and to their learning experiences in coordinating domestic and foreign production (Kogut, 1991; Kogut and Kulatilaka, 1994, 2001).

This brings us to the contribution of evolutionary economics to our understanding of MNE activity. To what extent have there been attempts to evaluate the extent to which the internationalisation of production is linked to the willingness and capacity of firms to accumulate, integrate and control O advantages across national borders? Up to now, the main focus has been on the accumulation of technological assets by MNEs, although we
might also think of the work of scholars such as Vernon (1966, 1979) on the product cycle and Ozawa (1992, 1996) on distinctive paths of economic development as following an evolutionary approach.

In drawing on the work of Rosenberg (1976, 1982) and Nelson and Winter (1982), John Cantwell (1989, 1991a) has argued that the creation and sustenance of new technology and new technological systems within firms is best understood as a series of evolutionary adjustments and refinements. When applied to the internationalisation process, each MNE or potential MNE, because of the differences in its OLI configuration and its strategic response to these variables, will create its own unique and differentiated technological trajectory or path, each step of which needs to be learned and coordinated with those which preceded it.141

The more complex, path dependent and widely dispersed the technology is, the more likely it is that the learning process needs to be internalised. However, although technological competence is often an O-specific asset, its creation and usage is often dependent on the innovating capabilities, market characteristics, and incentive structures of the countries in which the firm sites its production, and how it responds to these L-specific characteristics. It is also likely to be a function of the learning processes associated with different modes of internationalisation, the strategy of the firm towards the decentralisation of its R&D activities (Cantwell, 1991b, 2001; Dunning, 1993c), and the devolution of responsibility for asset-augmenting activities to affiliates and/or regional headquarters (see Chapter 8 for further details).

The path of international production, then, requires an appreciation of the interaction between the technological assets of firms and the specific endowments and institutions of countries over time, as well as at a given moment of time. Although the evolutionary approach to the MNE has tended to focus on the technological capacity of firms, it could easily be extended to embrace managerial, organisational, financial and marketing knowledge, and corporate incentive structures. Moreover, in the early 2000s, asset-augmenting FDI is becoming an integral part of the evolutionary model. Indeed, as Chapters 2 and 3 have shown, an increasing proportion of intra-Triad investment by both established and first-time MNEs is undertaken to access or acquire assets that will sustain, or add to, their existing O-specific advantages. Often, too, the choice of location and the modality of MNE involvement will further influence the growth path of MNEs. Indeed, tracing the evolution of both the traditional and recently established MNEs reveals a constant shifting, both of the content of OLI advantages, and of the ways in which they interact with one another.

Here, as with the evolutionary theory of the firm, it is difficult for IB scholarship to offer generalisations, simply because the co-evolution of technologies, firms and industry structures, the locational advantages of countries, and the governing institutions motivating behaviour, are constantly changing (Nelson, 2006). Embracing the evolutionary approach into understanding the respective role of OLI advantages in the growth or restructuring of MNE activity then requires a consideration of each of the variables, and the dynamics of their interaction. Such a co-evolution is being currently shown by the attempts of some MNEs from emerging countries to catch up with their established competitors. For example, technological, organisational and institutional learning is an integral part of Chinese, Korean and Indian FDI in advanced industrial countries. Even in the course of the last decade, it can be seen that such asset-enhancing activities are part of a
path-dependent process, which evolutionary theory is better able to understand and evaluate, than traditional neo-classical models (Nelson and Pack, 1999).

The chapters in Part II will discuss in detail how asset-seeking motivations affect the sequencing of investment, as well as the coordination of activities within the internal and external value-added network of the MNE. For now, we shall simply note that asset-acquiring or -augmenting investment is of critical importance to understanding the evolution of the modern MNE, and that such activity also lies at the core of two new theoretical approaches, namely the resource- and knowledge-based theories of the firm, which we shall discuss in relation to the eclectic paradigm in Chapter 5.

Finally, at a macroeconomic level, the dynamics of how the changing O advantages of firms and the L advantages of countries interact to explain the patterns of inward and outward MNE activity in a particular country have been explored by the investment development path (IDP). The IDP model was initially put forward by Dunning (1981, 1986a, 1988a), and developed further by Dunning and Narula (1996b) and Narula (1996) as a means for describing and analysing the underlying reasons for FDI-induced restructuring at different stages of development. The basic hypothesis is that, as a country develops, the configuration of the OLI advantages facing foreign-owned firms that might invest in that country and of its own firms that might invest overseas, changes, and that it is possible to identify the determinants for the change as well as its effect on the trajectory of development. The latest thinking on the IDP set out in Dunning et al. (2001) attempts to incorporate both trade and industrial structural change into its analysis. The IDP will be discussed further in Chapter 10. For the moment, we may think of it as an example of how MNE activity may affect the evolution of a country’s growth path.

4.5 ISSUES RESOLVED AND UNRESOLVED BY RECEIVED THEORY

In this chapter, we have described the evolution of the theory of international production over the past four decades. It may be interesting to note, as Dunning (2004a) has recently done, that the contribution of British (and other European) scholars to the theory of the MNE is considerable, as is their contribution to the history of the MNE and cross-border investment, which is reviewed in the next chapter. However, in Part II, as we move inside the firm in a quest to understand and evaluate the structural and strategic transformations of the MNE, the contribution of North American scholars becomes predominant. While such differences may be disappearing, particularly with the emergence of new business schools and the increasing mobility of individual scholars across borders, the strong historical position of American business schools may explain some of these differences in focus.

In the early 2000s, we have a galaxy of partial theories that purport to explain particular aspects of FDI and MNE activity, particular kinds of foreign production, and particular behavioural strategies of different types of MNEs. Most of these have been tested empirically; and most have sought to identify either the particular OLI variables affecting the geographical or industrial distribution of foreign production, or the strategic response of MNEs to these variables. Surprisingly few have attempted to assess the extent to which foreign-owned affiliates actually do record higher profits than their indigenous
competitors, or whether they earn higher rates of return than could have been earned had the same activity been undertaken in the home country, although in the 1960s and early 1970s there were attempts to do so from the viewpoint of the efficiency of resource allocation. Stevens (1974) and Caves (1982 [1996]) offer good summaries of the relevant empirical studies.

In the past three decades, the focus of attention has been directed to more general – and even interdisciplinary – explanations of international production, of which the eclectic paradigm is probably the most ambitious. Clearly, it is easy to criticise such paradigms. Indeed their very strengths – the encompassing of a large set of disparate variables – makes any systematic testing very difficult. However, it is worth repeating that the purpose of the eclectic paradigm was, and continues to be, to offer an analytical framework within which particular explanations of the determinants of MNE activity can be incorporated and appraised (Dunning, 2000a). To this extent, the debate between the view of those who argue that market failure is a necessary and sufficient condition to explain the existence of MNEs and those who assert that the eclectic paradigm offers a useful framework for analysing the extent and patterns of MNE activity, is more meaningful than that between both schools of thought and those who argue for and against generalist explanations.

At the same time, there remain many unresolved issues in IB theory that require attention. The publication of the second edition of Caves’s seminal book *Multinational Enterprises and Economic Analysis* in 1996, 14 years after its initial publication presented an opportunity for those interested in the theory of the MNE to examine the developments and challenges over the past decade. Another opportunity for reflection was offered by the publication of the 25th anniversary edition of Buckley and Casson’s *The Future of the Multinational Enterprise* (2002). Our own efforts with the publication of the current volume must be considered a similar opportunity, since a decade and a half offers considerable time to assess the developments in the field.

While the theory of internalisation itself remains a robust explanation for the ownership boundaries of the MNE, new topics provoking scholarly interest include the character and composition of OLI advantages, the boundaries of the firm within exchange networks, and the coordinating capacity of the firm within equity and non-equity relationships. The emergence of metanational and ‘born global’ MNEs, of private equity-managed FDI, and complex inter-firm transactions; an increased emphasis on the significance of relational assets, flexibility and real options; and the continuing growth in strategic alliances are also prompting new interest in joining theories of strategic management and international business. At the same time, the L component of the eclectic paradigm is receiving increasing attention as countries strive to compete for inbound FDI. Moreover, a reconfiguration of the locational needs of firms is occurring. Such variables as the institutional infrastructure, the presence of local supporting firms (e.g., suppliers), the opportunities for high-technology clusters, and the quality of social capital, have been shown to be of particular significance in explaining the recent growth and geographical composition of FDI in Central and Eastern Europe (Holland et al., 2000; Bevan et al., 2003; Grosse and Trevino, 2005).

We believe that some contemporary events, including the continuing rapid growth of service MNEs, the emergence of MNEs from some developing and emerging economies, and the opening up of Central and Eastern Europe, China and India to FDI, require only modest modifications to either internalisation theory or the eclectic paradigm, however
much they may demand a re-evaluation of several contextual theories which seek to evaluate the critical OLI variables affecting particular kinds of MNE activities. Similarly, together with a theory of strategic behaviour, both can satisfactorily identify the reasons why firms prefer to conclude joint ventures rather than engage in 100%-owned foreign production. They can even explain the determinants of the locus of control within firms. However, we and other scholars have identified four other trends in international business that might require a more fundamental appraisal of existing modes of thought. These include the continued growth in the importance of (a) cooperative alliances and networks, (b) international spatial clustering, (c) the quality of relational assets of firms and countries\textsuperscript{145} and (d) the role of institutions as underpinning the O and I advantages of firms and the L advantages of locations. Chapter 5 will present our attempt to incorporate these factors into the eclectic paradigm.
5. The determinants of MNE activity: the OLI paradigm revisited

5.1 INTRODUCTION

Over the past decade we have put forward four additions to our understanding of the evolution of the eclectic paradigm, presenting it as an ‘envelope’ within which various partial theories concerning MNE activity can be placed (Dunning, 1998b, 2000a, 2002b, 2004b).\(^{146}\) In addition, a special issue of the *International Journal of the Economics of Business* in 2001 and a subsequent book by Cantwell and Narula (2003), as well as a *festschrift* by Gray (2003), have provided thoughtful analyses on the past and future directions of the eclectic paradigm. In this chapter, we would like to present a synthesis of these refinements to the paradigm, as well as to incorporate our most recent thinking on its likely course of development.

In the previous chapter, we identified some changes in the organisation and external environment of MNEs that cause us to consider how these changes might be incorporated into the eclectic paradigm, or indeed, whether they impose challenges to its contents and methodology. These developments include the mushrooming of cooperative relationships and networks, the clustering of high value-added activities, the growing importance of relational assets of firms and countries\(^{147}\) in economic activity, and the role of institutions as underpinning the O and I advantages of firms and the L advantages of countries.

In order to accommodate these phenomena, there are three theoretical refinements we wish to consider in Section 5.2. These are first, an evaluation of the concept of internalisation at a time when coordination achieved through external transactions is becoming increasingly popular. Second, a more explicit critique of the resource-based and evolutionary views of the firm, and how it relates to asset-exploiting and asset-seeking investment, and third, an acknowledgement of the contribution made by the knowledge-based theory of the firm to our understanding of the boundaries of MNE activity.

A common thread to these refinements is a more specific acknowledgement of the importance of the relational and institutional capabilities in the asset portfolios of firms and countries; and the impact of these on the coordination of activities in the MNE network. In Section 5.3, we shall elaborate, in more detail, on our conception of institutions, and the importance of incorporating institutional factors more explicitly into IB scholarship. We then go on to present a revised form of our explanatory framework, which will allow us to extend the institutional viewpoint to all our subsequent analysis in this volume.
5.2 NEW THEORETICAL PERSPECTIVES

5.2.1 Cooperative Relationships and I Advantages

We have argued repeatedly that internalisation theory and the OLI paradigm are not directly comparable, since they do not seek to explain the same phenomena. At the same time, however, the mode of foreign involvement, or in other words why a firm would choose to own rather than to sell (or purchase) the right to use a particular O-specific advantage, is based on the theory of internalisation that arises from transaction cost economics. Just as the resource-based and evolutionary theories that underlie the competitive advantages of firms are partial theories, we see internalisation as a partial theory that explains the form of particular transactions. I advantages can thus explain why particular transactions are undertaken by the market, while others are more efficiently organised within the hierarchy of the firm, but it alone cannot explain the patterns of foreign production, as argued earlier.

Indeed, it is widely acknowledged that transaction cost economics is of great value in assessing the original make or buy decision, that is, whether the firm should integrate forward or backward, or whether it should enter new markets establishing a joint venture or a wholly owned affiliate. However, its value is still to be proven in explaining some of the structural and dynamic features of the large contemporary MNE, and its governance system which consists of a mosaic of relationships between its headquarters and subsidiaries forming an integrated network across borders. In addition to its internal network, the MNE is part of a larger network external to its ownership boundaries, which may involve close coordination with other firms in supplier or customer relationships, or with strategic alliance partners. In such cases, no ownership ties need exist between the core or flagship firm and the network partners. (The management and structure of the network MNE is explored further in Part II.) While these structural developments highlight the nature of the MNE as the coordinator of value-added activities that are distributed in space, they also raise questions about the boundaries of the firm that have only begun to be seriously addressed in the literature.

In reality, the make or buy decision is seldom, if ever, a clear choice between two mutually exclusive alternatives. Between arm’s-length exchange over the market and administrative fiat within the firm, there lie a wide range of methods of coordination which can be broadly labelled contractual. Some scholars prefer to call such intermediate forms ‘hybrids’ (Powell, 1990), while others such as Hennart (1993, 2000) emphasise that the different modes of coordination simply represent alternative combinations of two fundamentally different mechanisms: coordination by prices by the market and coordination by behaviour constraints within the hierarchy. Neither will be able to solve all problems of coordination, and both are subject to diminishing returns in use (Hennart, 2001).

The problems of using hierarchy as a mode of coordination of transactions are well known. They include dulled incentives (since compensation can be only partially linked to output), goal displacement, agency problems and shirking. Increased monitoring and appropriate internal incentive structures can overcome some of these problems, but the identification and implementation of these are not costless, and their effectiveness depends on the extent to which the quality of output can be readily assessed. By
contrast, the factors that plague long-term contracting (or any contracting under uncertainty) include *ex ante* adverse selection and *ex post* moral hazard, each of which is caused by information asymmetries combined with opportunism. However, it bears repeating that such problems are not solved simply by internalising the transaction. The costs of motivating agents, even if lower than the costs of transacting in the open market, are dependent on the incentive structures within the firm, and thus the formal and informal institutions therein. Under any form of relational contracting, whether governed by the market or undertaken within the hierarchy of a firm, the incentive structures matter to the costs incurred in executing the contract.

In addition to information asymmetries, some exchanges are complicated by asset specificity and small numbers conditions, which can create hold-up situations. A classic example of the former type described by Hennart (2001) is backward integration in aluminium, since bauxite is very heterogeneous and requires specialised facilities. A different challenge is posed by the banana industry, where rough treatment of unripe bananas reduces their quality, although the damage does not become apparent until they are sold to the final consumers. The solution is then for the same firm to control both the picking and the distribution. Sometimes combining the market and hierarchical route is the optimal mode of organisation. The choice between a salaried sales force and representatives paid on a commission-only basis is likely to depend on the degree to which, in the course of making a sale, a representative can jeopardise intangible assets such as firm reputation. If the quality of commission-only representatives is low, a solution would be to offer employees a base salary and a variable component related to sales.

The growing trend of outsourcing many stages of the value chain, which began with support services such as cleaning and catering, and then extended to transportation and logistics, and finally to manufacturing and customer services (for example, call centres), has reduced the number of activities directly owned by many firms. At the same time, a wide range of activities are coordinated by them through non-equity (contractual) relationships. Firms make outsourcing decisions based on what they believe to be their areas of core competence, and the predominant textbook view is that any activities outside of that core might be better performed by a contractual partner. Let us take the example of customer service. At first glance, it would seem impossible that a firm could outsource its customer service as a non-core activity. Indeed, if the only alternative to hiring its own customer service representatives was for the firm to contract for them on a short-term basis, most firms would probably prefer to keep the representatives as employees. However, if the alternative becomes available to contract (possibly on a long-term basis) with another firm which specialises in providing call centre services, the opportunity to transfer the costs of training and monitoring to another firm might become cost efficient.

In the former example, a strict interpretation of transaction costs within the ownership boundaries of the firm would suggest that, since the call centre employees no longer work for it, we should no longer consider this activity as part of its coordinating function. But, in practice, the contractual relationship just described requires monitoring and a periodical realignment of the firm’s incentive structures, if, for instance, its customers are unhappy with the service they receive. The firm cannot dissociate itself from its customers any more than it can do so from its suppliers, if, for instance, their social or environmental standards are found lacking. The value chain is still coordinated by one firm, and it is this coordinating role that is central to our understanding of its I advantages.
Furthermore, while transaction cost economics can determine what kinds of markets are most likely to be internalised, it cannot indicate who will internalise what. Our contention is that O advantages are necessary to explain why it was the banana distributors that chose to acquire the growers and not vice versa. The conventional answer is to relate these advantages to those activities that are actually owned by the firm. An earlier debate centred on the question of whether it was possible to acquire new O-specific advantages by internalising new intermediate markets, and if so, did the firm need to have any O advantages prior to internalisation. If we take the coordinating role as central to the I advantages of a firm, even a sole entrepreneur who coordinates a value chain by contracting with outside suppliers has a capability (O advantage) that might allow him/her to outcompete another firm. As the firm grows, it is likely to hire some more employees, and acquire additional assets. While almost any such transaction can potentially be internalised by one or more parties, who internalises what requires an explanation that rests on the specific capabilities of the firm.

We have drawn attention to this particular point to illustrate how a small and single-product firm may choose to internalise some advantages from the market. At the other end of the spectrum, the globally integrated MNE invites us to enquire how large might a firm grow by the internalised governance of activities which are not limited by ownership, and what might this mean for firms that derive unique competitive advantages based on their shared access to resources? In this context, the word ‘internalisation’ itself seems to become a bit of a misnomer. If one views the MNE as a system of interrelated activities, both internal and external to the ownership boundaries of the firm but that are controlled and managed by it, then internalisation refers to both the assets it owns, as well as those that are accessed by it. Nonetheless, we have argued that since particular assets have a value that depends on how they are employed in the value-adding activities of the firm, the I advantage of one firm accessing (but not owning) an asset will be different from that of another accessing (but not owning) the same asset. In this sense, internalisation, meaning the control and coordination of activities within a firm rather than as determined by the market, is still an appropriate name, even in the case of the globally integrated MNE.

An important realisation that follows from the emergence of the network MNE is that it may reflect not only a failure in the market for technology, but also that of multiple markets along the value chain, which determine the governance options available to the MNE. In an interesting theoretical contribution, Chen (2005) attempted to extend internalisation theory to take account of failures that can occur in these latter markets, and particularly those in manufacturing and distribution. To illustrate the importance of his approach, Chen analysed the choice between licensing and contractual (OEM) production, which had previously not received much attention in the literature, in spite of its growing empirical importance. His purpose was to demonstrate that the choice of a firm’s organisational arrangements depended not just on failures in the market for technology (the original licensing versus FDI decision), but also on those in the market for manufacturing (the OEM versus FDI decision).

The following two subsections will discuss different ways of incorporating O advantages into a transaction cost-based analysis. The first is the resource-based view, which is useful in explaining the accumulation of physical and human assets over time; and the second is the knowledge-based theory of the firm, which seeks to explain the superiority
of one form of governance, that is, the firm, in providing appropriate incentives to generate and transfer knowledge.

5.2.2 The Resource-based View and Dynamic O Advantages

Even as the ownership of physical assets has declined in importance while that of knowledge assets has increased, and the growth of outsourcing has diminished the importance of owning rather than accessing particular assets, the past decade has seen increasing interest within the field of management and business economics in studies that employ the resource-based theory of the firm. This theory, which builds on the seminal contributions of Penrose (1959), among others, postulates that resources that are valuable, rare and difficult to imitate are the source of the competitive advantages of firms.\(^{157}\) The firm’s ability not just to possess, but to grow or acquire more assets of this kind, affords it a sustainable competitive advantage over other firms, and has been the focus of a related literature on dynamic capabilities.\(^{158}\)

Since the resource-based theory, like internalisation theory, is a theory of the firm, it seeks to answer some, but not all, of the questions posed by the eclectic paradigm. At various times in the past we have stated that the OLI paradigm is not, and does not purport to be, a specific and testable theory of the MNE. Rather, it seeks to explain the cross-border value-added activities of firms at an aggregate level. In order to theorise about the behaviour of individual firms, more contextual information is necessary, such as that pertaining to the motivation of the investment, that is, whether it is market, resource, efficiency or asset seeking, as discussed in Chapter 3.

As the prevailing theory of the firm, the resource-based theory has helped to bring into a new light the contributions made by Edith Penrose on the endogenous growth of the firm (Pitelis, 2002b, 2004; Rugman and Verbeke, 2002, 2004a; Dunning, 2003a). Since the Penrosean theory is a true theory of the firm, the MNE emerges as the result of a growth process that extends the boundaries of the firm beyond nation states. What is new in the resource-based argument is a focus on the isolating mechanisms that help to ensure the uniqueness of a particular firm’s abilities, and thus its competitive position vis-à-vis other firms (Rugman and Verbeke, 2002). Beyond physical assets, the resource-based view regards knowledge as another type of capability, identifying ‘international knowledge and experience as a valuable, unique, and hard to imitate resource that distinguishes the winners from the losers and mere survivors in global competition’ (Peng, 2001:820).

From the perspective of the OLI paradigm, while the developments in the resource-based theory add much to our understanding of the kinds of physical assets and human competences that contribute to the competitiveness of firms, they leave open the question of where and in what form those advantages are exploited. However, a welcome development arising from the increased interest in resource-based theory is that it offers a natural means of injecting dynamism into the OLI paradigm. In previous writings (Dunning, 1993a) we have described the dynamics of the OLI paradigm mainly in terms of the difference between the configuration of the OLI variables at time \(t\) and the subsequent configuration at time \(t + 1\). Some of these changes may be the result of exogenous factors; for example, such as those to do with the locational attractiveness of either the home or host country of the MNE. Some, however, may be internal to the particular firms, and consist of a re-evaluation or reconfiguration of the collection of assets now owned, or
The determinants of MNE activity

121

amenable to being used, by the firm, as well as the ways in which the use of these assets is coordinated within the firm.

Acknowledging the importance of unique resources has also served to highlight the importance of the dynamics of resource accumulation. It is particularly in connection with strategic asset-seeking FDI that the distinction between the exploitation of the existing assets of firms, and the augmentation or adding to these assets comes into focus. Unlike market- and natural resource-based FDI, the expected return of which is easier to calculate with NPV methods, asset-seeking investments often have value that is dependent on the other assets, resources and capabilities owned or controlled by the MNE, and the extent to which it can successfully coordinate its system of global activities. Such systemic competences (and their institutional underpinnings) might make the acquisition of a given asset more valuable to one firm than it is to another. Consequently, even relatively homogeneous resources can contribute to the competitive advantage of a particular firm, while highly heterogeneous resources might have limited value to some firms, but significant value to others. This is the case, for example, with technology-intensive assets, the effective use of which is dependent on the absorptive capacity of the acquiring firm (Cohen and Levinthal, 1989). Finally, for the most part, much of the resource-based analysis gives relatively little attention either to the quality of intra- or inter-firm relationships, or to the incentive structures – both internal and external to the firm – that underpin the accessing, creation and usage of a firm’s resources and capabilities.

Other theories that share much common ground with the resource-based view are to be found in evolutionary economics (Nelson and Winter, 1982; Nelson, 1991) and specifically in the technology accumulation theory of the MNE (Cantwell, 1989, 1991a, 2001). Like the resource-based view, these theories focus on the path dependency of existing assets and on the accumulation of new assets; and they do so by examining the process of learning and knowledge dissemination within the firm. Since both theories emphasise the O-specific intangible assets of firms, there is much more interest in the modality of foreign involvement as this is dependent on the particular kind of knowledge the firm is seeking to exploit or acquire. As their focus is primarily on the growth of the firm, its locational profile might be expected to play little role. However, due to the opportunities offered by globalisation, and the possibilities for agglomeration economies and spillovers from firms located in close proximity to each other, the ‘where’ of knowledge transfer is also becoming of increasing interest to evolutionary scholars (Chapter 16 will review the literature on agglomeration and spillovers). The wealth of literature published in this area, which includes empirical studies on technological accumulation within the MNE (see Chapter 11), and the managerial issues regarding the management of knowledge and subsidiarity of decision making in the MNE network (see Chapters 8 and 9) will be reviewed in subsequent chapters of this book. A later section of this chapter will also pay some attention to the institutional underpinnings of both the resource-based and evolutionary theories.

We then see the MNE as a coordinated system of value-added activities, the structure of which is determined by the hierarchical costs of production, the market costs of exchange, and the interdependence of production and exchange relations (Dunning, 2003b). Our conception is similar to that of Madhok (2002), who considers three kinds of factors, namely, the governance structure, transaction and resource attributes, to explain the boundaries of firms. While we accept that transaction costs can be used to explain these
boundaries in a static framework, in order to explain dynamic growth, we believe that some reference to path-dependent resources and firm-specific capabilities is necessary. Furthermore, since different combinations of transactions, resources and patterns of governance are possible, firms do not necessarily organise similar transactions in the same way; and to this extent at least, transaction costs may be specific to the firm. For example, while for one firm, an inter-firm collaborative arrangement might make economic sense, for another, the same agreement might be prohibitively costly in terms of monitoring costs. Thus the content and structure of the O-specific advantages of a particular firm may critically affect how particular resources and competences are created, accessed or deployed. Finally, an appreciation of the ways in which governance structures, transaction costs and resource attributes may interact with one another, are also essential to an understanding of why the perceived value of resources and competences that the firm does not own, but to which it has access, can differ between MNEs and other firms.

5.2.3 The Knowledge-based Theory of the Firm and Dynamic O Advantages

In addition to the resource-based view, the knowledge-based theory of the firm has provided a theoretical foundation for a number of recent empirical studies on the behaviour of MNEs. This latter theory states that any knowledge generation and transfer within the MNE network is likely to be organised by ‘higher order organising principles’, which will tend to arise only within a hierarchical organisation (Kogut and Zander, 1993). In their influential article, Kogut and Zander examined how the differences between tacit and articulated knowledge affected its form of transfer. In particular, they argued that tacit knowledge was likely to be transferred more efficiently within the firm, and indeed, in their view, provided a rationale for the existence of the MNE in itself.

Another important aspect of their work is the conception of MNEs as ‘social communities that specialise in the creation and internal transfer of knowledge’ (p. 625). Subsequent studies by Kogut and Zander further developed the idea that organisational identity is the basis on which knowledge is shared within the firm, which, itself, is perceived to consist of communities of practice, within which the rules and normative boundaries that guide the process of learning are set (Kogut and Zander, 1996, 2003). We believe that such insights provide fruitful grounds to advancing our understanding of informal institutions at the firm level, and fit quite comfortably with the institutional perspective of MNE activity presented in this chapter.

Although the knowledge-based theory of the firm essentially rejects transaction costs or market failure as an explanation for the internalisation of technology transfer, we believe that the two views can be reconciled. Doing so requires that we use transaction cost and resource-based reasoning to explain the act of internalisation and asset accumulation over time; and combine this with an argument that can account for the formation and implementation of an effective incentive structure within the firm.

As stated earlier, we continue to think that transaction cost theory is essential to our understanding of the efficient alignment of the exchanges undertaken by firms, and their modes of governance. Furthermore, as discussed in the previous subsection, while transaction costs do not arise out of opportunism alone, without opportunism, it is difficult to understand why market transactions would not be preferred in the vast majority of cases (Foss, 1996a). It also seems clear that no form of governance is completely free of the
effects of opportunism (Hodgson, 2004). Problems arising from information asymmetries, difficulties in communication, and deficiencies in motivation plague contractual relations as well as relations within hierarchies. This being the case, it is not evident why the firm as a governance mechanism would necessarily align the incentives of individuals in the ‘communities of practice’. However, we do believe that the ‘higher order organising principles’, and the incentives accompanying them, are likely to explain why the institutional structure of one firm might be more amenable to knowledge generation and transfer than that of another.165

To the extent that incentives within the firm are easier to set in a mutually beneficial way, agents may be less likely to cheat on their principals. Similarly, in instances where firms are able to provide better methods of communication than markets, even honest disagreements or misunderstandings might be easier to reconcile internally (McFetridge, 1995; Ghoshal and Moran, 1996). Since the process of generating new knowledge is fraught with uncertainty, the ability of a firm to create communities that provide a context for structured experimentation is an important function that might be more difficult to achieve over the market (Spender, 1996). But even this does not fully explain when and where knowledge generation is likely to take place, which we believe rests on the informal norms and incentives that influence the cognition and motivation of employees within the firm.

We then agree with Foss (1996b) that any theory of the firm should essentially explain three things: why a firm should prefer to hire employees (rather than contract for their labour), why it chooses to own assets, rather than to lease them or their rights to other firms, and how monitoring and compensation take place within the firm. At the same time, it is our view that the third aspect is likely to be critical to the efficiency of the firm as a governance form. This is because understanding the rules governing monitoring and compensation requires an understanding of the incentives that induce people to cooperate; and that these incentives include both the formal incentives set by management, and the informal norms and values that permeate the organisation. In short, in our conception, the firm provides the institutional framework within which the formal and informal rules and incentives that guide the process of knowledge generation and transfer are formed and implemented. In addition to the attributes of the knowledge being transferred, we also believe that the success of knowledge generation and transfer depends on the willingness and motivation of both the transferor and the transferee, both of which are likely to be strongly influenced by the incentives that are part of the institutional matrix of a firm.

With these theoretical refinements in mind, we now move on to make the case for a more explicit acknowledgement of institutional factors influencing both the determinants as well as the outcomes of MNE activity, and how these factors might be incorporated into the OLI paradigm.

5.3 INSTITUTIONS IN INTERNATIONAL BUSINESS

The contemporary IB and management literature sees the MNE as a creator, accessor and transferor of a bundle of resources and competences, which typically includes financial capital as well as technology, consisting of both hard technology, for example, R&D
capacity, as well as soft technology, for example, organisational regimes. While most of
the literature related to the costs and benefits of technology transfer has been concerned
with hard technology, more recently scholars have begun to appreciate that no less impor-
tant is the willingness and ability of MNEs to transfer and/or adapt soft technology and,
in particular, organisational structures and work practices.

In the remainder of this chapter, we aim to present a conceptual framework that exam-
ines this bundle of resources and competences further, and to suggest that institutional
characteristics should be explicitly separated into one of the three main elements of
resources and competences transferred by MNEs. The institutional elements brought
along by the MNE may affect the host country in ways that can be beneficial or detri-
mental, but without explicitly identifying and evaluating this component of the bundle
transferred by the MNE, it is unlikely that much attention would be paid to such effects.
Consequently, we believe that gaining an understanding of the institutional dimension of
MNE activity will not only lead to an improved analysis of the MNE qua MNE, but it
will also better enable us to understand how MNE activity influences national-level insti-
tutions, and by doing so, the economic and social goals of countries.

Throughout this volume, in the course of reviewing the literature, we have identi-
ied a range of empirical results that point to the relevance of institutional factors. These
findings have been accompanied by considerable advances in institutional theory, most
noticeably within the fields of economics, management and sociology. At a micro level,
studies examining the choice of entry mode and location have employed an institutional
perspective emphasising isomorphism. At a macro level, the economics literature has
revealed a great deal about the importance of institutions for the ability of countries
to attract FDI, and to derive a sustained economic benefit from it. While this chapter is
more concerned with the micro level, and the integration of institutional factors into
our explanatory framework, macro-level institutions are also discussed in some detail in
Chapter 10.

While the IB literature has dealt with institutional issues in the past, and is increasingly
doing so now, the fact that the discussion has drawn on very different sources has pre-
vented integration of the micro- or firm-level analysis with the macro- or national-level
analysis. While this approach has allowed some progress to be made in understanding the
determinants of MNE behaviour, we think that it has not been as successful in illuminat-
ing the effects of MNE activity. We believe that a unified framework that combines micro-
and macro-level analyses, and explicitly considers the interdependence between the two,
would help to bring about a better analysis both of the behaviour of the MNE per se, and
of its effects on the home and host countries. We believe that the OLI paradigm, on
account of its holistic nature, is well-suited for this purpose.

The second argument we make is that institutional analysis in IB, or in the business
and economic literature generally, has paid very little attention to the motivations
behind the strategic behaviour of firms. Most research has tended to focus on outcomes
(mostly for the firm), rather than the inputs, or the context of decision making as it
relates to the norms and values both internal and external to the firm. Research on the
goals and determinants of economic growth at the national level is increasingly focus-
ing on the content and role of informal institutions, as an important complement to that
of formal institutions in affecting both the physical and human environment. We believe
that this research should find a natural counterpart in studies exploring how informal
institutions at the firm level affect both the strategies of firms and the consequences of MNE activity.

Our discussion will proceed as follows. We begin with a brief explanation about why we believe that the role of institutions has attracted increasing attention by business scholars over the past two decades. This is followed by a short review of how the IB literature has begun to incorporate institutional considerations into its scholarly armoury. We then present our own concept of institutions and institutional change, which draws substantially on the work of Douglass North. We shall analyse each of the three components of the OLI paradigm to articulate how an institutional dimension might be incorporated into the analysis, and how it relates to previous formulations of the paradigm.

5.3.1 Why Focus on Institutions?

Why have institutions become so much more important over the past two or three decades? We would argue that the reasons lie both in our changing conception of the MNE as an organisational entity, as well in the changes in the global economy that have dramatically changed the economic landscape.

The previous section has examined in some detail the changing conception of the MNE as an organisational entity. IB scholars now see the MNE as a *coordinated system* of domestic and cross-border value-added activities. The content and structure of such a system is thought to be determined by the hierarchical costs of production, the market costs of exchange, and the interdependence of production and exchange relations. While we accept that transaction costs can be used to explain these interdependencies and boundaries in a static framework, in order to explain dynamic growth, we believe that some reference to path-dependent resources and firm-specific capabilities is necessary. Furthermore, we would aver that the institutional structures created, accessed and deployed by the firm affect its choice of governance, of both productive and exchange activities; and that in this sense, transaction costs are firm specific.

Throughout its history, most economic theory of the determinants of IB activity has been asset based, whether these assets were owned, or accessed by the MNE. However, in the past two or three decades, the composition and significance of competitiveness-enhancing assets has changed, as the tangible resources and intangible capabilities available to firms have become more knowledge and information intensive (Dunning, 2004b). At the same time, their geographic sourcing and deployment have become more widely spread. This had led to an increased importance of the MNE as a fashioner and organiser of economic activity, and consequently the motives, values and norms that shape and condition MNE decision making.

Much of economic value today is a return to the way in which O-specific advantages of firms are created and deployed, rather than a return to capital in the sense of a return to the owners of capital equipment and property. The downsizing of the physical assets owned by firms, including productive assets and real estate, and the corresponding increase in contractual outsourcing have changed the boundaries of the firm. Only those activities in which the firm possesses unique skills and capabilities are likely to be internalised. For other value-added and transactional activities, the increasing modularisation of design, and the commoditisation of the modular components, have led, and are
leading, to a dramatic increase in the number of firms capable of providing such intermediate inputs at low cost and according to high specifications. Even activities such as R&D, which are critical to the knowledge generation of the firm, are beginning to be subject to modularisation and outsourcing, at least in the more routine areas of research (Zysman, 2004; UNCTAD, 2005c).

Of course, these changes in the nature of the MNE have themselves been driven by developments in the global economic and political landscape. Dramatic reductions in communication and transportation costs, combined with the increasing interconnectedness of cross-border markets, has resulted in an increase in the number of locations where value-added activities can take place. This presents more options to MNEs both to exploit locationally bound ‘sticky’ assets wherever they may be sited, and to engage in cost-reducing footloose investment to produce goods and services that do not draw on locationally bound resources.

Institutions at the national level affect the value-adding opportunities open to firms, including those associated with agglomerative or clustering economies (Enright, 2000c). While for some kinds of activities, such as simple parts assembly, MNEs may be able to choose among multiple locations, for knowledge-intensive activities the number of alternative sites may be small or equal to one. This makes it imperative to understand both how macro- or national-level institutions might affect the value-adding opportunities of MNEs, and how the ideas and actions of these firms might, over time, affect the content and significance of these institutions (Ozawa, 2005).

5.3.2 Institutions in the International Business Literature

The IB literature essentially followed a neoclassical approach in the 1960s and early 1970s. Although in these years profit-maximisation models of the firm were being challenged (Simon, 1959), early European research on FDI from Dunning (1958) onwards tended to assume that firms were profit or asset growth maximisers. In US business schools, scholars paid little explicit heed to the institutional component of managerial decision making. Vernon’s (1966) product cycle model also largely ignored motivation and behavioural issues, although some exceptions were present, such as the more micro-orientated studies by Aharoni (1966), which had a more behavioural bent. In the 1970s, attention switched to the MNE per se, and an organisational perspective began to dominate, as witnessed by the writings of Behrman (1974), Buckley and Casson (1976) and Johanson and Vahlne (1977). Here, although the term ‘institutions’ was not explicitly used in evaluating the significance of any of the three components of the eclectic paradigm, a behavioural component was frequently central to their thinking. At a macro level, and with respect to the impact and effects of MNE activity, the role of government and its institutional underpinnings was given some attention in these years in the dependencia debate, and in the findings of the UN Group of Eminent Persons (Dunning, 2005a).

In the last 20 to 30 years, institutions have become a more integral part in explaining the determinants and effects of IB activity, mainly, as we have said, because globalisation and technological advances have widened the options for behaviour of both firms and governments; and because the environment in which MNEs operate has become more uncertain, complex and volatile. The 1990s brought some of these events to a head. This was demonstrated in a variety of ways, not least by the increased awareness of, and
reactions to, differences in culture and belief systems, and how these impacted on the cross-border activities of firms. Nonetheless, in the 1980s and 1990s, most economists and business strategists working on IB issues continued to concentrate on the implications of new technological and information-related developments for the resources and capabilities of MNEs, and the markets served by them.

At the same time, there have always been important strands of IB research that should be considered institutional. Primary among these is the theory of internalisation, which is based on transaction cost reasoning at the firm level. Other scholars have engaged in work that has been concerned with institutional issues, although it may not have been labelled as such, and where the role of institutions has not been the objective of the research. At the national level of analysis, these have included scholars working in international relations and international political economy dealing with government–firm bargaining relationships and issues related to extra-territoriality, such as Eden and Potter (1993), Kobrin (2001a), Eden and Molot (2002) and Grosse (2005b), as well as in business history, such as Wilkins (2001, 2004) and Jones (2000, 2004). At the level of the firm, scholars interested in the role of culture, and the sociological analysis of culturally related patterns of organising work, such as Kogut (1992, 1993) and Westney (1993, 2001), have similarly helped pave the way towards introducing institutional considerations into the mainstream of theorising. Here we might also include at least a subset of the numerous studies on culture, building on the work of Hofstede (1980, 2001), as reviewed by Graham (2001), Leung et al. (2005)169 and Kirkman et al. (2006).

Then in the 1990s and 2000s, the focus of attention has begun to shift in the writing of both management scholars and IB economists, towards the role of institutional and relational assets in their theoretical as well as empirical work (Mudambi and Navarra, 2002; Sethi et al., 2002; Henisz, 2003; Maitland and Nicholas, 2003; Mudambi et al., 2003; Peng, 2003).170

Within the business and management literature, firm-level institutional analysis has frequently drawn on the framework of Scott (1995 [2001]) which identified three types of institutions – the normative, regulative and cultural-cognitive – that rest on different understandings of the essential role of institutions prevalent in different disciplines, and that employ different methods of enforcement. Another typology frequently employed by management scholars is that of DiMaggio and Powell (1983) who identified three mechanisms for institutional diffusion, namely coercive, normative and mimetic, that could be mapped to the types identified by Scott.171 Of these, the influence of mimetic pressures has particularly attracted the attention of scholars in their analyses of why firms would choose to adopt practices or structures that are similar to those that prevail in the human or physical environment in which they operate.172

In this vein, of particular interest to IB scholars has been the way in which MNE affiliates seek to gain legitimacy, both in the eyes of their parent companies, and within the context of the values and institutions of the host countries in which they operate. This research, often framed in terms of institutional distance (Kostova, 1999), has begun to reveal interesting insights about the differences in incentive structures and enforcement mechanisms, and their influence both on the location of MNE affiliates, and on their motivation and conduct (Kostova and Zaheer, 1999; Kostova and Roth, 2002). Another area where the concept of institutional distance has been applied is in the context of the transfer of particular O-specific advantages (including organisational practices) to
subsidiaries (Guler et al., 2002). Finally, firm-level institutional variables have been used to explain the interaction between locational choice and entry mode of MNEs (Xu and Shenkar, 2002), and to explore the effects of imitation on their entry choice (Davis et al., 2000; Chang and Rosenzweig, 2001; Lu, 2002; Guillén, 2003).

Several IB scholars have also considered the role of both firm- and country-level institutions in affecting MNE behaviour and entry mode (Meyer, 2001a; Yiu and Makino, 2002; Delios and Henisz, 2000, 2003). Our own thinking on the subject has evolved from an exploration of the ‘relational’ capital of the firm as examined in Dunning (2002b, 2004c), to attempts to incorporate institutional variables into the OLI framework as they influence MNE activity in developing countries and countries in transition (Dunning, 2005a, 2006c). The latter work has also been influenced by the analysis of national-level institutions presented by Dennis Rondinelli (2005). In his contributions, Rondinelli has explored the characteristics of seven kinds of national institutions: those of economic adjustment and stabilisation; those which help affect economic motivation; those directed to the protection of private property; those which promote freedom of enterprise; those which set rules and offer corporate or societal guidance; those promoting competition; and those promoting equity among the stakeholders of society, and access to opportunity. We return to the importance of macro-level institutions in Chapter 10.

It is apparent that in the IB literature, the micro- and macro-level analyses have drawn from very different institutional traditions. We would argue that in order to better understand the determinants of MNE activity as well as its effects, we need to be able to simultaneously consider the institutional influences inside the firm, as well as those between the firm and the external environment in which it operates. To achieve a unified framework within which to accommodate both firm- and country-specific considerations, we have chosen to use and to extend the analysis of Douglass North (1990, 1994, 2005). His analysis, while seemingly at the macro level, has strong microeconomic foundations, which we believe may be used to extend the analysis to the firm level. While we are not suggesting that adopting the Northian framework is the only way to reconcile firm- and national-level analyses, we do believe that employing one consistent definition and approach is desirable if one is to effectively highlight the importance of the interdependence between the two levels.

A second factor that emerges from our reading of the received literature is that even as analyses employing a resource-based view of the firm have become very popular, they have rarely explicitly considered how and why resources and capabilities were created or exploited. While IB scholars have taken these elements on board in discussing the outcomes in strategy and policy, to the best of our knowledge, none of the work to date (March 2007) has addressed the importance of changing values and belief systems on the input side, and of how these help to reshape the institutions which influence strategy and policies. While the relevance of a firm’s strategic intent and implementation is well highlighted in the literature, the factors that influence the formation of strategy and its implementation have received much less attention, and the belief systems underpinning that strategy none at all.

The same applies largely to the location (L) attractions of countries, where until recently much of the discussion has ignored the institutional context, and the ways in which a country’s institutions might be influenced by the presence of MNEs and/or their affiliates. As already mentioned, the discussion concerning the internalisation factor
has always been more institutionally orientated, as it relates to the costs and benefits of alternative modes of governance. Even here, however, the dynamics of firm-specific coordination costs has remained underexplored.

The network structure of the modern MNE has resulted in more attention being paid to the human environment, and the preconditions for successful cross-border linkages. The practice of such values as trust, reciprocity, honesty, forbearance and integrity, are all affecting, and being affected by, the institutional framework of society. The presence or absence of such values is also critical to achieving the goals of both firms and countries. At one time, the moral underpinnings of the market were assumed to be an endemic feature of (perfect) markets. This is no longer a valid assumption in our contemporary age, in which there is so much market failure (for example, in respect of uncertainties, information asymmetries and volatility). With the MNE playing such a critical role in affecting the character and content of both domestic and cross-border markets, we believe that it is time to focus some scholarly attention on the role of both formal and informal institutions in affecting both the determinants and the effects of MNE activity.

5.4 INCORPORATING INSTITUTIONS INTO THE OLI PARADIGM

5.4.1 Institutions Defined

The definition of institutions we have adopted draws on the work of Douglass North (1990, 1994, 2005) who, perhaps more than any other scholar, has advanced our understanding on institutions at the macro level. North defines institutions as formal rules (for example, constitutions, laws and regulations) and informal constraints (norms of behaviour, conventions and self-imposed codes of conduct). Institutions (and their enforcement mechanisms) set the ‘rules of the game’, which organisations, in pursuit of their own learning and resource allocative goals, must follow. An institutional system is complete only when both formal and informal institutions are taken into account. Although we draw on both, we prefer North’s analysis to that of Williamson (1985, 2000), as the latter primarily takes on an organisational/economic view on institutions which, we believe, is narrower, and does not deal with motivational and belief system issues. We shall also extend North’s views and arguments to give them a micro-level relevance, which will allow us to explore the interdependence between firm and national-level institutions.

The study of the formal institutions thought to influence economic activity and growth at the national level has thrown up some curious puzzles. The broadly convergent economic performance of developed economies, which reflect a wide range of incentive structures and enforcement mechanisms, would seem to suggest that many different institutional configurations can produce broadly similar results. Alternatively, it might be that particular institutions are required for the efficient (and socially responsible) production of particular goods and services (Amable, 2003), while others simply represent (economic) inconsequential variety. However, the difficulty lies in being able to tell one kind from the other. At the same time, the gap in the economic performance of many developed and developing countries has persisted through decades (with some notable exceptions, particularly in Asia). Since the formal institutions underpinning modern
economies, including the structure of the legal system, the design of financial institutions, and the system of intellectual property rights, have been copied in many developing countries, why has their performance not improved over time? The answer suggested by North, and largely confirmed by empirical research, is that an institutional system is complete only when both formal and informal institutions are taken into account. Countries that perform poorly do so because the informal institutions including values, norms and belief systems do not support economic activity in a manner that is compatible with global capitalism.

Like Adam Smith, North has a clearly articulated theory of human nature that underpins his analysis. His is a model based on the cognitive limitations of the individual, and the consequent influences that both informal and formal institutions may have on his or her motivations and actions. People devise and implement institutions that are effective in meeting their needs and aspirations, and that economise on their need to process information. However, there is no guarantee that the institutions so devised are efficient from an economic perspective, or even broadly desirable from a societal perspective. Institutional change is a path-dependent process, and there are considerable transaction costs in changing the existing structure, as both individuals and organisations tend to embrace changes in their environment with great caution. Furthermore, any set of institutions is always a combination of elements that both promote and hinder the upgrading of existing resources and capabilities. Consequently, even in countries where efficient institutions tend to outnumber inefficient ones, institutional change is never guaranteed to produce the kinds of results it is intended to do (Eggertsson, 2005). Partly the reason for this is what North (2005:19) calls the non-ergodic nature of much of the contemporary world, which means that uncertainty is extremely difficult to measure or deal with, let alone overcome, by reference to past events, information and intentions. This poses particular challenges for countries with predominantly undeveloped institutions, as institutional change is even less likely to bring about the intended results.

What then accounts for the dynamics of change in institutional settings? The conventional economic explanation is attributed to changes in relative prices. The fundamental economic condition of scarcity leads to competition, which acts as an incentive to innovation and learning, and to devising better institutions. But this does not account for all of institutional change, and according to North, the primary stumbling blocks lie in two directions. First the resistance of vested and dominant interests to change, and second the informal institutions, especially social mores and traditions. Such a ‘bottom-up’ theory of institutional change implies that anything that is likely to influence individual decision making, such as education and belief systems, is also likely to affect the choice of institutions, and consequently the path of economic growth (North, 2005; Nelson, 2006).

In its emphasis on culture as the method by which beliefs, values and norms are transmitted through generations and across space, North’s argument is, of course, reminiscent of Weber’s (1920) analysis of the connection between the protestant work ethic and the growth of capitalism, as well as other more recent studies linking the role of national culture to economic growth (Jones, 1995; Gray, 1996; Casson and Godley, 2000). However, of these, North is the only one to offer a general and complete theory that connects the motives and actions of micro-level actors – be they individuals or firms – to patterns of economic growth at the macro level without being specific to time or place. Among IB scholars, the work of Mark Casson (1982a, 1993, 1997) on the influence of
national culture on economic growth comes closest to North’s ideas, if not to his methodology. Casson looks specifically at the role of trust versus monitoring in influencing entrepreneurial activity, but approaches this from a strict rational action perspective. Although not explicitly inspired by North, this work shares the same ‘bottom-up’ logic by building a theory of IB activity that rests on the information processing of the individual entrepreneur.182

We think that there is no reason why this kind of institutional reasoning should not be extended to analysing the motivations and behaviour of the MNE. This kind of reasoning would embrace the rules and norms that govern relationships within the MNE, and those between the MNE and its external stakeholders, including its suppliers, customers and community groups. In our understanding, institutions are, by their nature, restrictive in that they close off courses of action that otherwise would be available, by making them excessively costly, or reducing their value. At the same time, institutions do not simply impose constraints on the actions of firms: they may also affect the cognition of managers, and condition the possible behavioural paths that an MNE might pursue.183 Importantly, we also believe that, in some circumstances, MNEs may have the ability to alter the formal or informal incentive structures that affect their actions.

Conceived in this way, the design and implementation of incentive structures and enforcement mechanisms may be seen to affect all three parts of the eclectic paradigm. The most direct link is between the burgeoning literature in economics of the importance of institutions in explaining national-level economic growth, and the L advantages in the OLI paradigm. The internalisation factor (I) is already institutionalised at the micro level, although it largely confines its attention to comparing the static (or comparative static) efficiency of different forms of organising transactions. Of the three components of the OLI paradigm, the O-specific advantages are thus the most difficult, as well as the most critical, to deal with. The O advantages require us to examine the extent to which it is possible to describe institutions (formal and informal) at the level of the firm, and the advantages derived from them (Oi), and then to distinguish these from the asset (Oa) and transaction (Ot) based advantages identified in the received literature (for example, Dunning, 2004b). Finally, all three factors will need to be considered in a developing or dynamic setting. Thus, for example, we might expect the Oa and Oi in time ‘t’ to influence I, or mode of entry, and the L advantages of alternative locations. In time ‘t + 1’, the L advantages of the operating locations might influence the O advantages of the investing MNE. We shall now consider each component of our explanatory framework in turn.

5.4.2 Ownership-specific Advantages

As stated in Chapter 4, the asset-based advantages (Oa) of the MNE include the know-how related to production management, organisational systems, innovatory capacity, organisation of work and so on.184 Consequently, one way to deal with institutions within the OLI paradigm would be to subsume them under Oa as another form of organisational know-how.185 While there are reasons to recommend this approach, parsimony being a primary one, we do not believe that it is adequate to deal with the issues posed here. While incentive structures, both internal and external to the firm, may affect the extent to which and the ways in which particular inputs are converted into particular outputs, we believe that they are not just another resource or capability. In this subsection, we seek to explain
why institutional advantages should be separated from other O advantages, and what such advantages might comprise.

The need to separate Oa- and Oi-specific advantages
While they share many similarities, an important difference between the resources, capabilities and markets available to and organised by firms, and institutional advantages, has to do with the origins of Oa and Oi. While some components of Oi are reflected in firm-specific norms, values and enforcement mechanisms sometimes labelled ‘corporate culture’, others are more influenced by the norms and values external to the firm, and particularly that of the human environment in which the firms conduct their activities. The development of both Oa and Oi advantages is subject to changes in external demand and tastes. But while in the former case, changes are directly related to the product or service, that of the latter is influenced by shifts in values, perceptions and behavioural mores, which may or may not directly relate to the range of products or services the firm offers. For example, a recent ideological shift that has directly affected the goods and services supplied by firms is the open source movement, which has emphasised the value of maintaining a ‘knowledge commons’ to encourage innovation (von Hippel and von Krogh, 2003). This can be contrasted with the strategies of many large information and communication technology (ICT) and pharmaceutical firms, which have focused on extending the boundaries of private knowledge through extensions to intellectual property rights (IPR) law (Weber, 2006).

Finally, while the asset advantages (Oa) of a firm can be enhanced and regenerated, for example, by the R&D function, we currently know very little of the mechanisms whereby a firm might add to or restructure its institutional advantages. Indeed, Nelson (2005) puts great weight on the argument that while progress in ‘hard’ technology boils down to developing adequate isolating mechanisms (for example, physical technology protected from vibration or dust) that allow for experimental conditions to be extended to production, a social environment is difficult or impossible to isolate, making institutional innovation inherently more complex.

In searching for an example where the influence of Oi is most apparent, we might go back to the capitalism of the 19th century, when powerful industrialists such as William Lever created industrial empires and communities such as ‘Port Sunlight’, which strongly reflected the values and beliefs of their founders. A less stark modern-day equivalent of this model is found in firms with an empathetic corporate culture and an identifiable mission or vision. An important reason why organisations would need strong and effective institutions is to influence how decisions are made in situations when the degree of discretion in decision making is growing. As the goals of society have become more multifaceted, and as the complexity, volatility and uncertainty in the operating environment increases, more and more decisions must be made based on discretion, instead of routines or established procedures.

Another way in which firms today are challenged to reveal their institutional and cultural underpinnings is reflected in the increasing monitoring and reporting on corporate social responsibility (CSR). A strict interpretation of a ‘business case’ for social responsibility would suggest that socially desirable investments are consistent with the objective of shareholder value maximisation only when they can be shown to pay off in financial terms. A more relaxed interpretation would suggest that the level of CSR can be set high or low, depending on the form and extent of stakeholder influence, but that, for
a given level of social performance, well-managed firms reach a lower long-term cost of compliance. From an institutional perspective, one would expect that financially successful firms would have both the resources and the coordinating mechanisms (Oa and Ot), as well as the cognition and motivation (Oi), to behave in a socially more responsible manner. Since stakeholders often present firms with a range of conflicting demands, we would suggest that a firm with strong institutional assets (Oi) is likely to have a better sense of what is and what is not consistent with its own resources, capabilities and social objectives. Furthermore, while integrating CSR issues into every aspect of how a business is run is likely to yield the best performance both economically and socially, the more the issues of social responsibility became entangled with business strategy, the less tractable and transparent they are likely to be to outside observers. This again makes it imperative to investigate what kinds of motivations and belief systems underlie and influence Oi.

Indeed, compared to the situation faced by the patriarchal mill owners of the 19th century, in modern organisations it is possible, and indeed necessary, for the corporate values and beliefs to reflect not just the personal beliefs of the people at the top of the organisation, but also those of a cross-section of the relevant stakeholders. It is also clear that changes in the values and beliefs of individuals or organisations external to the firm (for example, NGOs) have a more immediate impact, and need to be considered in a strategic sense, much more than they were in Victorian times.

In addition to making a difference in how Oa and Oi advantages are created, accessed and developed within the firm, Oi advantages are of growing importance in understanding the effects of MNE activity from a home or host country perspective. Like all forms of resource and knowledge transfer, those of Oa and Oi include both intentional transfer of practices and institutions, as well as unintentional ‘spillage’ to other firms. Although innovation in a social (as opposed to technological) context is difficult, and there are limits to how far best practices can be copied and absorbed, MNEs are unique in engaging in such cross-border transfers on a continuous basis. If we accept that different incentive structures can be functionally equivalent, the numerous transfers that take place within the internal and external MNE networks, provide a robust context for experimentation and the creation of new institutions.

As we have already noted, neoclassical economists assumed single motivations and goals of firms, and of the institutional mechanisms directed to achieving these goals. Moreover, in conditions of perfect competition there is no strategic choice, no uncertainty, and no ability to earn economic rents. In the contemporary global economy, the goals of economic activity are becoming more multifaceted, with stakeholder capitalism partly replacing shareholder capitalism, with the role of non-market actors becoming more prominent, and uncertainty, volatility and complexity leading to imperfect markets and a widening of strategic choice. Hence the motivating forces influencing the conduct of firms towards the creation, absorption and deployment of resources and capabilities (and the rewards emanating from them), have become critical in determining a firm’s success. While in extant theories Oi advantages may well be built into Oa and Ot, we believe that because of the characteristics of our contemporary human environment, there is merit in separating these former advantages, and considering them as an influencing factor on the ways in which firms create new or utilise more effectively their existing resources, capabilities and markets.
Examples of Oi advantages

What, then, are these institutional advantages? The Oi comprise the incentive structure, which is specific to a particular firm. At any given moment of time, such an incentive structure comprises a galaxy of internally generated and externally imposed incentives, regulations and norms, each of which may affect all areas of managerial decision taking, the attitudes and behaviour of the firm’s stakeholders, and how each of these relates to the goals and aspirations of other economic and political actors in the wealth-creating process. Such an incentive structure may be formal or informal (in the Northian sense) and backed up by the firm’s own enforcement mechanisms. Table 5.1 sets out some examples of different kinds of institutional assets.

The composition and strength of the Oi advantages of firms is likely to be strongly contextual. In particular, it is likely to reflect the character of the macro-institutional infrastructure of the country or countries in which they operate. The extent and ways in which the internal incentive structure of MNEs, or potential MNEs, of a particular nationality take on board these institutions, and adapt them to their own particular requirements, is likely to be an important ingredient of the content and quality of the former’s resources and capabilities. For example, an ethnocentric approach to the institutional management of an MNE’s foreign affiliates which are located in very different cultural or political regimes from that of the investing country is less likely to generate a different set of Oi advantages from that of a geocentric approach which externalises the distinctive incentive structures of an MNE most useful for organising its cross-border operations.

The institutional portfolio of MNEs is also likely to vary according to the kind of value activities carried out by them and their affiliates, and the raison d’être for these activities. Thus the ‘rules of the game’ and enforcement mechanisms to stimulate cost-effective innovative activities – particularly where the latter are jointly undertaken with another firm – are likely to be very different from those underpinning the conduct of both home- and foreign-based personnel managers in their human resource strategies, or those of purchasing managers in setting standards for the employment practices and safety procedures of their subcontractors, or those of marketing managers in ensuring acceptable quality control procedures from their local distributors.

With respect to the motives for MNE activity, it seems likely that some kinds of strategic asset-seeking FDI are designed to gain access not only to foreign resources, capabilities and markets, but also to firm- or country-specific institutions. Particularly, this is likely to be the case where the economic structure and business and social culture in the home and host countries is markedly different. Adaptations to the home-based Oi assets of market-seeking MNEs – and particularly of those with the least experience of foreign markets – may also need to take account of differences in consumer preferences and behaviour; while the incentive structures underpinning efficiency-seeking FDI – particularly in (and between) low labour cost developing countries may require modifying because of the different expectations, requirements and values of individual workers and/or labour unions. Lastly, the reconciliation of country-specific institutional differences is likely to play a less significant role in the case of natural resource or capital-intensive MNEs which involve relatively few and fairly straightforward production processes and transactions, than in that of knowledge-intensive MNEs which operate within complex networks of human interaction.
Table 5.1  Incorporating institutional assets into the eclectic paradigm

<table>
<thead>
<tr>
<th>Institutions</th>
<th>O: Organisational / governance</th>
<th>L: Social capital</th>
<th>I: Relational</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formal</strong></td>
<td>Legislation, regulations</td>
<td>Laws, regulations</td>
<td>Contracts (both inter- and intra-firm)</td>
</tr>
<tr>
<td></td>
<td>Discipline of economic markets</td>
<td>Discipline of political markets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Command/hierarchical</td>
<td>Rules-based incentives</td>
<td></td>
</tr>
<tr>
<td><strong>Informal</strong></td>
<td>Codes, norms</td>
<td>Religion, social customs, traditions</td>
<td>Covenants, codes, trust-based relations (both inter- and intra-firm)</td>
</tr>
<tr>
<td></td>
<td>Country/corporate culture</td>
<td>NGOs-as institutional reshapers</td>
<td>Institution-building through networks/clusters of firms</td>
</tr>
<tr>
<td></td>
<td>Moral ecology of individuals</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Enforcement mechanisms</strong></td>
<td>Sanctions, penalties</td>
<td>Sanctions, penalties</td>
<td>Penalties for breaking contracts</td>
</tr>
<tr>
<td><strong>Formal</strong></td>
<td>Taxes, incentives</td>
<td>Quality of public organisations</td>
<td>Strikes, lock-outs, high labour turnover</td>
</tr>
<tr>
<td></td>
<td>Stakeholder action (consumers, investors, labour unions)</td>
<td>Education (in shaping and implementing institutions)</td>
<td>Education, training</td>
</tr>
<tr>
<td><strong>Informal</strong></td>
<td>Moral suasion</td>
<td>Religion</td>
<td>No repeat transactions</td>
</tr>
<tr>
<td></td>
<td>Loss or gain of status/recognition</td>
<td>Guilt, shame</td>
<td>Guilt, shame</td>
</tr>
<tr>
<td></td>
<td>Retaliation</td>
<td>Demonstrations, active participation in policy-making organisations (bottom-up influence)</td>
<td>External economies/diseconomies arising from networks/alliances, e.g. learning benefits</td>
</tr>
<tr>
<td></td>
<td>Build-up/decline of trust</td>
<td>Moral suasion (top-down influence on institutions, organisations and individuals)</td>
<td>Blackballing</td>
</tr>
<tr>
<td></td>
<td>Blackballing</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Institutional dysfunction</strong></td>
<td>Dishonest accounting practices, fraud and other corporate abuses</td>
<td>Crime, corruption, flaws in justice system, breakdown in communities/personal relations</td>
<td>Lack of good intra- or inter-corporate relations; failure of alliances/codes; lack of transparency/accountability</td>
</tr>
</tbody>
</table>
What evidence is there in the literature of the importance of Oi advantages? Since the latter have not been considered separately from different forms of technology and other O-specific assets, it is not possible to answer this question directly. In subsequent chapters in this volume, we shall try and highlight the institutional aspect of MNE activity in the light of existing evidence. Overall, we have identified three broad areas of research within which illustrative examples can be found. These are first, the cross-border transfer of institutional practices; second, instances where the Oi of firms influence, or are influenced by, the L advantages of countries; and third, where the Oi advantages of firms influence their mode of entry or degree of internalisation of markets. The first of the three cases will be discussed here, the other two in subsequent subsections.

Historical examples concerning the transfer of organisational practises (Oa with Oi), include the introduction of the multidivisional or M-form of organisation in the US and Europe in the 1920s and 1930s (Chandler, 1990; Kogut and Parkinson, 1998), the transfer of US management models and incentive structures from the US to Europe in the 1950s and 1960s (Kipping and Bjarnar, 1998; Zeitlin and Herrigel, 2000), and the transplantation of Japanese work practices and quality control procedures into the US and Europe in the 1980s. Indeed, as Westney (2001) has noted, it is curious that prior to the study of the Japanese ‘transplants’, there was very little research interest directed at the cross-border transfer of organisational systems, and there is still not very much attention being paid to reverse transfer, or the changes that MNEs are inducing in their home countries as a result of their experiences abroad. A recent exception is that of Ozawa (2005:206), who has examined how US MNEs have contributed to the institutional transformation ongoing in Japan. In his words ‘foreign multinationals which are now eagerly welcomed in Japan to revitalise its corporate business sector are serving as renovators that can remodel Japan’s inner set of institutions more closely in accordance with the norms of the outer set’.192

It also deserves to be noted that, whereas European firms were fairly quick to introduce the mass production methods in automotive and other industries in the early 20th century, it took them much longer to adopt the multidivisional (or M-form) of organisation (Kogut, 1990). It would appear that the transaction costs of overcoming the rigidities of ingrained tradition and business practices are considerably higher than those of replacing ‘hard’ technology or introducing new products. This, indeed, is one of the reasons why we believe that Oi advantages need to be considered as advantages in their own right.

Contemporary examples of transfer and reverse transfer of different regulatory and voluntary standards are more abundant, and it appears that a diverse range of standards is being transferred by MNEs through their affiliate networks.193 These can include standards for quality management processes, such as ISO 9000 (Guler et al., 2002), or environmental management processes, such as Eco-Management and Audit Scheme (EMAS) and ISO 14000 (Christmann and Taylor, 2001). Indirect examples include the dissemination of regulatory standards by MNEs, such as that of elementally chlorine free pulping from Scandinavia to the US (Lundan, 2004a), the diffusion of the arm’s-length standard of transfer pricing within North America (Eden et al., 2001), and the effects of foreign investors on standards of corporate governance in Central and Eastern Europe (Hellman et al., 2002). Recent examples of reverse transfer include the effects of the Sarbanes–Oxley Act194 in the US on the forms of corporate governance adopted by German MNEs in their home country (Hollister, 2005).
Institutional transfer can also involve the cross-border transmission of employment practices, such as the ‘one union’ system imposed by Japanese MNEs on their affiliates in the UK in the 1980s (Dunning, 1986b; Oliver and Wilkinson, 1988), and in the adoption (and adaptation) of workforce diversity policies in some UK affiliates of US MNEs (Ferner et al., 2005). Other institutional changes not solely attributable to MNEs, but often influenced by them, are the importation of an anti-union culture, centred on individual achievement and individual rewards, as well as challenges to the traditional work–life balance, each of which is fashioning a more atomistic (less communitarian) society.

Finally, a special case of institutional diffusion concerns cases that involve no outward or inward MNE activity as such, but where MNEs tap into an aspect of the institutional framework outside of their home country. Here we might think of the evidence presented by Oxelheim and Randøy (2003), who demonstrated that the introduction of Anglo-American members to the governing boards of Swedish and Norwegian companies increased firm value. They attributed this effect to an enhanced corporate reputation and better standards of corporate governance brought about by a more diverse board composition. As financial markets have become more integrated across national borders, seeking a listing or an equity issue on a dominant stock exchange abroad could also be seen as an effort to gain visibility and an enhanced image due to the (perceived or real) higher standards of disclosure (Modén and Oxelheim, 1997). In each of the examples outlined here, Oi is transferred along Oa, although the degree to which the success of such a transfer rests on one or the other attribute is likely to vary.

The global economy connects growing numbers of people and organisations from countries with different institutional legacies; and MNEs are important facilitators of this process. Consequently, we believe that the way in which such firms respond to these institutional differences will be increasingly important for their long-term competitiveness. For example, the particularism and paternalism associated with Chinese family firms (see, for example, Redding, 2001), while perfectly functional in its cultural context, stand in opposition to the transparency, equality and diversity favoured by most American and European firms, not just as means to reach better organisational effectiveness, but as a reflection of wider societal norms. Hybrids of incentive structures that can effectively bridge organisations from different institutional contexts can lower the costs of transacting, but achieving this in the social (human) environment, rather than in the physical (technological) environment, as has been customary, is likely to prove challenging.

5.4.3 Locational Factors

Within the field of economics, institutional analysis has risen to prominence in recent years. Particularly germane to our own interests have been the analyses, in fields as diverse as economic history, public choice, international political economy and international economics, on the importance of institutions and good governance for economic efficiency and growth. The national-level institutions are more readily identifiable (though not always easily measurable) than their firm-specific counterparts, and thus ample evidence exists of the role of institutions, though little has been said on the role of MNEs in affecting these institutions.

In a widely cited study, Rodrik et al. (2002) set out to compare three rival sets of determinants of economic growth, composed of geographical measures (climate, natural
resources, disease burden and transportation costs), the role of economic openness and international trade, and the role of institutions (property rights, the rule of law and social infrastructure). The authors came to the conclusion that institutions ‘trumped’ everything else: in other words, once institutional quality was controlled for, economic integration had no direct effect on income levels, and geography had weak effects at best. Another group of scholars have estimated that three-quarters of the income gap between the top and bottom of the world income distribution might be explained by differences in their institutions (Acemoglu et al., 2001). Other research has emphasised the fundamental role of human capital in economic growth, arguing that the upgrading of human capital (through education) enables growth, which in turn enables institutional upgrading (Glaeser et al., 2004).

We believe that institutions and the values and belief systems underpinning them are playing an increasingly important role in the L attractions of countries in a world in which many Oa advantages are becoming increasingly available, and can be more easily transferred between countries than in the past. Whether the Oa of MNEs can be successfully absorbed or built upon by the transferring entities rests essentially on the content and quality of L-specific institutions, particularly as the goals of countries have widened to embrace environmental, security and other ‘quality of life’ concerns (Dunning, 2006c). While some country-specific institutions are directed specifically to encouraging inward or outward FDI, others are more general, but nonetheless critical to the contribution of MNE activity to economic welfare. We would argue that globalisation is compelling a reexamination of both the formal and informal institutional infrastructure of different home and host economies, not least because its form and content is becoming an L advantage (or disadvantage) in its own right.

Like the Oi advantages of firms, the institutionally related location advantages of countries (Li) are likely to be highly situational, and to differ considerably both between developed and developing countries and among developing countries. As an example of the latter, over most of the 1970s, 1980s and early 1990s, the incentive structures and enforcement mechanisms of most East Asian countries were much more conducive to promoting the creation and usage of their resources, capabilities and markets, and to advancing their development goals than those of most Latin American and virtually all sub-Saharan African countries. The balance between top-down and bottom-up incentive structures, and that between obligatory and voluntary enforcement mechanisms, is also likely to be a strongly country-specific Li variable. Particularly difficult to identify is the range of informal institutions in a particular country. The concept of social capital has been used in the literature as a measure of the quality of the informal institutions in a society. It has been defined as ‘the web of cooperative relationships between citizens that facilitates resolution of collective action problems’ (Brehm and Rahn, 1997: 999). Civic norms enforced either internally (through guilt) or externally (via shame and ostracism) encourage people to cooperate in situations that proximate the well-known prisoner’s dilemma.

If North and Nelson are right in averring that differences in the incentive structures and enforcement mechanisms between countries are a critical factor in explaining their differential growth rates and development paths, and pari passu as an important determinant of FDI, it follows that the extent, form and quality of a country’s incentive structures, and its upgrading (as it affects each and every individual and organisation involved in the wealth-creating process) are likely to seriously impact on the quantity and quality
of inbound – and for that matter outbound – MNE activity. Chapter 10 presents a more extensive discussion of the kinds of institutions necessary for inbound and outbound MNE activity, and their impact on economic growth and development.

If institutional evolution is seen as a process that is path dependent, slow changing and uncertain, one would expect experimentation to play an important role in improving institutions. As a consequence of such experimentation, one would also expect that institutions that are differently designed, but functionally equivalent, can persist across countries and over time. Seen in this light, cases such as the Chinese dual-track approach to liberalisation, or the inefficiency of the retail sector and lifetime employment practices in Japan, may be seen as robust examples of successful experimentation rather than as signs of failure (Rodrik, 2000b). On the other hand, network ties can turn into crony capitalism, and the Japanese model, which had many unique institutional features that contributed to the growth of the Japanese economy between the mid-1980s and mid-1990s, saw some of the same features turn into liabilities over the past decade (Florida and Kenney, 1994b; Ozawa, 2003).

Insights drawn from both the transition economies of Central and Eastern Europe, as well as from the experiences of the East Asian NICs, have resulted in a fairly convergent set of institutionally related goals and policies that a government should adopt to enable successful economic restructuring and growth (Rondinelli and Behrman, 2000). These include sound macroeconomic policies, institutions to secure property and contract rights, policies to enhance competition, oversight of financial institutions, policies to increase social cohesion, policies to secure participation in the political system and transparency and accountability in government. Which particular institutional form such policies take will depend on the country-specific variables, but the overall importance of institutions in determining economic restructuring and growth has become increasingly clear in the light of growing empirical evidence. Subsequent to applying the new blueprints, change in the formal institutions of a country can occur quite rapidly, as was the case with the shock therapy applied in Russia, but the change is likely to be successful only if the underlying informal institutions have also had time to change.

In addition to recognising that a functioning economy needs well-defined property rights, and a system of law with credible enforcement, a critical part of North’s argument is that the informal norms and values in society not only affect which functional form different institutions will take, but also condition the institutional evolution that will occur in that society. Indeed, studies on Central and Eastern Europe have been particularly illustrative of the fact that culture is not a constant, and that change in both the formal and informal institutions is necessary for economic growth to be realised (Meyer and Peng, 2005).

National-level institutions affect the attractiveness of a given country both as a host and home to MNE activity. The combination of formal and informal institutions influences the kinds of Oa and Oi advantages firms are likely to develop; and as we have already seen, national-level institutions are also shaped by the activities of indigenous and foreign MNEs. When looked at from a host country perspective, what, then, is the evidence that institutions, both formal and informal, affect either a country’s ability to attract FDI, or the benefits it can derive from it? On the latter question there is, as yet, little evidence available, but one example of a case where the institutional L advantages appears to have influenced the strategies of inward investors is provided by Chen et al.
(2004), who found that Taiwanese firms were more likely to form linkages with local firms in the US than in South-East Asia or China. Primarily, they argued, this was due to the presence of more desirable strategic and knowledge resources in the US, but the authors also emphasised the role of a ‘friendly’ networking environment in encouraging linkages in the host country.

On the first issue, cross-sectional studies on the effects of good and bad governance have generally confirmed that countries with good governance attract the most FDI (Henisz, 2000; Stein and Daude, 2001; Globerman and Shapiro, 2002), and that strong property rights protection generally has a marked positive effect on the flows of FDI (Li and Resnick, 2003). Studies employing panel data, which enable an analysis of the time dimension, have also begun to offer more evidence of the effects of changes in the institutional structure, such as in the tightening of an IPR regime, and how this affects the investment decisions of MNEs (Smarzynska Javorcik, 2004a; Branstetter et al., 2005). As regards the influence of bad governance, two specific issues, namely corruption and environmental pollution, have been examined in the literature. These studies confirm that bad governance (endemic corruption, poor environmental protection) repels rather than attracts inbound FDI (OECD, 1999; Wei, 2000; Zhao et al., 2003; Habib and Zurawicki, 2002). These and other studies are examined in more detail in Chapter 10.

While scholars have also considered the influence of home country institutions on the strategies of MNEs (for example, Pauly and Reich, 1997; Amable, 2000), such analyses have tended to overlook the dynamic upgrading of the institutional advantages of countries, and their impact on both indigenous and foreign MNEs. However, a few recent studies have taken the home country view, and have begun to examine the interplay between national-level institutions (both formal and informal) and firm strategies, particularly related to decisions of corporate scope or diversification. The first study, by Kogut et al. (2002) examined whether there were commonly agreed-upon technical and market-related arguments that would compel firms to adopt similar strategies of diversification, regardless of their national origin, or whether industrial diversification was a more likely strategy for firms from one home country as opposed to another. They analysed the diversification patterns of large firms from France, Germany, Japan, the UK and the US, and found no common patterns of diversification across countries. In a related theoretical contribution, Peng et al. (2005) examined how institutional change (both formal and informal) might change the parameters of feasible behaviour for all firms in an economy, specifically in respect of their patterns of industrial diversification.

5.4.4 Internalisation Factors

The internalisation factor (I) of the OLI paradigm explains the firm’s propensity to internalise market failure. As we have already stated, a great deal of the received wisdom on I is directly or indirectly institutional in its approach. This is because it is directed at assessing the costs and benefits of alternative modes of exploiting and accessing O-specific advantages, however these are determined.

As we indicated in the beginning of this chapter, embracing an institutional perspective has led us to consider the MNE as a system of value-added activities and transactions of both an inter- and an intra-firm nature. The question then arises: under what conditions is it best to engage in intra- or inter-firm value-added activities and transactions? Here we
believe that institutions play a major role in determining the complementarity or substitutability of the different modes, which essentially represent different combinations of two fundamentally different mechanisms: coordination by prices over the market, and coordination by behaviour constraints within the hierarchy.

Furthermore, while transaction cost economics can determine what kinds of market are most likely to be internalised, it cannot indicate what types of firm will internalise what kind of market failure. Our contention is that to answer the latter question requires an explanation that rests on both the Oa and the Oi of a firm. Rather than equate ownership with internalisation, we think it is better understood as a reflection of the sum total of the make-or-buy decisions made by the firm. The MNE is thus best considered as a collection of activities, both internal and external to the ownership boundary of the firm, that are controlled and coordinated by it. The costs of motivating agents within the firm, even if lower than the costs of transacting in the marketplace, are dependent on the incentive structures and enforcement mechanisms devised and implemented by the firm, and thus the formal and informal institutions therein.

How do Oi advantages then influence I advantages? At the one extreme (for example, in some kinds of asset-seeking FDI) the incentive structures of the investing company or country may be totally inappropriate for it to impose on its foreign affiliates. The choice then is either to adapt its home-based (or global) incentive structures, or to engage in some kind of partnership with a local firm, so that the (other) O advantages transferred and combined with the resources of the partner firm may be effectively deployed. The latter organisational form is likely to be most prevalent in the case of firms investing in countries with very different business cultures and/or belief systems (for example, Iran and Germany) or between those at different stages of development (for example, Australia and Sri Lanka). At the same time, if the incentive structures of the investing firm reflect those which are likely to be eventually embraced by the host countries (as now seems to be happening in the case of UK and German FDI in the Baltic states and in Croatia and Slovenia), then the transactions and coordination of value-added activity, at least in the initial stages of its FDI in an unfamiliar country, are more likely to be internalised.

However, as with any form of foreign involvement, much will depend on the host government’s attitude and policy towards the non-resident ownership of its indigenous assets. On the one hand, the liberalisation of markets in the 1990s and the increasing integration of many developing countries into the global economy, for example, via efficiency-seeking FDI, is leading to a harmonisation of intra-firm incentive structures. On the other, the increasing attention now being paid to all aspects of CSR has encouraged some developing countries to renew their earlier attempts to ensure that the conduct and performance of foreign affiliates promotes their particular economic and social needs and objectives. Inter alia, these include the encouragement of foreign affiliates to abide by the formal and informal institutional mores of the host countries, and to respect the values and belief systems underpinning them.

In the IB literature, there have been a number of studies confirming that the institutional content and quality in the host country may affect the mode of entry of the MNE. Several studies, in particular, have recognised the importance of institutions in fostering the development of East Asian economies (Kasper, 1998), and their role in influencing both inward and outward FDI (Mathews, 2006; Peng and Delios, 2006). Other research has examined the choice of entry mode related to institutional quality in Central and Eastern Europe
and Vietnam (Meyer, 2001a; Meyer and Nguyen, 2005), as well as in the EU (Brouthers, 2002). Delios and Henisz (2003) have considered the effects of both organisational capabilities as well as public and private expropriation hazards on the entry mode choice of Japanese MNEs. Moving away from measures of psychic distance, Yiu and Makino (2002) have applied the concept of institutional distance to explain the choice of entry mode in a cross-section of countries. Other scholars have examined the effects of imitation on the mode of entry (Davis et al., 2000; Chang and Rosenzweig, 2001; Lu, 2002; Guillén, 2003). A recent study by Chan et al. (2006) considered the influence of an MNE’s history of prior entry and exit, as well as that of rival firms, at the level of the host country, the global industry, the local industry in the host country, and the parent firm. We would make one final, but, we believe important, point. Most of the research on the internalisation of markets assumes that firms behave in an economically rational way, and in so far as it is considered at all, are able to combat, or at least minimise, uncertainty. However, in a non-ergodic world, and one in which firms pursue multiple changing interests and engage in unfamiliar cultural domains, the efficiency-based transaction cost model may need some modification. In such situations, in order to promote the kind of institutions it believes will best protect or enhance its dynamic Oa and Ot advantages, and minimise the adverse effects of change, firms may need to consider a variety of non-economic (and in that sense, non-rational) elements. Admittedly, this takes us to largely unexplored territory to internalisation scholars, or indeed to any management scholar or economist! But we believe that a joint effort by evolutionary economists, institutional scholars from various disciplines, and IB researchers can take us some way in tackling, and possibly resolving, some of these challenging issues.

5.4.5 Propositions Regarding Institutional Transfer and Change

Putting the three components of the OLI paradigm together, what do we have regarding the significance of institutions in effecting determinants of the extent and pattern of MNE activity? Where is the impact of transfer of Oi most likely to be felt? We have argued two main points in this chapter. The first is that the firm- and national-level analyses on the influence of institutions on MNE behaviour need to be linked and treated holistically. This, we believe, is necessary in order to appreciate the interdependencies between the two levels, that is, how national-level institutions influence firm-level strategy and vice versa. The second one is that the institutional advantages possessed by firms are distinct from the other O-specific assets, including hard and soft technology, that the firms possess.

Based on the preceding discussion on how each element of our paradigm is affected by the inclusion of institutional factors, we conclude by presenting the following four propositions:

\[ P1 \quad \text{The extent to which and the way in which the asset-based coordinating and ownership advantages of the firm are exploited depends on the institutional advantages of the firm. The asset-based and institutional advantages jointly determine the firm’s degree of internalisation. (Oa + Oi \rightarrow I)} \]

\[ P2 \quad \text{The transfer of the asset-based ownership advantages of the MNE occurs in conjunction with the transfer of firm-specific institutional advantages, making the host country a recipient of technological as well as institutional transfer. (Oa + Oi \rightarrow L)} \]
Each of these statements is testable, but testing them requires that, just as previous research uncovered different types of O-specific advantages (Oa and Ot), different types of I advantages (Oi) need to be identified in future research. One way this could be achieved would be by paying closer attention to the norms that govern changes in the behaviour inside firms, as suggested by both the evolutionary and the knowledge-based theories of the firm. In empirical research, employing measures such as the World Values Surveys used by Knack and Keefer (1997) at the national level, or the kinds of cultural measures explored by Fu et al. (2004) at the individual level, offer some indication of how the motivational issues related to MNE behaviour could be tackled more directly than has been the case thus far.

5.5 CONCLUSIONS

We began this chapter with an examination of the changes that needed to be made if our theoretical framework was to successfully accommodate the complexity of the globally integrated network MNE. Rather than equate ownership with internalisation, we now understand it to reflect the sum total of the make-or-buy decisions made by the firm. The MNE is thus best considered as a coordinator of a system of domestic and foreign activities that are controlled and managed by it. Institutions play an important part in determining the complementarity or substitutability of the different modes of coordination.

Institutional analysis at the national level in fields such as economic history, public choice, international political economy and international economics has emphasised the importance of institutions and good governance for economic efficiency and growth. Institutional analysis at the firm level has explored the normative, regulative and cognitive influences on MNE behaviour. Of particular interest to these scholars has been the degree to which mimetic pressures cause firms to adopt similar practices as those that prevail in the human or physical environments in which they operate, and the ways in which MNE affiliates seek to gain legitimacy both in the eyes of their parent companies, and within the context of the values and institutions of the countries in which they operate. We presented the OLI paradigm as a means of exploring and evaluating how macro- or national-level institutions might affect the value-adding opportunities of MNEs, and how the actions of MNEs might affect the content and significance of these institutions over time.

In some ways, aspects of institutional analysis have been present in the existing IB theories for a long time. However, for the reasons we have outlined in this chapter, we feel that it would be fruitful for future scholarship to clearly separate the institutional effects from other influences on the activities and strategies of MNEs. This is partly to do with an
increasing need to accommodate stakeholder considerations in addition to shareholder interests, but it is not limited to issues of social performance. Indeed, an institutional view makes no presumptions about whether the macro or micro institutions that develop are beneficial or not, or whether new institutions will develop at all (North, 2005). Our contention is that formal institutions cannot be studied apart from the motivations and belief systems that underlie them. Static comparisons of institutional forms have ignored the fact that functionally equivalent institutions can take on many different forms, and it is the underlying informal institutions that are likely to determine the sustainable outcomes in the long run. We have also argued that in a dynamic, complex and volatile global economy, the role of both firm- and location-specific institutions in reducing the transaction costs of cross-border value-added and exchange activities is becoming more important.

We believe that the conception of the bundle of assets transferred by MNEs as consisting not just of resources, capabilities and markets, but of institutional advantages as well, will be critical to improving our understanding of what determines the ability and willingness of the MNE to transfer knowledge across borders, and the ability and willingness of the firms and individuals in the host country to appropriate this knowledge. Cross-border business activity provides many opportunities for the creation and exploitation of new institutional forms. While not all such hybrids will be successful, new institutions embodying norms and values that are national, regional or global, of entrepreneurial or established firms, or of individualist or collective cultures, are likely to become increasingly common. So, indeed, are the challenges being posed by the multiple goals of firms and governments that increasingly incorporate diverse non-economic objectives. Consequently, the cross-border activities of firms deserve to be studied not just in terms of the different product–market combinations they bring under one system of governance, but also in terms of the informal institutions they embody. From a managerial point of view, there is potential for efficiency gains or losses from the introduction of new institutional forms. From a policy point of view, the hybrids introduced by domestic and foreign MNEs are likely to play an important role in influencing the dynamics of institutional change at the national level.

We appreciate that this introduces not only a vast new area of unexplored territory, but also a territory that is moving further and further away from the area within which economists and strategic business analysts feel most comfortable, namely, analysing the structures of firms, markets and national economies, and assessing their performance on efficiency-based criteria. Nonetheless, it is our considered opinion that in order to understand the evolution of the global economy, we need to pay more careful and systematic attention to what kinds of goals and motivations underlie firm behaviour, how these differ by country and by industry, and how MNEs transfer and transform such institutions across borders.
6. The emergence and maturing of international production: an historical excursion

6.1 INTRODUCTION

Since the dawn of modern civilisation, individuals, social groups, institutions and governments have always sought to advance their economic prosperity by engaging in three avenues of spatial activity. The first is by the emigration or immigration of people, and particularly of professional, managerial and skilled workers. The second is by trade in assets, goods and services. And the third is by the acquisition or colonisation of new territory. To promote these various activities, it is not long before there is a need for some kind of foreign-owned production. In the case of migration, new settlers may not only bring their savings capital and knowledge with them. Often their translocation is fostered by, or leads to, international investment. In trade, the foreign involvement might take the form of buying or selling agencies, reception, warehousing and storage facilities. At the very least, colonisation requires some resources and capabilities to establish trading outposts or bridgeheads until the settlement becomes self-sufficient. Frequently these basic activities need supportive services, such as banking, insurance and ship maintenance, and before long a rudimentary network of international commercial activities has been established.

Clearly, there are certain prerequisites for any international value-adding activity to occur. These include the perception or knowledge that foreign territories of some economic value exist. The history of FDI is largely the story about the increasing ease of, and motivation for, wealth-producing entities to engage in production and transactions outside their national boundaries. In the following pages we shall describe these developments within the context of the eclectic paradigm set out in the previous chapter. In particular, we shall see that the early cross-border activities of firms were largely dependent, first, on their perceived need and ability (or that of their home countries) to acquire resources or markets beyond their national boundaries; second, on the facilities available for transporting goods, people and information across geographical space, and particularly across water; and third, on the relative costs and benefits of the alternative modalities of undertaking trans-border transactions of intermediate products.

The following sections summarise the main features of international production from the Middle Ages onward, although earlier examples of embryonic MNEs can, most surely, be found in the colonising activities of the Phoenicians and the Romans and, before that, in the more ancient civilisations of the Near and Middle East, China, and perhaps South America. A pioneering attempt to write the history of such enterprises by Moore and Lewis (1999) provides us with a fascinating first glimpse into how our forefathers dealt with
many of the economic issues of their time, and how the institutions supporting economic exchange differed between the Assyrians, the Phoenicians, the Greeks and the Romans.

6.2 COLONISING AND MERCHANT CAPITALISM

Prior to the industrial revolution, most value-adding activities initiated by economic entities – be they the state, private corporations, families or individuals – outside their national boundaries were prompted by three factors. The first was the desire to foster trade and financial activities consistent with the needs of the state or that of individual producers or consumers. The second was to acquire new territories and new forms of wealth. The third was to discover new avenues for the use of domestic savings.

For much of the period from the 13th to the 18th century, the state was directly or indirectly involved in most kinds of overseas ventures. Most transactions were hierarchical or personalised. Neither capital nor intermediate product markets, as we know them today, existed. Such overseas investment as there was, was usually intended to advance the political or strategic goals of the governments of the home countries. It was undertaken primarily by chartered land companies, merchants and wealthy family groups.

Three characteristics of this period are particularly worth noting. First, up to the 19th century at least, it was generally quicker and cheaper to conduct commerce across water than by land. Because of this, the development of export-orientated industries proceeded faster than that of their domestic counterparts (Williams, 1929). To give just one example, the modern factory, based as it is on the contracting-out system, originated in the medieval towns of the Low Countries and Italy, which manufactured goods primarily for export. The second characteristic is that since a lot of trade was between metropolitan countries and their colonies, little or no distinction was made between internal and cross-border transactions; each was organically related to the other. The third characteristic of the period was that migration and investment were handmaidens of each other. Indeed, expatriate investment was one of the most important forms of international commercial activity in the Middle Ages (Cunningham, 1902).

Douglass North (1981, 1985) traces some of the earliest IB ventures to the Commenda, which dominated caravan and maritime trade in Medieval Europe. The Commenda was an arrangement by which a principal investor, or group of investors, entrusted their capital (or merchandise) to an agent, or manager, who then traded with it and returned to the investor his principal and an agreed share of the profits. Much of this commerce involved the transfer of resources across national boundaries. It was conducted by parties who were personally known to, and trusted by, each other, and who came from similar cultures. This, according to North (1985), minimised the need for the formal rules and compliance procedures which characterise impersonal exchanges.

In addition to the Commenda, in the early Middle Ages there were numerous trading firms, based in different parts of Europe, which set up offices and representatives in many of the important cities of the continent. These companies were the ancestors of the 16th- and 17th-century merchant capitalists, and of the modern Japanese and Korean trading companies. They were normally partnerships formed for a short period of time, at the end of which the profits would be distributed and the partnerships dissolved. However, there were two important exceptions. The first was the Hanseatic League, a cross-border trading
The League was, \textit{par excellence}, a 14th-century organiser and promoter of Western European and Levantine commerce. Its particular O-specific advantage was its ability to coordinate and diffuse the use of capital, entrepreneurship and goods throughout Europe. Among its many achievements, it helped to develop various branches of agriculture in Poland, sheep-rearing in England, iron production in Sweden and general industry in Belgium (Williams, 1929).

The second example of an early trading MNE was that of the Merchant Adventurers, a powerful consortium of UK wool and cloth companies which was set up to promote marketing outlets for its members’ goods in the Low Countries. Some of these early merchant adventurers also developed banking services \textit{inter alia} to provide loans and credit for their customers.

Later in the 14th century, the centre of gravity of international commerce switched to Italy. Capitalising on its geographical position between the Western and Eastern hemispheres, this was the time when the hegemony of the Italian banking and trading houses was at its peak. Banking dynasties such as Bardi, Acciauoli and Peruzzi operated branch offices in London, Bruges and Paris. According to one estimate (Hawrylyshyn, 1971), by the end of the 14th century there were 150 Italian banking firms which were truly multinational in their operations. Among the best known of these was the Medici, which dominated the business and political life of Florence. The company had at least eight trading and banking houses scattered throughout Europe (Heaton, 1936). Some of these early ventures also engaged in foreign mining activities. Genoese merchants poured money into Polish salt mines. The Fugger family, which in 1525 was reputed to be the wealthiest company in Europe, invested in silver and mercury mines in Spain and Latin America, and chain stores in most of the larger cities of Europe.

There were several trading and treasure-seeking expeditions by European explorers such as Bartolemew Dias, Vasco da Gama, Ferdinand Magellan and Christopher Columbus in the late 15th and early 16th century. However, emerging (but contested) findings, assembled by Gavin Menzies (2002), suggest that the only foreign colonising ventures of the age were undertaken by the Chinese. At the beginning of the 15th century China was, by far, the most economically and technologically advanced nation in the world. In the interest of furthering its international status, the Emperor at the time – Zhui Di – financed a series of tribute-seeking expeditions between 1421 and 1423 which involved several hundred Chinese ships. It was in the course of such expeditions that several permanent Chinese colonies were established in various parts of the Americas, and possibly too, in Australasia.

According to Menzies, as a result of these expeditions, the Chinese not only pioneered the global propagation of many plants and agricultural products, for example rice and root crops, but may well have engaged in silver and diamond mining in South America, and established a rudimental dyestuffs and lacquered technology industry in Mexico. However, shortly after the sailing of the Chinese fleet in 1421, a series of events occurred in China, as a result of which the country completely cut itself off from the rest of the world for the next three centuries. Had it not been for this climatic change in outlook and policy, China might indeed, have led the globalisation of the world economy well beyond the 15th and 16th centuries.

The 16th and 17th centuries saw new developments in IB. Gradually, as trans-border communications improved and the boundaries of commerce widened to embrace new
institutions and cultures, relations between the trading partners became less personal and began to be based more on formal documentation. Throughout this period, FDI continued to be of two kinds. First and foremost it was intended to support the trading activities of the home countries. This, indeed, was the era of the first major colonising ventures of Western European companies. Unlike their medieval predecessors, however, most of the companies in this era were directly set up or supported by the state and enjoyed its patronage only as long as they advanced its economic and political objectives. Among the best-known trading firms of this period were the British East India Company (chartered in 1600) and the Dutch East India Company (chartered in 1602), both of which became deeply involved in India and the Far East, the Muscovy Company (chartered in 1553), which was formed to pioneer the North East Passage, the Royal African Company (chartered in 1672), and the Hudson’s Bay Company (chartered in 1670), which was one of the first companies to set up a major wholesale trading operation in North America.

Like the Hanseatic League, some of these trading hierarchies also helped to foster foreign value-added activities and, in many respects, may claim to be the progenitors of the modern MNE. The domination by the Hudson’s Bay Company of the production and trading of Canadian furs is one such example. Another is the Dutch East India Company which established a plant in Bengal in 1641 to refine saltpetre and a print works for textiles for 10 years. By 1717, the company was reported to be employing over 4,000 silk spinners in Kaimbazar (Prakash, 1985). In other cases, the initiative was taken by individual entrepreneurs. In 1632, for example, two Dutch merchants – Andrei Vinius and Peter Marselis – established water-powered ironworks, 150 kilometres south of Moscow (McKay, 1970). Both capital and technology were exported from Holland. This venture was followed by others, and by the end of the 19th century almost three-fifths of all large industrial plants in Russia were reputed to be owned by foreign enterprises (ibid.).

The second kind of FDI in this period was to promote colonisation and land development. In the early 17th century, most attention was focused on America, and several companies, for example, the Virginia Company and the Massachusetts Bay Company, helped to settle the Eastern seaboard. Most of these companies originated from England, which, at that time, offered appropriate incentives to emerging international entrepreneurs. Like the trading companies, these colonising ventures soon branched out into other activities. For example, the Massachusetts Bay Company helped to cultivate a New England economy based on fishing, boat-building and simple manufacturing industries, while in Virginia, British capitalists initiated a plantation economy the prosperity of which rested primarily on cotton and tobacco. In both cases, expatriate capital, migrant workers, absentee investors and some direct investment played a critical role. As well documented by Coram (1967) and Wilkins (1989), many of these pre-revolutionary industries were started with European (mainly British) money and technology, machinery and skills. Other chartered companies also helped to colonise other parts of the world, notably in Africa.

Apart from the Middle Eastern trading ventures of the early medieval period, most IB ventures in the preindustrial era originated from the major cities of the Low Countries and England. In addition, two Swiss families – the Jennys and the Blumers – were active in banking and trading ventures in Italy in the 18th century (Wavre, 1988). During the latter part of the period, American colonial merchants also began to set up branch outposts in England and the West Indies (Lewis, 1938).
6.3 THE EARLY 19TH CENTURY: THE FORERUNNERS OF THE MODERN MNE

6.3.1 Introduction

The industrial revolution dramatically changed both the ability and the incentive of firms and countries to engage in trade and colonising activities. The 19th century also led to a massive cross-border movement of people, especially from Europe to North America. Capital, technology, management and entrepreneurship all followed to support and sustain these activities. At the same time, firms were prompted to invest abroad for new reasons, in particular to acquire minerals and raw materials for their domestic industries, and foodstuffs for their population, and to protect or widen their indigenous markets. While the first kind of investment was generally trade creating, rather than trade substituting (except where prior to the investment, the resources were being imported from independent foreign suppliers), the second often reduced trade in as much as the markets were previously serviced by exports. However, both market- and resource-seeking foreign investors aimed to produce goods and services that would advance domestic economic welfare and the colonising policies of metropolitan governments.

The industrial revolution affected both the nature and organisation of the value-added activities of firms. It introduced the factory system and helped to fashion the business enterprise as we know it today. It also dramatically influenced the way corporations were managed, the techniques of production and the range of value-added activities that could be efficiently undertaken by a single hierarchy. It created the demand for new sources of energy and industrial materials. By helping to raise living standards, it also increased the demand for the kinds of food and other products that the temperate industrial countries could not produce, or produce economically. It led to new and more efficient forms of transport, and drastically reduced inter- and intra-firm communication costs. It necessitated changes to the legal and financial status of companies and altered the character of exchange relationships. Personal transactions based upon trust and mutual forbearance were replaced by impersonal incentive structures backed up by legally binding contracts and elaborate monitoring devices (North, 1981; Jones, 1986).

The growth of industrial capitalism also led to more specialisation and division of labour both between and within business enterprises. This, in turn, fostered the roundaboutness of production and a reorganisation of institutional mechanisms wherever the production or exchange of one product yielded costs and benefits to the production or exchange of other products (North, 1999). Embryonic hierarchies began to emerge, although these did not reach maturity until the third quarter of the 19th century (Chandler, 1980).

Finally, the industrial revolution greatly enhanced the role of technological capacity, money capital and human competences in the production process. Unlike natural resources, however, these assets had to be created. Once created, they often became the proprietary rights of the owners (that is, they became specific). They were also potentially mobile across space, opening up the possibility that firms might utilise the human and physical assets they generated or acquired in one country to produce goods and services in another.
Taken together, these events heralded a watershed in the history of international business. The age of merchant capitalism which had dominated international commerce for the previous two centuries was now replaced by an era of industrial capitalism. Although the MNE, as we know it today, did not emerge until later in the 19th century, firms from Europe and North America began to invest in foreign plantations, mines, factories, banking, sales and distribution facilities in large numbers. We can identify three main kinds of FDI in the first half of the 19th century. The following subsections describe the main characteristics of each.

6.3.2 The Individual Entrepreneurs

The era prior to the emergence of managerial capitalism and limited liability was dominated by small firms, often owned and operated by a single entrepreneur or family group. Some of these entrepreneurs were internationally orientated from the start. Among those of US origin identified by Mira Wilkins (1970:17) were: William Wheelwright, who established several businesses in Latin America in the second quarter of the 19th century; Henry Meiggs, who was instrumental in developing a network of transport and communications facilities in Chile; Hiram Walker, who erected a distillery in Windsor, Ontario in the 1850s; and Joseph Dyer, who set up a factory in Manchester, England to manufacture American-designed machinery around 1820.

At the same time, attracted both by market prospects and by generous incentives offered by state legislatures (Wilkins, 1988a), European businessmen were migrating to the US. Like their American counterparts, the European entrepreneurs usually invested only small amounts of capital but considerable amounts of technological expertise and management experience. Since most, and in particular the UK, governments saw the US as a potential industrial competitor, they did their best to discourage this transatlantic export of capital and technology. These efforts were generally unsuccessful, and up to the American Civil War at least, there was a steady migration of skilled workers, innovators and managers across the Atlantic. Entrepreneurs such as Andrew and William Macallum in carpet manufacturing, John Ryle in silk, Thomas Lewis in iron, Peter Ballantine in brewing and the Wright brothers in the umbrella business played a vital role in the development of American manufacturing industry.

English-speaking entrepreneurs such as Charles Baird, a Scottish iron maker, also played a major part in the industrialisation of Russia, particularly in the textile, machinery and railroad equipment industries (McKay, 1970). Among the ventures pursued by British entrepreneurs in Europe in the early 1800s – not all of which were successful – were the establishment of engineering factories by William Cockerill in Belgium (in 1807) and by Aaron Manby near Paris in 1819, and that of a brewery operation by the Scottish distiller John Stein in St Petersburg around 1802 (Corley, 1992).

Inasmuch as many of the early 19th-century entrepreneurs migrated with their capital, the subsequent investment which they made cannot be considered ‘foreign’ or ‘direct’ in the sense that it is defined today. At the same time, in so far as both its motives and its contribution to the economic development of the host country were concerned, it had many of the features of FDI. Thus it may be legitimately viewed as one of the precursors of the modern MNE.
6.3.3 The Finance Capitalists

If the entrepreneurs brought only a small amount of money capital to foreign ventures, the finance capitalists brought little else. It was unusual for them to be involved in the management or organisation of the businesses they funded. Indeed, for most of the 19th century the cross-border trade in financial assets was largely independent of that of technology and entrepreneurship. One exception appears to be the close relationships between French capital exports and entrepreneurship. Rondo Cameron (1961), for example, identified several sizeable French FDIs in Europe and Africa in the first half of the 19th century, which were accompanied by French management and technology.

Britain first began exporting capital on a major scale after the Napoleonic Wars to finance the reconstruction in Europe, followed by an investment boom in Latin America during the 1820s (Rippy, 1959). Much of this capital had been accumulated by UK industrialists and was the result of the first fruits of the industrial revolution. The British government initially supported such foreign investment, but after about 1840, apart from investment directed to the British colonies, it generally adopted a non-interventionist stance (Stopford, 1974:308). By far the greater part of these capital exports prior to 1850 were portfolio rather than direct investment, although in a few cases they were substantial enough to give the investor a voice in the management of the foreign company. For the most part, it was Europe (rather than the US, which, at that time, was a major importer of capital) that supplied the finance, with British mercantile and investment banks playing a leading facilitating role.

Overseas companies financed by European capital were of three kinds. The first were those which raised money – mainly on the London market – from portfolio investors, but then organised its deployment abroad. Often, these were free-standing investments in the sense that, apart from maintaining a small head office in the home country, all the value-added activity was undertaken elsewhere. Mira Wilkins (1988b) suggests that between 1870 and 1914 there were literally thousands of British free-standing companies involved in a diverse range of activities including copper mining in Russia, cattle in the US, railroads in Brazil, mortgage companies in Australia and meat packing in Argentina. Estimates made by Corley (1998) on the extent of issued capital associated with free-standing companies from 15 major source countries show that in 1914, free-standing capital might have accounted for as much as 45% of the total stock of FDI.208

At the same time, at least some of the foreign-owned activities were closely managed by the parent organisation. The main O advantages of this group of foreign investors were their access to the UK capital market and their organisational skills in managing foreign investments. Some of the free-standing investments – particularly in the petroleum industry – were the forerunners of today’s giant MNEs.209 Additionally, much of the free-standing investment seems to have been carried out by colonial powers at a time when colonial investment was often not considered to be ‘foreign’ due to the institutional similarities between the home country and the colonies, and at a time when the home countries were experiencing a capital surplus.

The second type of overseas companies were those set up by local entrepreneurs and managers, but which needed external capital. The main categories of enterprises registered overseas were UK railway, public utility and mining companies, and some continental European-owned railway companies. It has been estimated that there were 2,640
of the former companies registered in 1914; most had only a small head office in London (Houston and Dunning, 1976). They invested their resources mainly in foreign mining and plantation investments. Such firms as Rio Tinto, Consolidated Gold Fields and deBeers were among the most active of these MNEs.210

A third group of overseas investors were the British-based investment groups, which mainly comprised entrepreneurial or family concerns whose names and reputations were used to float a variety of foreign mining, manufacturing and tertiary enterprises. In some respects, these groups fall in between the first two categories of finance capitalists, and certainly many of them would be considered as free-standing investments by Wilkins (1988a). However, they deserve especial mention in that they were the natural descendants of the giant trading conglomerates of the 17th and 18th centuries. Essentially, their task was to facilitate all kinds of UK trade and commerce; frequently, in pursuance of this goal, they engaged in FDI. Typical of such investment groups were Matheson and Co., Jardine Skinner, Finlay and Co., Wallace Bros, Harrisons and Crosfield and E.D. Sassoon and Co., which, between them, owned cotton and jute mills, coffee and tea estates, rubber plantations, shipyards, sugar refineries, copper, diamond and gold mines in India, China and the Far East (Chapman, 1985; Jones, 2000).211 While the foreign activities of some of these mercantile groups were organised from their head offices in the UK, many, like expatriate firms, were often managed by local managing agents. This system was particularly prevalent in India,212 from whence it spread to Iran and Malaysia (Davenport-Hines and Jones, 1989; Tomlinson, 1989).

Nevertheless, most of the investment outside the UK by British firms, at the time, took the form of portfolio capital. During the first half of the 19th century, finance capital poured into Europe and the US to help construct public utilities, canals and railroads. As late as 1850, these activities accounted for more than one-half of UK capital exports (Houston and Dunning, 1976). Other capital was directed to the ‘white’ Dominions and to Latin America, but only rarely did the sizeable investments involve any managerial influence or control.

6.3.4 The Embryonic MNEs

The third kind of foreign investment consisted of that directed to the territorial expansion of a firm’s domestic value-added operations. Such investment included that undertaken by the embryonic manufacturing MNEs. Sometimes they first exported to the country in which they made their investments; in other cases they did not. In a few cases, a company began life in one country, began investing in another and then, over time, became an MNE from the foreign base. Geoffrey Jones (1986) refers to these companies as ‘migrating’ MNEs. In every instance, however, the investing company perceived itself to have a particular competitive or O-specific advantage over its domestic competitors or those producing in the host countries. Often this advantage was embodied in the products offered for sale or in production processes. However, in the case of resource-based investment, access to foreign markets was no less important. In some cases, high spatial transaction costs provided the initial impetus to produce abroad; in others, foreign investment followed exports as the local market expanded.

In the main, this kind of investment was within the (then) developed world and was intended to produce goods and services for the local market. One exception, identified by
Corley (1992), was a coconut-crushing plant set up in Ceylon (now Sri Lanka) by Prices Patent Candle Company of London to provide oil for candles made in the UK. Certainly manufacturing investment accounted for the bulk of the early activities of US MNEs (Lewis, 1938). As early as 1804, two Americans built a paper mill in Quebec; over the next half-century, several US-owned companies set up branch factories in Canada. By the mid-1850s, American technology had already overtaken European technology in a wide range of metal-using industries and in those utilising mass production techniques (for example, machine tools, agricultural equipment, firearms and sewing machines).

Greatly encouraged by the response to their exhibits at the Crystal Palace exhibition in London in 1851, US firms tried to capitalise on their advantages by stepping up their sales to the UK. Frequently, however, they found it uneconomic to export from their American plants. The firms then had two options. One was to conclude licensing arrangements with British producers. This was the modality chosen by Cyrus McCormick, who, in 1851, licensed the British firms Burgess and Key to make agricultural reaping machines. The other was to set up a foreign manufacturing affiliate. This was the route of entry preferred by Samuel Colt, who established the first US-owned factory in the UK in 1852 (Wilkins, 1970). The UK branch was designed to produce revolvers that were exact copies of those produced in its US factory.

The main O-specific advantage of the Colt Company was its ability to design and mass produce interchangeable parts for firearms. However, it was the fear that he might lose the European market to his competitors, unless he produced in their territories, that was the main locational stimulus to Colt to engage in FDI. The UK was chosen as a production site mainly because of the size of the local market and for language reasons. Three years later another US firm – J. Ford & Co. – set up a vulcanised rubber plant in Scotland. The factory was American financed, designed, equipped and managed. As it happened, neither venture was profitable and both were sold to British interests within a decade of their establishment (Dunning, 1998a; Jones, 1988).

European firms also set up subsidiaries in the US in the first half of the 19th century. One example was the DuPont Company, founded in 1801 by French capital and management. However, it was the tariffs imposed in the second half of the 19th century which prompted the first major wave of inward direct investment into US manufacturing industry. There was also some intra-European MNE activity, but it is difficult to pinpoint how important it was. The Englishman William Cockerill established a branch factory to produce textile machinery in Prussia in 1815. According to White (quoted in Wilkins, 1977b), much British capital entered France after the Napoleonic Wars to establish textile factories and (later) to construct railroads. Jenks (1927) observed that, by 1840, about 20 textile plants and iron foundries had been built and were being operated by Englishmen in various parts of France. There were also sizeable Swiss direct investments in the Italian textile industry throughout the 19th century, such as the case of a Zurich-owned company – J. Egg – employing 1,300 workers in a cotton mill in Italy in 1834 (Clough et al., 1968).

The first half of the 19th century also saw the continued growth of foreign-owned trading and sales ventures, and the establishment of the first foreign banking and insurance affiliates. American mercantile banks opened branch offices in London and Paris, while the first US merchants to promote the American-West Indian Sugar Trade were set up in Cuba in 1838 (Lewis, 1938). The European banking houses of Baring, Rothschilds and Lazard were extremely active in financing infrastructure projects in continental
Europe and the US, while in Asia, the Oriental Bank Corporation, founded in 1845, was for several decades the most important British bank in the East (Davenport-Hines and Jones, 1989; Jones, 1993a). The first foreign insurance affiliate – the Phoenix Assurance Company – was set up in the US (by UK interests) in 1804. Several European land companies also established affiliates in the US to purchase and farm large tracts of agricultural land (Lewis, 1938).

The emergence of industrial capitalism, then, generated a variety of activities financed or managed by foreign investors. Add to these the expansion of existing trading investments and some early French and British plantation investments in Africa, and we have quite an impressive package of IB activities. The growing O-specific advantages of enterprises – particularly in processing industries, insurance, banking and shipping – a gradual reduction of inter-country locational barriers, and the need to gain access to both foreign input and output markets, led many firms not only to look beyond their national borders for intermediate or final products, but also to control the production and marketing of these products. Nevertheless, by the mid-1850s, the development of international production as we know it today was still in its infancy.

6.4 FROM 1870 ONWARDS: THE MODERN MNE EMERGES

6.4.1 New Technological and Organisational Advances

It is difficult to put a precise date on the second watershed in the history of FDI and MNE activity. This is because a series of interrelated events occurred between the mid-1830s and mid-1870s, which, between them, had far-reaching implications on the nature, organisation and location of production. In terms of the OLI paradigm, the second half of the 19th century witnessed organisational and technical innovations that not only better enabled firms to create or acquire proprietary rights and to produce at a much larger scale of output, but also provided them with opportunities to become multiproduct and multinational producers. In particular, dramatic advances in domestic and international transport, communications and storage techniques created new market opportunities and led firms to reappraise their locational strategies. These developments, together with the emergence of a professionally trained cadre of managers and administrators, led both to a widening and deepening of value-added chains and to a growth in the transactional sector of the industrial economy.

In contrast to the technical and organisational advances of the previous 50 years, those of the mid- and late 19th century most affected the fabricating industries, notably the engineering and metal-using sectors, rather more than the processing industries. Partly because of this, as well as the different resource, production and transactional needs of the two sectors, the organisational leadership of the new industries shifted from owner-managed and family firms to joint stock companies. These newer industries were characterised by a higher ratio of non-operative to operative workers as well as by the substantially larger number of separate economic activities (and, hence, transactions) required to produce a given end product.

Compared to most European countries, the US was better suited both to create and to take advantage of these advances. Indeed, the institutional mechanisms and organisa-
tional structures which had evolved to meet the needs of the first phase of the industrial revolution proved inappropriate and, in some cases, acted as a handicap in the second. As an emerging industrial nation, the US was well equipped to meet and fully exploit the challenges and needs of the last quarter of the 19th century, while the innovations, themselves, were both influenced by, and more suited to, its own natural resources, organizational capabilities and markets (Wright, 1990).

The last half-century before the First World War introduced a wave of technological advances which in many ways were more profound and far-reaching than their predecessors. They were stimulated and supported by the creation of new transport and communications networks, which helped increase both the demand for and the supply of goods and services. Electricity and the internal combustion engine, the interchangeability of parts and the introduction of new continuous processing machinery were the main technological linchpins of the second industrial revolution. They combined to make possible economies of scale in production and economies of scope in marketing. At the same time, the new and more capital-intensive production techniques required a reliable and sustained supply of intermediate products, an uninterrupted flow of work on the factory floor and assured and stable markets and distribution networks if they were to be profitably exploited.

Such technological changes fundamentally affected the production frontiers of firms, their capacity for, and strategies of, growth, and the market environment in which they operated. They made possible new kinds of O-specific advantages, which both added to the ability of enterprises to exploit foreign markets and affected their organisational cultures. For, compared to those that preceded them, these advantages created many more barriers to the entry of firms not possessing them as well as to their transfer to other countries. These included the growing cost-effectiveness of large plants, the economies of process, product or market coordination, and the protection offered by the international patent system. They encouraged further technological and organisational changes, which eventually led to a greater concentration of industrial output and to the transformation of some L-bound advantages of countries into the proprietary rights of enterprises.

The innovations of the later 19th century were different in another sense. Although the earlier discoveries in metallurgy, power generation and transport were interrelated and mutually reinforcing, such interdependence rarely extended across national boundaries. The implications of the later advances were truly transcontinental. By drastically reducing transport costs and improving the preservative qualities of primary products, the railroad, the iron-steamship and the innovation of new refrigeration and temperature controlling techniques opened up new sources of food and raw materials from distant countries. *Inter alia* these developments led to an increase in the size of the foreign trade sector.

Two other features about the newer technologies are worth mentioning. First, they demanded a higher and more consistent quality of inputs (for example, components and parts, skilled labour, managerial expertise) than did their predecessors. At the same time, the materials they used were geographically more dispersed. Often the possession of these inputs generated advantages to firms which were not only exclusive (at least for a period of time) to the firms possessing them, but were transferable across national boundaries via FDI or by contractual agreement. Second, they tended to be more complex than their predecessors in that their output required a larger number of divisible production processes, both lateral – in the case of fabricating industries – and vertical – in the case of
continuous processing industries. Yet to be fully effective these separate processes frequently needed to be coordinated within the same firm. Hence, economies of scale and specialisation went hand in hand with economies of joint production. This integration extended beyond the production process to the purchasing of inputs and the marketing of outputs. Indeed, some writers, notably Chandler (1977), have asserted that access to and control over distribution networks was fundamental to the successful commercial exploitation of the new technologies.

As a result of these developments, many firms grew into multinational, multiregional and multi-activity units. According to Chandler (1980:397), the modern industrial enterprise did not grow primarily by producing something new or by a different way; it grew by ‘adding new units of production and distribution, by adding sales and purchasing offices, by adding facilities for producing raw and semi-finished materials, by obtaining shipping lines, railroad cars, pipelines and other transportation units, and even by building research laboratories’.

Putting the Chandlerian thesis in another way, the competitive advantages of firms were based less on the natural resources of the countries in which they produced, and more on their capabilities and willingness to innovate new products and methods of production, and to coordinate these with a series of complementary assets and related value-adding activities. In the pursuance of creating and sustaining these advantages, firms increasingly took on organisational functions previously assumed by the market. In the generation of O-specific assets and the internalisation of the market for these advantages, the first and second conditions for the existence of the modern MNE, as set out in Chapter 4, were fulfilled. At the same time, events were occurring which favoured the location of at least some of these activities outside the home country of the innovating firms.

Chapter 3 distinguished two main reasons why firms initially choose to engage in FDI. The first is to obtain and control the production and marketing of intermediate products which are inputs to other value-adding activities of the investing firms; such investment was referred to as ‘resource-seeking’ investment. The second is to acquire control over the production of goods and services embodying intermediate products which are also produced by the investing firms; such investment was called ‘market-seeking’ investment. Data on the industrial distribution of both the European and US foreign direct capital stake in 1914 suggest that in the preceding half-century or so the amount of the two kinds of investment was about even. Most resource-based investment was going to the developing countries and most market-seeking investment was being attracted to Europe and North America. Of an estimated $2.6 billion of US FDI in 1914, $1.4 billion (54.6%) was in petroleum, mining or agricultural activities; the balance was in manufacturing, railroads, utilities and sales and marketing organisations (Lewis, 1938). Of the 3,373 UK enterprises that operated wholly or very largely overseas and were quoted on the London Stock Exchange in the same year, 1,802 (53.4%) were engaged in primary production and the balance in manufacturing or service activities (Houston and Dunning, 1976).

In his study of continental European MNEs, Franko (1976) identified 167 manufacturing subsidiaries that had been set up by 85 large European MNEs before 1914. In addition, these firms owned 48 mining, petroleum or plantation operations. No separate data of investments in other primary product sectors are available. In an analysis of Swedish direct investments before 1927, Lundstrom (1986) found that most were made by manufacturing companies seeking foreign customers. Outbound German MNE activity also
tended to be market seeking, with the US chemical and electrical engineering sectors attracting the largest share of capital exports (Hertner, 1986; Wilkins, 1988a).

French business interests abroad date back to the mid-19th century when St Gobain established a branch plant in Germany. By 1914, French MNEs were operating in a wide range of sectors, either to exploit natural resources or to seek new markets. Swiss MNEs, which were already active in several consumer good sectors and in hotels, were particularly renowned for their quality control techniques (Himmel, 1922). The Société Générale de Belgique was one of the largest diversified Belgian international investors of the late 19th century. At the other end of the scale, Wilkins (1990a:27), referring to the work of Van der Wee and Goosens (1990), reported that ‘individual Belgian entrepreneurs had many direct investments abroad’.

The main thrust of Japanese MNE activity in the late 19th and early 20th centuries was to promote her industrial exports and ensure that her domestic factories had adequate supplies of raw materials. Hence the importance attached to building up an efficient network of trading companies. Outside trade, most Japanese investment was directed to neighbouring territories, particularly to China, which, according to the Bank of Japan (quoted in Wilkins, 1986), accounted for 77.5% of Japan’s foreign business investments at the turn of the century.

China, in fact, had already attracted a good deal of Western investment in such sectors as ship repair and maintenance, silk processing, soy bean manufacturing and railroads (Allen and Donnithorne, 1954). This was noticeably speeded up as a result of the Shimonoseki Treaty in 1895 which permitted, for the first time, foreigners to manufacture in Chinese treaty ports. However, according to Wilkins (1986), some 36% of the 136 foreign-owned cotton plants set up between 1850 and 1913 were Japanese owned. The Chinese match industry was exclusively in Japanese hands and there were substantial Japanese direct investments in the coal, iron and shipping sectors. Wilkins also observes that the main O-specific advantages of Japanese firms (vis-à-vis Chinese companies) at the time lay in their substantially greater industrial experience, their entrepreneurial initiative, their strong motivation to tap foreign markets, and the fact that they frequently had good financial support from their own banks. The following subsections explore the reasons for these two kinds of foreign production in more detail.

6.4.2 Market-seeking Investments

Although the structure of market-seeking MNE activity differed according to its country of origin, each was prompted by the desire or necessity to exploit perceived competitive advantages through the establishment of foreign value-adding facilities. These O-specific advantages varied according to the extent of a firm’s industrial or geographical diversification, the nature of its production and managerial capabilities and the market structure of the investing country.

In an analysis of 119 UK manufacturing firms that undertook FDIs in the 1870–1939 period, Nicholas (1982) found that one-half set up factories abroad to exploit a perceived technological advantage. A later study by Archer (1986), based on information provided by 187 UK MNEs, suggested that the possession of brand names and trademarks, and the ability to supply high-quality, differentiated goods and services, was ranked next to superior technology and managerial competence as the principal O advantage. This
finding is consistent with the fact that the greater part of the market-seeking investment by UK foreign investors before the First World War was in the processing and consumer goods sectors, and that UK affiliates abroad were producing goods at the later stage in the product cycle (Vernon, 1966).

By contrast, US direct investment abroad was primarily directed to the newer capital-intensive mass production and fabricating sectors. To quote from Mira Wilkins (1970:66):

> The US triumph abroad was one of ingenuity: new products, new methods of manufacturing and new sales and advertising techniques. Americans who made overseas commitments had something distinctive to offer foreign customers. They sought not only to cater to, but to create foreign demand. From sewing machines to drugs to oil to insurance, aggressive and imaginative marketing gave Americans an advantage. Americans went abroad when they discovered their advantage.

The competitive advantages of continental European firms seemed to be strongest in the chemical and electrical engineering sectors. In his study of some of the largest continental MNEs, Franko (1976:77) concluded that product and process innovations tended to be biased towards material savings and ‘working class and luxury products’. Notable exceptions were Nestlé’s mother’s milk substitute and a series of electrical innovations by Siemens and AEG of Germany and Philips of the Netherlands. Taking a host country perspective, Brown (1976) concluded that superior production techniques by European MNEs, relative to indigenous firms, helped to develop and modernise the ship repair and maintenance, and silk industries in China. In his analysis of MNE activity in Japan between 1899 and 1931, Mason (1987) argued that although the amount of foreign capital invested was small, the impact was ‘very great indeed’. *Inter alia* it provided advanced production methods and valuable knowledge about Western management methods and financial control systems, and training and skill development for Japanese workers.

In spite of the differences in the organisational structures of US and European MNEs in the late 19th century, the early US and European MNE firms had two features in common. The first was that they were managed by dynamic entrepreneurs who were willing to take the risk of venturing into unfamiliar territories. In his examination of British manufacturing MNEs prior to 1914, Stopford (1974:318) observed that they were all led by men who shared a global vision. Examples included William Lever (of Lever Brothers), Thomas Johnston (of Nobel Explosives) and A. Dewhurst (of English Sewing Cotton). Sometimes the business leaders were themselves foreigners. For example, Henry Wellcome and Silas Burroughs (of the British firm Burroughs Wellcome & Co.) were US citizens. Continental Europe also produced its entrepreneurs, such as Henri Deterding (of Royal Dutch Shell) and Lars Ericsson (of Ericsson). In the US, too, men such as Alexander Graham Bell, Thomas Edison, George Westinghouse, George Eastman and Isaac Singer each played an active role in the internationalisation of their businesses.

The second common feature of both European and US market-seeking investments was that they were strongly concentrated in sectors characterised by oligopolistic competition. This was also a time when companies were beginning to use foreign production as a strategic tool. The two decades before the First World War saw the emergence of a group of industries, for example, pharmaceuticals, tyres, electrical equipment, oil and motor vehicles, in which the leading firms vied with each other to establish some kind of presence in the larger and more promising foreign markets.
While the possession of some kind of competitive advantage was a necessary prerequisite for market-seeking FDI, the impetus to engage in foreign production was entirely based on the perceived net economic benefits of such production vis-à-vis exports from a home-based factory. Here the evidence is very clear. In particular, four specific factors appeared to have been of paramount importance in influencing MNE activity.

The first was the imposition, by host governments, of a variety of import barriers on foreign-made goods and services. Between 1860 and 1904, the US, Canadian and most European governments sharply increased their tariffs on a wide range of imported manufactured products. Before the Civil War, for example, three-quarters of the trade of J. & P. Coats had been with the United States. A 50% tariff imposed in 1864 forced the company, and other cotton thread producers, to relocate their manufacturing activity in the US. That this was successfully accomplished is shown by the fact that by the outbreak of the First World War, British-owned subsidiaries accounted for four-fifths of the cotton thread produced in the US (Wilkins, 1989).

Up to 1890, the US bought 70% of the tinplate produced in South Wales. Then an ad valorem tariff of 90% was imposed, as a result of which some 60 Welsh mills were closed down (Berthoff, 1953). In an effort to recapture the market, there was a steady migration of capital, technology and labour across the Atlantic. Earlier tariffs imposed by the US government had had a similar effect. In 1867, W. and S. Butcher of Sheffield, maker of crucible steel and tools opened a steelworks in Philadelphia (Corley, 1992). In 1864, two British chemists began to produce aniline oil and magenta in a New York factory (Wilkins, 1989). However, perhaps the largest exodus of capital and people occurred in the British silk industry. It is estimated that some 16,000 people migrated from Macclesfield in England between 1870 and 1893. Several UK companies moved the whole or part of their plants to the US. Sometimes they crated their machinery and moved lock, stock and barrel with their employees (Mason, 1920). They fared rather better than the tinplate manufacturers; in particular, they captured most of the US market in velvet and satins.

From their examination of business histories, both Archer (1986) and Jones (1986) concluded that tariffs were the single most important trigger leading to foreign investment by market-seeking British MNEs before 1914. Increased import duties also led German dyestuff, pharmaceutical and electrical manufacturers to set up production facilities in France and Russia (Hertner, 1986); Swiss textile firms to manufacture in Italy (Wavre, 1988); Dutch soap and food processing firms to relocate some of their activities in Belgium and Germany (Franko, 1976); and the American Tobacco Company to enter into the UK market in 1901 (Dunning, 1998a). Likewise, much of the early US manufacturing investment in Canada was prompted by the Canadian Tariff Act of 1879 (Marshall et al., 1936). There are also instances of firms investing in the UK in order to gain favoured access to Commonwealth markets, and of German firms investing in the UK to overcome non-tariff barriers in the form of ‘buy British’ programmes in the 1880s and 1890s (Hagen, 1999).

Along with tariffs and import controls, foreign governments often used other means to attract inward direct investment. The Russian government, for example, limited its purchases of many industrial products to domestically located firms (Kirchner, 1981). Patent legislation and, in particular, the insistence by some governments that foreign-owned patents should be locally exploited, prompted such companies as Dunlop to set up rubber
tyre factories in France and Germany (Jones, 1984a); Siemens to invest in France to supply electric lighting equipment; Bell Telephones to manufacture telephone equipment in Canada; Badische and Hoechst to produce dyestuffs in England (Jones, 1988); and several US firms to establish production facilities in the UK (Lewis, 1938; Wilkins, 1970; Jones, 1988). On the other hand, the absence of any legal obligation to use patents granted by the US administration meant that German dye makers could supply most of the US market by exports or by becoming US companies (Hertner, 1986).

There are also several instances of governments offering a variety of tax and other incentives to foreign investors. A reading of business histories suggests that such incentives influenced Lever to invest in South Africa, American steel companies to set up plants in Canada, and Vickers (an armaments firm) to manufacture in several European countries. Many US states also offered generous fiscal inducements to tempt foreign firms into their, rather than other, regions. Contemporaneously, there are other cases of host governments deliberately discouraging inward investment, for example, in Mexican and Canadian railroads (Wilkins, 1970:170).

The second locational factor prompting overseas investment may be labelled ‘competitive strategy’. Earlier, we suggested that most firms that engaged in foreign production in the late 19th century operated in oligopolistic industries. While this was not, in itself, a sufficient motivation for foreign investment, it was most certainly a contributory factor and an important determinant of its timing. Perhaps the best-known example of oligopolistic strategy influencing foreign production was Royal Dutch Shell’s investment in the US. Other examples include the establishment of Dunlop’s factory in Japan in 1899 as a pre-emptive move against US tyre companies; the setting up of Swiss and German synthetic dyestuff firms in Russia and France to match the international moves of rivals to maintain a certain share of the whole European market for their product; the establishment of Japanese textile companies in China, which was a direct response to the opening up of Shanghai and other ports to Western manufacturers (Wilkins, 1986); and the widespread practice of affiliate matching by Dutch margarine firms in continental Europe (Franko, 1976:95).

The third impetus for 19th-century firms to produce abroad was to reduce freight and production costs. Much of US direct manufacturing investment in Europe and European investment in Commonwealth countries in the late 19th century was geared to this end. Clearly, such an impetus was most pronounced where the goods supplied were bulky, fragile or perishable, and where labour, raw materials and energy costs were substantially lower in the foreign than in the home country. Industries such as cement, chocolates, brewing, flour, milk, and iron and steel manufacturing fell into this category. Examples ranged from Anglo Swiss Condensed Milk’s venture in Norway to produce condensed milk and Tobler’s investment in Italy to supply chocolate, to Westinghouse’s manufacture of brakes in Paris. Political, cultural and economic ties also help to explain the preference of UK companies for production sites in the White Dominions and the Indian subcontinent; Belgian and French investment in parts of Africa; and US investment in South America. The ability to raise finance in the City of London was also a factor in influencing the locational choice of US companies setting up subsidiaries in Europe (Jones, 1988).

Fourth, firms engaged in FDI to be near the market and to cater to the specific and special needs of local customers. This was the reason given by the Western Electric Company and the International Bell Telephone Company for their decision to manufacture telephone
equipment in Belgium in 1882 (Wilkins, 1970:51). This became more important as markets grew, and was especially noticeable where differences in factor endowments and consumer tastes required adaptation of the products supplied by, or the production methods used by, foreign firms. Frequently – particularly in service sectors such as banking, insurance and restaurants – foreign firms were set up to meet the needs of previously established foreign subsidiaries and/or of migrants. The use of imperial units of measurement in the UK apparently influenced the decision of SKF, the Swedish ball- and roller-bearing company to start manufacture in the UK in 1910 (Lundstrom, 1986). The British firm John Lysaght set up a factory in Australia in 1884 to produce wire netting to curb the spread of rabbits (Blainey, 1984).

In some cases, for example, American consumer goods manufacturers, the foreign invaders sought to create and fashion demand (Wilkins, 1970:66). In others, such as Nestlé baby food, the attraction of large, high-income markets made local manufacturing a viable proposition. By the turn of the century, Mercedes had formed a joint venture with the US piano producer Steinway to produce luxury vehicles in the US, while Daimler and Benz had begun production of their handcrafted luxury cars in Britain in 1893 and in the US some years later. At the same time, Godley (1999) notes that prior to 1890, apart from the successful entry by Singer, American consumer goods producers in the UK met with little success, mainly due to insufficient adaptation to the local market conditions. Market-seeking investment to serve consumers in developing countries sometimes required even greater adaptation as a result of differences in tastes and needs, or of local supply capabilities. A good example is the (UK) Gramophone Company’s investment in India, which was prompted by the perception that Indian consumers wanted records of indigenous, rather than of American, music (Stopford, 1974).

So much for the L-specific variables influencing market-seeking investment in the late 19th century. The final motive for such MNE activity reflected the preference for firms to internalise the markets for their competitive advantages. Why, for example, did not the innovators of the 19th century license the right to use the fruits of their innovations to foreign firms? Why did so many manufacturing investors prefer to own their sales and distributing facilities rather than use local agents?

Contemporary business historians suggest that there were two main reasons why firms preferred to engage in FDI. The first, which has been particularly well enunciated by Chandler (1980), is that just as the growth of the domestic corporation led to the ‘creation of multi-unit enterprises, administered through managerial hierarchies’, so did the extension of these firms outside their national boundaries produce a similar result. Moreover, in each case, the reason was the same, namely, to reduce the transaction costs of the invisible hand of the market by vertical or horizontal integration. At the same time, distance and producing in an unfamiliar political, economic and cultural environment added to the costs and uncertainties of transportation, inventory control, worker motivation, supplier reliability and the protection of quality. Such market failures as these provided an additional reason for FDI.

The second reason is closely allied to the first, but rests less on the advantages of common governance than on the need to minimise the transaction costs of selling the output of a particular asset. Here the main rationale was to protect property rights and the interests of the investing firm. For example, Nicholas (1983) has suggested that the failure of independent sales agents to act (or be perceived to act) in the best interests of
the exporting company was a powerful reason for early British investment in overseas sales and marketing activities.²²² The argument can be readily extended to explain Singer’s preference for owning and managing its own retail and servicing outlets (Chandler, 1990). Singer was one of the first firms to master a functional administrative structure which would characterise a later generation of MNEs (Davies, 1969). By 1914 it was reported that Singer had 1,000 distribution centres scattered over Tsarist Russia (Kirchner, 1981). According to the company, independent agents ‘did not pay sufficient attention to the product, did not know how to service it, failed to demonstrate it effectively and did not seek new customers aggressively’. Other well-known US manufacturers, such as the agricultural implement producers, chose to use franchise dealers (Chandler, 1980:399).

Further up the value-added chain, although some US companies had licensed their property rights to the foreign manufacturers, most perceived that FDI would better protect these rights from misuse or dissipation. Moreover, in some instances the production processes and equipment were so new that there was insufficient local know-how (or know-why!) for their successful implementation.

While both kinds of market failure just described influenced all kinds of market-seeking investments, those undertaken by the processing industries (for example, chemicals, food, drink and tobacco) tended to rest more on the second, while those by the fabricating sectors (for example, metal using and engineering) tended to be of the first. This is partly because managerial hierarchies were more pronounced in the latter sectors, which also recorded a higher ratio of transactions to value added. It also explains why the advantages of common governance were most visible in large and diversified firms. An analysis of the industrial composition of pre-1914 foreign activities by US MNEs reveals that there was a clear bias towards sectors that possessed assets and capabilities best organised by managerial hierarchies. By contrast, European FDI was more likely to be undertaken by firms whose competitiveness rested on their favoured possession of specific intangible assets (Franko, 1976; Chandler, 1980).

An examination of the leading US market-seeking foreign affiliates established before 1914 reveals that about three-fifths were concentrated in the fabricating industries and the rest in processing industries (Wilkins, 1974). The respective proportions for UK firms were one-third and two-thirds, and for continental European firms one-quarter and three-quarters (Vaupel and Curhan, 1969). Interestingly, the pattern of Swedish manufacturing investment more closely resembled that of the US than that of the rest of Europe (Lundstrom, 1986). Of some 27 US firms identified by Jones (1988) as having set up manufacturing subsidiaries in the UK before 1914, all but seven were in fabricating industries, whereas 15 of the 23 affiliates of continental European investors were in the processing sectors. All of the Swedish manufacturing affiliates in the UK were in fabricating sectors. However, by US standards most of these investments were small and their parent companies were usually much less vertically integrated than their American counterparts.

Research done from a host country perspective confirms the pattern we have already outlined. In Britain, Bostock and Jones (1994) find that although the first instances of manufacturing FDI took place in the 1850s, FDI in Britain was insignificant until about 1885, and only really took off after the First World War.²²³ Wholly owned greenfield investment was the predominant means of FDI, which took place mainly in the high-growth sectors of the economy. Acquisitions also accounted for a substantial share of investment, but joint ventures did not become popular until after the Second World
In the period before the First World War, German FDI in the UK was second only to investment from the US. Using the same methodology as Bostock and Jones, Fletcher and Godley (2000) examined FDI into British retailing in the same period. Entry into retail was much less common, and unlike manufacturing investment, it did not really take off until much later, in the 1980s and 1990s (Godley and Fletcher, 2000). Indeed, the company of Woolworth's is the one great exception to the British story. It entered into Liverpool in 1909, and quickly grew a large network of retailing outlets. Even so, Woolworth's did not introduce the variety-store format to the UK, but rather pursued a strategy of rapidly gaining market share until saturation was reached.

Almost all of the other major retailing entries were made not by retailers as such, but by manufacturers. Most prominent among these was Singer, but the group also included smaller firms selling specialised products, such as photographic or phonographic equipment, and musical instruments. For these companies, retailing was simply a means to an end. They invested in distribution, because the products they manufactured were complex and required demonstration, financing and other services to successfully introduce them to the market. Indeed, entry into retailing by foreign manufacturers faded away in the 1920s, suggesting that for a period of about 30 to 40 years, these firms found it necessary to internalise the retailing activity. Once the market became more sophisticated, however, the use of independent intermediaries became the preferred alternative.

The conclusion of the above paragraphs is that it is difficult to generalise about either the characteristics or the determinants of market-seeking MNE activity before 1914. The Chandlerian view of the growth of large firms in terms of the advantages offered by vertical or horizontal integration (that is, the Ot advantages identified in Chapter 5) is certainly pertinent in explaining some kinds of FDI – particularly that of the larger and more diversified US firms. However, it is less convincing in accounting for the kind of foreign production that rests on the investing firm owning a specific intangible asset (that is, the Oa advantages identified in Chapter 5) which, because of imperfections in the market for that asset, or its rights, the firm perceives that it can best utilise itself from a foreign location.

### 6.4.3 Resource-seeking Investments

As the industrialisation of the Western world proceeded, there was an increasing need for additional or new sources of materials to those available locally. At the same time, the innovations of the late 19th century tended to require different kinds of minerals and materials (for example, oil, bauxite and rubber) from those required previously. In addition, as incomes rose, consumers from temperate climates were increasingly demanding tropically produced food and drink products.

Since most of the resources involved were specific to particular locations, the factors explaining the ‘where’ of FDI are easily identified. In cases where investors had some choice, shipping costs, political and cultural ties and the quality of the infrastructure (for example, roads, docks and public utilities) were among the key L-specific determinants. Many of the German investments in French iron ore mines prior to the First World War were designed to strengthen the position of the German iron and steel makers vis-à-vis their French competitors (Franko, 1976). For both economic and political reasons, British, French, Belgian and Dutch manufacturers preferred to source their raw materials.
and foodstuffs from their colonial territories. American firms favoured Canada, Mexico and Chile for minerals and Mexico and the Caribbean for raw materials and agricultural products (Lewis, 1938), while Japanese firms owned valuable iron ore deposits and coal mines in China. On several occasions, particularly in colonial territories, MNEs themselves built roads, railroads, docks and warehouse facilities, and supplied the necessary housing and educational facilities for their workers.226

Earlier in this chapter, we suggested that much of world trade prior to the industrial revolution was organised by chartered trading or land companies. On occasions, these companies also invested in the local production and processing of the imported products they acquired. Generally speaking, however, this was not encouraged by the metropolitan powers. Industrialisation vastly increased the demand for most raw materials, minerals and foodstuffs. At the same time, improved farming and mining techniques, a reduction in sea and land transport costs, and new storage techniques made this a practical possibility. Between 1800 and 1875, UK imports of primary products rose twentyfold in real terms. While the majority of these products were supplied by indigenous producers, an increasing proportion – though we have no record of how much – was provided by MNE affiliates.227 The interesting question is ‘why’?

The answer, suggested by the previous chapter, lies in the lower transactional costs of organising the transnational purchase of primary products within the same firm rather than through the market. This, in itself, presupposes that the investing firm perceives it has sufficient O-specific advantages to produce and/or market these products, or expects to gain such advantages by FDI. The previous chapter also identified the nature of these advantages and the conditions under which MNEs preferred to exploit them via FDI rather than by licensing or some other non-equity arrangement.

The late 19th century brought about a number of important economic changes which fundamentally changed the nature and organisation of trade in intermediate products. The first was the increasingly technological and capital intensity of the production of primary products. This was, perhaps, most clearly seen in the petroleum and non-metallic mining sectors. However, the years preceding the First World War were also the heyday of the large plantation economy for many foodstuffs and raw materials. The second was the increasing importance attached to quality consistency and delivery reliability of some products by both industrial and domestic consumers. Examples include petroleum, copper, bauxite and several agricultural products (for example, pineapples, bananas and coffee). Each of these events clearly favoured the large producers and those best able to coordinate their production and marketing functions. These assets and organisational skills were, in the main, only available in the high-income purchasing countries.

The third economic development was the growth of large and standardised markets. Since these markets were largely located in developed countries, it was only natural that enterprises from these countries had privileged access to them and the knowledge of how best to supply them. These three factors, and the bargaining power which they afforded the investing firms, explain why they frequently dominated the production and trade of foreign-based natural resources.

The question, however, remains. Why should a firm wish to own intermediate products? Why not license the right to use the assets that it possessed? Internalisation theory suggests several strategic and economic reasons why a firm might wish to engage in cross-border backward vertical integration. The first is to gain control over the supply of
essential resources in order to protect or strengthen its market position. In the late 19th century, firms aggressively sought control of the supply of primary products both to restrict or close the markets to their competitors, and as a defence against competitors pursuing such a strategy.

The second, and no less powerful, motive for backward integration is to forestall a foreign supplier from using his options (for example, vary output, raise prices, vary quality, alter delivery dates and so on) to the buyer’s disadvantage. This certainly was an important reason cited, for example, by British firms investing in the US and Argentinian cattle-raising industry, as well as US MNEs involved in hard mineral ventures in Chile and Bolivia (Lewis, 1938; Coram, 1967). The third reason is to ensure that the quality and efficiency of the intermediate products supplied meet the purchaser’s requirements and standards. This suggests that the purchaser has superior knowledge which he perceives that, without ownership, cannot or will not be implemented by the supplier. Sometimes this might be because the supplier perceives that the capital investment required is not economically justifiable. Alternatively it might be because the supplier does not have the managerial or organisational skills to implement and monitor the use of advantages. Much US and European FDI in agribusiness ventures in developing countries was undertaken for this reason (Wilkins, 1988a).

In their respective analyses of US, British and continental European MNEs investing in resource-based sectors, Wilkins, Stopford and Franko each tell a similar story. Wilkins observes that by far the largest number of foreign investments by US MNEs prior to 1914 were in sales or manufacturing activities, while only a few companies had supply-orientated investments in more than one country. She attributes this situation to the fact that, for most of the 19th century, the US was self-sufficient in most minerals, raw materials and foodstuffs. Indeed, right up to the outbreak of the First World War, the US was a substantial exporter of oil.

Nonetheless, Wilkins names nine US companies which had extraction or agricultural holdings in more than one country in 1914 (Wilkins, 1970:216). In addition, she and other scholars (for example, Lewis, 1938; Stopford, 1974) have also identified several manufacturing companies engaged in backward vertical integration in the late 19th or early 20th centuries. These included the leading rubber tyre producers (for example, Dunlop and Firestone) which owned plantations in Malaysia and Liberia, respectively; Singer, which owned iron mines and timberlands in Russia; the meat processing companies (for example, Armour and Swift) which owned packing plants supplied by cattle ranches in Argentina and Uruguay; American Tobacco, which owned tobacco plantations in Cuba and Turkey; Diamond Match, which owned forests in Canada; Amalgamated Copper, which owned copper mines in Mexico; and DuPont, which owned saltpetre mines in Chile.

Most US mineral and oil producers initially made their investments abroad to sell their domestic output rather than engage in primary production. Again, tariffs were a major contributory factor. The hard mineral companies led the way. These included the Oxford Nickel & Copper Company, set up in 1878 to exploit nickel deposits in Canada; the Batopilas Mining Company (a consortium of five silver companies), to mine silver in Mexico; and the American Smelting and Refining Company, which was to become one of the foremost miners and smelters of lead and silver in Mexico. In Chile, American capital – drawn by a highly stable domestic environment and generous investment incentives – dominated the initial development of the copper industry, with the Braden Copper
Company and the Guggenheim family each playing a major entrepreneurial role (O’Brien, 1989). In Canada, US interests were primarily directed to the asbestos and precious metals industries, while in the Caribbean, inward investors were attracted to the opportunities offered by asphalt and iron ore.

The oil companies first entered the FDI arena as market seekers. It was not until the first decade of the 20th century that US MNEs began producing crude oil, primarily in Mexico, Canada, Peru and Romania. Of these companies, none pursued a more aggressive international strategy than Standard Oil. By 1900, this company was already an established MNE, and by 1907 it had acquired control of 55 foreign enterprises. As the world demand for oil rose rapidly, Standard Oil searched for new markets. It tried to obtain a stake in the Far East – notably in Burma and the Dutch East Indies – but was thwarted in so doing by the British and Dutch governments. Apart from small investments in Canadian, Romanian and Mexican fields, it engaged in no further oil exploration prior to its dissolution in 1911. However, between 1911 and 1914 several other US companies increased their investment in Mexican oil fields (Lewis, 1938).

In the raw material and agricultural sectors, US capitalists invested heavily in Canadian forests – in 1909 it was estimated that 90% of the available timber in British Columbia was controlled by US citizens or enterprises – Mexican rubber plantations and cattle raising. Most US interest in the late 19th century, however, was directed to the Caribbean. Many of today’s giant agribusiness MNEs had their origins in these years. Wilkins (1970:151) tells of how US trader turned investor Captain Lorenzo Dow Baker started the banana trade in 1870, and Andrew Preston marketed the fruit in the US. The two merged their interests in 1885, and the new firm, Boston Trust Company (later acquired by the United Fruit Co.), soon decided that ‘in order to secure a reliable source of fruit’ (ibid.:151) it should grow as well as purchase and market bananas. To this end, the firm bought plantations in Jamaica and Santo Domingo (the Dominican Republic).

Elsewhere in the Caribbean, defaults on loans made to Cuban sugar growers by US merchants resulted in companies such as Atkins & Company acquiring sugar plantations in the 1880s. By 1885 it was reported that there were 200 US engineers and machinists engaged in Cuban sugar estates (Jenks, 1927). Exempt from US import duty and employing the latest production techniques, sugar production proved highly profitable for American investors, and by 1909, US affiliates were producing 40% of Cuban sugar (Lewis, 1938).

The story of United Fruit’s foreign operations is well known.228 It is one of the most fascinating in the early history of MNE activity. When the company was formed in 1889, it owned or leased 322,000 acres of land in the West Indies. The land was allocated not only to the production of bananas, but also to that of oranges, coconuts, rubber and sugar. Initially the United Fruit Company bought 65% of its bananas on the open market and through contracts.

However, it soon decided to purchase additional land with a view to producing four-fifths of the fruit it marketed. According to Wilkins (1979:158), this policy was prompted by the need to improve quality consistency and the failure of local growers to respect contracts.

In addition, United Fruit began to acquire its own transportation and distributing facilities to protect itself against delivery uncertainties. It owned railroads in several banana-producing countries, and steamship companies to transport its products to the US. It was
one of the first resource-based companies to realise and exploit the benefits of the common governance of cross-border production, purchasing, transport and marketing activities. It installed sewage, drainage and water systems, built roads, established company towns and invested in hospitals.\textsuperscript{229} By 1899, United Fruit controlled 90% of the banana imports of the US. By 1915 it was one of the largest MNEs in the world and owned assets of nearly $90 million (Read, 1983).

The involvement of US direct investment in the agricultural sector of the Caribbean is also an excellent example of the early interaction between home government and business interests. This, again, is a well-documented story\textsuperscript{230} which culminates in the action of President William Taft sending gunboats and marines into the Caribbean to protect US-owned property and the commercial interests of American affiliates. There are many other less dramatic examples of the US authorities influencing the amount, kind and course of FDI in the early years of the 20th century,\textsuperscript{231} while host governments were not slow to offer tempting concessions to foreign companies to promote indigenous resource development.

In South America, US investments in agribusiness were differently focused. There was some investment in rubber plantations in Peru, Bolivia and Brazil, as well as some cattle ranching in Paraguay. American meat packers, however, did not integrate backwards into cattle lands. Instead they expanded horizontally when they were faced with growing competition to their own exports from Argentine meat packers. By 1914, most US meat packing plants had investments in Brazil, Paraguay, Uruguay and Argentina. Their primary motive was to protect their existing markets; the evidence suggests that they were prepared to pay a substantial price to do so.

Resource-seeking investments by British manufacturing firms were also prompted by the need to counteract market failure. For example, by owning and controlling their own sources of oil and rubber, companies such as Shell and Dunlop could better offer their customers secure and stable supplies, while lessening their own dependence on unfriendly market forces. As processing activities became more capital intensive, so the cost of supply irregularities mounted. Some firms, too, integrated backwards to gain information on mining or cultivating techniques (Jones, 1986). Rather than rely on bilateral contractual agreements, UK manufacturers increasingly preferred to own and control their primary sources of production.

Examples of cross-border vertical integration prompted by this concern included Cadbury’s investments in cocoa plantations in the Gold Coast and Trinidad; those of Crosfield (later Unilever) in vegetable oil plantations in Dutch West Africa; those of Fitch Lovell in cattle-raising and meat packing plants in the US; those of Imperial Tobacco in tobacco leaf in Nyasaland (now Malawi); and those of Turner Brothers (later Turner & Newall) in asbestos mines in Rhodesia (now Zambia) and South Africa (Stopford, 1974; Houston and Dunning, 1976). British and Russian tea merchants were also active in promoting a higher and more uniform quality of leaf tea produced in China.

No less important than security of supply was the need by industrial customers to obtain primary products at a reasonable price. William Lever, for example, was greatly suspicious of the combines and rings among foreign raw material producers, and was convinced that they worked to the disadvantage of the purchasing manufacturers. As a result, in the early 1900s Lever began to acquire vegetable oil plantations in the Solomon Islands, Belgian Congo and Nigeria.
Unlike their US counterparts, however, most British companies investing in foreign natural resources did not engage in similar operations in the UK.\footnote{\textsuperscript{232}} However, the London market was instrumental in financing most of the overseas mining and commodity ventures, and many free-standing companies were floated there. These included MNEs such as Rio Tinto Zinc, Gopeng Tin Mining, Consolidated Gold Fields of South Africa and Borax Consolidated Ltd, whose O-specific advantages were based partly on the expertise and experience in mining built up over the years, partly on their favoured access to the international (and particularly the UK) capital market\footnote{\textsuperscript{233}} and partly on their privileged access to final product markets. These assets enabled them to offer host countries a superior package of assets to those of their competitors.

The late 19th century also witnessed a variety of more speculative UK foreign investments directed to the mineral sector. Between 1851 and 1913, at least 174 British mining companies owned or controlled copper pyrites, iron, lead and silver mines in Spain. Together with French and German interests, they dominated the Spanish minerals sector (Harvey and Taylor, 1987).\footnote{\textsuperscript{234}} Another study (Wilkins, 1989) has identified 659 companies which were registered in Britain between 1880 and 1904 to promote mining ventures in the US alone. By 1889 it was estimated that foreign (mainly UK) owned companies accounted for more than 25\% of the copper mining output of the US. There was also some activity by UK MNEs in the iron and steel industry in the American South, prompted by high tariffs and the perception that, unless they produced in the US, they would lose the market to indigenous firms. Individual entrepreneurs, or groups of entrepreneurs, initially played a crucial role, but these later gave way to syndicates such as the Southern States Coal, Iron and Land Company, which helped found the industrial town of South Pittsburgh in Tennessee in 1877 (American Iron and Steel Association, 1887). In the main, these investments were unsuccessful, primarily, it seems, because of the incompetence (and sometimes dishonesty) of local management, an inadequate appreciation of local mining conditions and unanticipated organisational problems (Coram, 1967).

In general, there was little attempt by British – or indeed by European – investors to exploit the benefits of vertical integration. Wilkins (1989) puts this down to the fact that, while US companies invested abroad to acquire intermediate products for their domestic factories, British and European MNEs primarily invested in the US to sell to the local market.\footnote{\textsuperscript{235}} A recent review of the evolution of FDI in the US, including some interesting case studies of firms is contained in Wilkins (2002).

British interests were also active in promoting agricultural activities in the US. Foremost among these was cattle-raising. Here, British investors were attracted by the very high profits being earned by indigenous cattle firms in the 1860s and 1870s. Much of the capital originated from Scotland and was channelled through mortgage and investment brokers whose managers were well experienced in financing the animal husbandry business in their home country. Between 1879 and 1889, there were some 41 acquisitions by British companies of cattle ranches in the American West; over £10 million was invested (Wilkins, 1989). Large acreages of cattle ranches in Texas, Wyoming, Colorado and New Mexico were owned by British companies (Lewis, 1938).

Not only capital, but also expertise was transferred across the Atlantic. Cattle breeds improved as imported British pedigree animals strengthened the US stock. Scottish husbandry and breeding techniques were transferred to America, and there was also some
migration of cattlemen from Scotland. At the same time, the cattle-raising companies did not integrate forwards into meat packing, although, as we have already seen, several UK meat packers set up branches in the US in the 1880s.

However, dwarfing all other resource-based foreign investments were those of the British and Anglo-Dutch oil companies. By the turn of the century, Royal Dutch Shell already owned oil wells in the Dutch East Indies (now Indonesia). From there, it acquired new fields in Russia and Romania. By 1914, Shell controlled almost 20% of the total Russian oil production (Davenport-Hines and Jones, 1989). The discovery of oil by the Anglo-Persian Oil Company (now BP) in the Middle East did not occur until 1908. Royal Dutch Shell’s purchase of oil fields in California and Oklahoma in the early 1900s was in direct retaliation to Standard Oil’s incursion into the Far East. However, it was also made to gain access to the world’s largest market for oil. As John Stopford puts it (Stopford, 1974:332), Royal Dutch Shell ‘though only 40% British-owned was a classic example of British capital at work to exploit natural resources on a worldwide scale’.

Continental European investments in the primary activities were mainly concentrated in the extractive sector. One of the first (but unsuccessful) ventures was that of a Dutch sugar refining company in a maple sugar affiliate in upstate New York in 1792 (Wilkins, 1989). Franko (1976) tells of how several large European manufacturing enterprises integrated backwards into coal, bauxite, iron ore, nickel, copper, zinc and oil. A substantial proportion of these investments were located elsewhere in Europe; only a few appear to have been directed to colonial or other developing territories. It would seem that continental European governments were anxious not to be unduly dependent on foreign supplies which might be cut off by English sea power or the closure of the Suez Canal (ibid.:52).

Apart from the Dutch, there was little interest by continental European firms in foreign oil exploration. By the First World War, the Belgian MNE, Union Minière, was beginning to extract copper and other non-ferrous ores from the Congo; its later role in that country has been compared to that of the United Fruit Company in the Caribbean.

There were few continental European equivalents to the free-standing investments of British companies in minerals, raw materials and agricultural products, except for the Dutch free-standing companies operating in the Dutch East Indies (now Indonesia). French and German companies seemed to prefer either to invest in UK enterprises, which, themselves, engaged in free-standing investments, or to own and manage their own foreign affiliates. French companies, for example, mined silver in the US, copper in Spain and the US, and phosphate in the US and North Africa. The Germans were among the world’s largest traders in zinc and lead. Drawing upon their long experience and technical expertise, they integrated backwards into US and Latin American smelting and refining operations.

Some large US mining companies were also started by German expatriates. There was a substantial German involvement in US potash mines, while in the early 1900s a US affiliate of the German precious metals firm Degussa supplied most of the cyanide required by US industry. There was also some European direct investment in Russian coal mining which, according to one economic historian (McKay, 1970), was accompanied by new techniques in the washing, sorting and coking of coal, as well as in the ventilation, electrification and centralisation of pits.

On a different continent, the first major foreign investment by an Australian company occurred in 1882 when the Colonial Sugar Refining Company (CSR) began investing in
the Fijian Sugar Industry (Bureau of Industry Economics, 1984). This was a defensive horizontal investment intended to prevent the Fijian Sugar Industry becoming a competitive threat to the Queensland industry. Australian MNEs were also among the first and most successful iron, tin and gold mining investors in Malaya (now Malaysia). Such investment dates back to the 1880s. According to Birch (1976), by 1930, Australian companies accounted for a sizeable stake of the foreign mining sector in both Malaya and Siam (now Thailand).

Finally, there was some supply-orientated foreign investment which originated from retailers. One example was the investments by the Englishman, Thomas Lipton, in US meat packing plants in the 1880–1902 period. Others were directly involved in the wholesale and retail meat trade, but again, these investments were mostly short-lived.

6.4.4 Other Investments

Finally, brief mention should be made of MNE activity that does not easily fit into the ‘market’- or ‘resource’-seeking categories. Foremost among these were FDIs in railroads, shipping and public utilities. However, although sometimes there was active foreign organisational and managerial participation, for example, by Japanese companies in Chinese shipping (Wilkins, 1986), most of these investments were of the free-standing kind rather than extensions of established domestic enterprises. There was more direct foreign control over railroad investments in developing countries, notably in India and Argentina, than in the US where there was adequate local manpower and technological capacity. The main problem of absentee foreign investors in this sector (as indeed in others) was to know who to trust and how (and to whom) to delegate responsibility.

By 1914, 60% of UK foreign portfolio and direct investment was in railroads (Houston and Dunning, 1976:44); of all inward investment in the US, about one-third was in this sector (Lewis, 1938). However, there were few genuine multinational railroad companies. Similarly, most foreign participation in public utilities took the form of portfolio rather than direct investment, although in some developing countries, European and US MNEs dominated the gas and electric power supply sectors.

The late 19th century was also an active period for syndicated foreign investment. Substantial amounts of British capital poured into the US to acquire granaries, grain elevators, flour mills and breweries. In the 1888–91 period, for example, 24 English syndicates acquired 80 breweries and two malt houses. Their reported investments amounted to $90 million (Coram, 1967). However, because of injudicious entrepreneurship and bad management, most of these ventures lost money and few remained in British ownership at the beginning of the First World War.

In the half-century before 1914, there was also some foreign production in a variety of service sectors. Multinational banks, such as Deutsche Bank (Germany), Société Générale (Belgium) and Banque d’Indochine (France), established a network of offices in many parts of the world (Jones, 1990). By 1913, the 28 UK registered banks had already established 1,286 foreign branches and agencies (ibid.), more than double the number of branches set up by German and French banks (Aliber, 1984). Jones (1993a) identifies the (then) O-specific advantages of UK banks as their ability to raise finance on the world’s largest capital market at a lower cost than their competitors; the presence of related or supplier industries in the City of London; their organisational capabilities; their
ingenuity in offering multiple services and differentiating their products; and their focused strategy on following their customers abroad. It should also be noted that before 1914, it was the specialist overseas banks (the equivalent of the free-standing firms) which had extensive branch networks, including the Bank of London and South America, Standard Bank of South Africa, or the Chartered Bank of India, Australia and China. After 1914, some of the British domestic banks, including Barclays, started acquiring equity stakes in some of these banks, which dominated the banking sectors in much of the Southern Hemisphere and Asia.

By contrast, US banks lacked these capabilities. In addition, they were subject to statutory restrictions on branching. In consequence, as Wilkins (1990a:222) observes, there were not many American banks with foreign operations before 1914. Wilkins (1986, 1990b) records that the Yokohama Specie Bank – the predecessor of the Bank of Tokyo – had set up an agency in New York City in 1880 while it was operating a branch in Bombay in 1894. According to another source (Tamaki, 1990) the same bank had established at least 21 overseas banking units. Chinese banks, which were later to become particularly prominent in South-East Asia, had already set up affiliates in Malaya and the Straits Settlements by 1912 (Brown, 1990).

European shipping, cable and wireless companies were active in the US – the Marconi Company was the leading enterprise in the field of radio communication (Wilkins, 1989). Swiss hoteliers owned or managed hotels in Italy, France and North Africa (Himmel, 1922), while there were substantial Belgian investments in foreign tramways (Van der Wee and Goosens, 1990). There was a sizeable FDI stake in insurance, though mainly of US and UK origin. Best’s Insurance Report for 1914 indicates that the First Bulgarian Insurance Company of Roustchouk, Bulgaria, operated offices in seven European countries and the US. Accounting, consultant engineering and construction firms from Europe and the US were represented in several developing and developed countries. The period between 1850 and 1914 also saw a marked growth in foreign firms entering into the UK retail sector, although these were mostly manufacturers distributing their own products (Fletcher and Godley, 2000).

By the turn of the century, Japanese trading companies were accounting for one-half of the total exports of Japan (Yonekawa, 1985), while Japanese MNEs owned or controlled an important part of trans-Pacific shipping operations. By 1881, 14 Japanese trading companies had branches in New York City, the purpose of which was both to promote Japanese exports, notably of silk, and to procure materials and machinery for domestic manufacturers. In 1914, one Japanese trading company, Mitsui, was reported as handling more than 30% of US raw cotton exports to Japan (Sugiyma, 1988, quoted by Wilkins, 1990b). British, German and French companies were also actively involved in import/export merchanting, particularly in primary products.

Extensive research by Geoffrey Jones reveals the extent of the operations of British trading companies in the 19th and 20th centuries (Jones and Wale, 1998; Jones, 2000). These firms formed a heterogeneous group, which from the 1870s onward increasingly diversified into other activities such as shipping, as well as the provision of financing and banking services, and eventually manufacturing. Jones suggests that trade intermediation is a self-limiting activity in a market with a relatively fixed number of buyers and sellers. Once the buyer and seller are connected, they might no longer need an intermediary, unless the intermediary is able to offer a host of other services as well. Jones argues that
this led to the transformation of the merchant firms from trade intermediaries to conduits for FDI in the late 19th century. While the era of merchant capitalism did draw to an end for the simple merchants, the firms that diversified into other activities, such as manufacturing and resource-based investments, survived well past this point.

Taken together, the activities of these merchant groups, and the extensive free-standing investments of British origin, paint a somewhat different picture from that offered by Chandler (1990) in his analysis of the driving forces behind American, British and German economic growth in the 1870–1940 period. In particular, Chandler argued that British industrial firms in this era were hampered by the prevalence of family ownership, and a focus on current income rather than strategic risk taking, which was required to capture the benefits of the three-pronged investments in production, distribution and management. While many British manufacturers were clearly outperformed by their American counterparts, Jones (1997) argues that at least in part, due to the performance of the merchant groups and the free-standing investments, speaking of a general British failure prior to the Second World War is unwarranted.

Indeed, far from being miserably underperforming, many of the merchant groups performed quite well financially. Citing Casson (1997), Jones (2000) suggests that due to their established reputation and extensive local knowledge, such firms were well suited to overcoming the obstacles posed by a lack of trust and information that would otherwise have hampered exchange. Furthermore, since the merchant firms relied on the use of ‘other people’s capital rather than their own’ (p. 27) to finance their investments, close contact with leading firms in the City of London, as well as an image of trustworthiness enabled the groups to raise funding for many high-risk projects, such as investments in natural resources.

The British class system, combined with family ownership, meant that those selected for managerial roles not only knew each other, but were also likely to know the potential investors and bankers on a social level. While such connections may have done nothing to help British manufacturing firms, which suffered from a lack of investment necessary to achieve economies of scale and scope, in retailing the use of socialisation as a means of controlling the performance of foreign managers proved to be useful. Similar advantages were also identified by Jones (1993a) in connection with British multinational banks.

6.4.5 The Position Prior to 1914: A Résumé

Studies published in the past two decades suggest that earlier scholars considerably underestimated the role of FDI as a vehicle for the international transfer of intangible assets in the 40 years prior to the First World War. By assembling widely disparate estimates of both the inward and the outward direct capital stake of countries, it would appear that by 1914 at least $14.5 billion, and possibly as much as $18 billion, had been invested in enterprises or branch plants in which either a single or a group of non-resident individuals or firms owned or controlled a majority (or a substantial minority) of the equity interest, or which were owned or controlled by first-generation expatriates who had migrated earlier. The former figure represented at least 35% of the estimated total long-term international debt at the time.

There is also little doubt that, from the viewpoint of some home and host countries, MNE activity, both as a channel for the transfer of resources and capabilities between
countries and as a means of controlling the use of these and complementary local assets, played a scarcely less important role than it had since the mid-1950s, and a far greater one than it did in the inter-war period. Moreover, the territorial compass of FDI was probably wider than it had been for most of the last half-century. Both Eastern Europe and China were, for example, attractive outlets to foreign businessmen in the years preceding the First World War. According to one estimate (McKay, 1970), between 1880 and 1913, roughly 50% of all capital invested in industrial corporations doing business in Russia was of foreign origin, while many of the coastal industries and trade of Eastern China was controlled by Japanese firms. It is also worth recalling that there were few governmental controls on either inward or outward investment flows in the late 19th and early 20th centuries, or on the scope or behaviour of the activities of MNEs and their subsidiaries.

While for the first three-quarters of the 19th century, direct capital exports mainly comprised expatriate investment or finance raised in the home country by corporations or individual entrepreneurs, the subsequent 40 years saw the infancy and adolescence of the type of FDI that predominates today, namely that owned and controlled by firms already producing in their home countries. This latter thrust began around the middle of the 19th century and accelerated after 1875. By 1914, the MNE had become firmly established as a major vehicle of international economic involvement.

As revealed in Table 6.1, the UK was by far the largest foreign capital stakeholder in 1914. According to one estimate, free-standing firms accounted for more than three-quarters of the total direct investment by British firms (Corley, 1994). New research on direct investment by firms in the UK, the Netherlands and Germany have led us to revise upwards our previous estimate of the total stock of capital by $3.45 billion. The origin of these new estimates, as well as the problems associated with assessing the home and host country distribution of investment historically, are detailed in Jones (1994).

Tables 6.1 and 6.2 present what we believe still to be the only comprehensive estimates of the extent and distribution of the global stock of FDI in 1914, measured at current prices and exchange rates. It should be noted, however, that particularly when it comes to the distribution of investment between different host countries, by necessity, these represent orders of magnitude rather than exact figures. While the number of significant home countries has been, and continues to be, quite small, the number of host countries has been substantial, making accurate estimation very difficult. Indeed, in her analysis of the situation in 1914, Wilkins (1994) declined to give any figures, and instead ranked the host countries in their order of importance. Her ranking is concordant with ours, except in the case of China, which our estimates would place notably higher. In Table 6.2, the $3.45 billion in additional investment identified earlier has not been reallocated among the host countries due to the paucity of information.

Even in 1914, US investments were more directed to the growth sectors in foreign countries, and a much larger proportion represented the activities of affiliates of MNEs rather than of absentee equity owners. Such country-specific differences reflected differences in resource endowments and capabilities, institutional mechanisms and trading propensities of the investing countries. Thus, while Europe had accumulated a pool of entrepreneurial and managerial expertise and was already a major portfolio capital exporter, the US, with none of this background, was building a strong comparative advantage in corporate technology and management skills, which were often best exploited within the enterprise generating them.
Table 6.2 shows that about three-fifths of the foreign direct capital stake in 1914 was directed to today’s developing countries. However, taking a definition of such countries, at the time, to include all areas outside Western Europe and the US, the figure would rise to more than four-fifths. The distribution among recipient nations was quite diffused, with the combined Russian and Chinese share exceeding that of Western Europe and only slightly less than that of North America. The importance of non-resident capital and expertise in the development of both economies is often underestimated.

About 55% of the global FDI stake in 1914 was directed to the primary product sector, 20% to railroads, 15% to manufacturing activities, and 10% to trade, distribution, public utilities and banking. Manufacturing investments, which were largely of a market-seeking variety, were mainly concentrated in Europe, the US, the UK Dominions and

---

Table 6.1 Estimated stock of accumulated FDI by country of origin, 1914–1960

<table>
<thead>
<tr>
<th></th>
<th>1914</th>
<th>1938</th>
<th>1960</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$m</td>
<td>%</td>
<td>$m</td>
</tr>
<tr>
<td>Developed economies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North America</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>2,652</td>
<td>14.7</td>
<td>7,300</td>
</tr>
<tr>
<td>Canada</td>
<td>150</td>
<td>0.8</td>
<td>700</td>
</tr>
<tr>
<td>Western Europe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>8,172</td>
<td>45.3</td>
<td>10,500</td>
</tr>
<tr>
<td>Germany</td>
<td>2,600</td>
<td>14.4</td>
<td>350</td>
</tr>
<tr>
<td>France</td>
<td>1,750</td>
<td>9.7</td>
<td>2,500</td>
</tr>
<tr>
<td>Belgium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>1,925</td>
<td>10.7</td>
<td>3,500</td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other developed economies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>300</td>
<td>1.7</td>
<td>450</td>
</tr>
<tr>
<td>Japan</td>
<td>300</td>
<td>1.7</td>
<td>750</td>
</tr>
<tr>
<td>Australia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>180</td>
<td>1.0</td>
<td>300</td>
</tr>
<tr>
<td>South Africa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>neg</td>
<td>neg</td>
<td>neg</td>
</tr>
<tr>
<td>Developing economies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18,029</td>
<td>100.0</td>
<td>26,350</td>
</tr>
</tbody>
</table>

Note: na – not available; neg – negligible.

Sources: See Table 6.2.
The figures for 1914 reflect the following changes to the first edition:
The figure for Germany is based on Schröter (1984) cited in Jones (1994).
The figure for the Netherlands (925) is based on Gales and Sluyterman (1993) cited in Jones (1994).
The figure for the UK is based on Corley (1994) and reflects the stock in 1913.
The estimated figure for Italy, Belgium, Sweden and Switzerland (1000) is based on Corley (1994).
Russia. Apart from iron ore, coal and bauxite, almost all mineral investments were located in the British Commonwealth or in other developing countries.

Of especial significance in this era were raw material and agricultural investments. This was the heyday of the large plantations (rubber, tea, coffee and cocoa); of cattle raising and meat processing; and of the emergence of the vertically integrated MNEs in tropical fruits, sugar and tobacco. Indeed, apart, perhaps, from some transnational railroad activity in Europe and Latin America, it was in the agricultural sector that the international hierarchical organisation first flourished. It was especially prominent in economies whose

<table>
<thead>
<tr>
<th>Country or Area</th>
<th>1914</th>
<th>1938</th>
<th>1960</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$m</td>
<td>%</td>
<td>$m</td>
</tr>
<tr>
<td>Developed economies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North America</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>1,450</td>
<td>10.3</td>
<td>1,800</td>
</tr>
<tr>
<td>Canada</td>
<td>800</td>
<td>5.7</td>
<td>2,296</td>
</tr>
<tr>
<td>Europe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Europe</td>
<td>1,100</td>
<td>7.8</td>
<td>1,800</td>
</tr>
<tr>
<td>UK</td>
<td>200</td>
<td>1.4</td>
<td>700</td>
</tr>
<tr>
<td>Other Europe</td>
<td>1,400</td>
<td>9.9</td>
<td>400</td>
</tr>
<tr>
<td>Russia</td>
<td>1,000</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td>Australasia and South Africa</td>
<td>450</td>
<td>3.2</td>
<td>1,950</td>
</tr>
<tr>
<td>Japan</td>
<td>35</td>
<td>0.2</td>
<td>100</td>
</tr>
<tr>
<td>Developing economies</td>
<td>8,850</td>
<td>62.8</td>
<td>15,969</td>
</tr>
<tr>
<td>Latin America</td>
<td>4,600</td>
<td>32.7</td>
<td>7,481</td>
</tr>
<tr>
<td>Africa</td>
<td>900</td>
<td>6.4</td>
<td>1,799</td>
</tr>
<tr>
<td>Asia</td>
<td>2,950</td>
<td>20.9</td>
<td>6,068</td>
</tr>
<tr>
<td>China</td>
<td>1,100</td>
<td>7.8</td>
<td>1,400</td>
</tr>
<tr>
<td>India and Ceylon</td>
<td>450</td>
<td>3.2</td>
<td>1,359</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Middle East</td>
<td>400</td>
<td>2.8</td>
<td>621</td>
</tr>
<tr>
<td>International and unallocated</td>
<td>neg</td>
<td>neg</td>
<td>na</td>
</tr>
<tr>
<td>Total*</td>
<td>14,085</td>
<td>100.0</td>
<td>24,315</td>
</tr>
</tbody>
</table>

Note: na – not available; neg – negligible. * The total stock of investment indicated in Tables 6.1 and 6.2 is not equal, due to the paucity of information related to the geographical distribution of the investment stock.

Sources of Tables 6.1 and 6.2: The data contained in these tables have been derived from a large number of sources but the main ones have been as follows:

1914 Allen and Donnithorne (China and Japan, 1954); Bagchi (India, 1972); Callis (South-East Asia, 1942); Frankel (Africa, 1938); Hou (China, 1965); Houston and Dunning (UK, 1976); Lewis (various, 1938, 1945); McKay (Russia, 1970); Pamuk (Ottoman Empire, 1981); Paterson (Canada, 1976); Rippy (Latin America, 1959); Svedberg (various, 1978); Wilkins (various, 1988a).

1938 Allen and Donnithorne (China and Japan, 1954); Bagchi (India, 1972); Callis (South-East Asia, 1942); Conan (Sterling Area, 1960); Hou (China, 1965); Lewis (various, 1938, 1945); Svedberg (various data collected by him, 1978); Teichova (East Europe, 1974); United Nations (1949).

1960 Various government publications are cited in United Nations (UNCTC, 1981a) and especially those of the United States (Department of Commerce); United Kingdom (Department of Trade); and Canada (Dominion Bureau of Statistics). See also Conan (Sterling Area, 1960) and Kidron (India, 1965).
prosperity was highly dependent on a single cash crop, the production, distribution and marketing of which was controlled by a few foreign companies.

By 1914, FDI was increasingly taking the form of branch plant activity by MNEs. Both resource-based and market-seeking investments were becoming strongly motivated by the desire to exploit the gains of vertical or horizontal integration of production as well as the desire to minimise the uncertainties of intermediate product markets. Increasingly, too, such cross-border activities were being conducted by international oligopolies. While dynamic entrepreneurship continued to be a key O-specific advantage, strategic considerations began to play a more important role in affecting foreign investment decisions.

6.5 THE MATURING OF FOREIGN PRODUCTION: 1918–39

6.5.1 Introduction

The First World War and the years that followed saw several changes in the level, form and structure of international production. The war itself caused several European belligerents to sell some of their investments, while consequential political upheaval and boundary changes further reduced intra-continental European corporate activity and eliminated it altogether from Russia. Of the major investing countries, only the US emerged unscathed by these events. However, along with other countries, it suffered from the collapse of international capital markets in the late 1920s and early 1930s. Nevertheless, because American MNE activity was largely directed to sectors supplying products with an above-average income elasticity of demand, the US share of the world direct capital stake rose from 18.5% in 1914 to 27.7% in 1938.

Overall, as Table 6.1 shows, the international capital stake rose quite substantially in the inter-war years. Although there were some sizeable West European investments in Central Europe (Teichova, 1974), the amount invested in Russia fell dramatically after expropriations associated with the revolution. The Americas continued to attract more than two-thirds of the US direct investment stake. While the role of intra-European and US participation in Europe fell in the 1920s, it partially recovered in the 1930s, as did European investments in the US. There was also some retrenchment of European economic involvement in Latin America – particularly in the railroad sector. This was partly compensated by a modest increase in UK direct investment in Commonwealth countries in an attempt to recapture export markets lost during the war. Prior to the Sino-Japanese War, there was also a sharp rise of Western and Japanese business activity in China.

The case of Germany as an outward direct investor in the inter-war years is particularly interesting. Having lost most of their foreign assets in or after the First World War, German MNEs displayed a certain reluctance to invest abroad. Moreover, a shortage of financial resources and foreign exchange constrained their options. Instead, German enterprises turned to international cartels and contracts as a means of assuring the supplies of critical raw materials, and protecting market shares in the leading industrial countries (Schröter, 1988).

One of the most popular areas for German direct investments in the inter-war years was Scandinavia. Sometimes, such involvement took the form of FDI (for example, in
Norwegian iron ore mines, nitrogen production, and so on), sometimes by cartel (for example, that formed by ASEA, AEG and Siemens in the field of electrical power and equipment and by DuPont and I.G. Farben in chemicals), and sometimes by long-term contract. Examples of such contracts are those between the German iron and steel producers and the Swedish firm Granges for iron ore, and between I.G. Farben and the Finnish dairy cooperative Valio for a chemical process designed to conserve livestock fodder (ibid.).

There was also quite a lot of new MNE activity in the developing world in the interwar years. This included investments by US firms in new oil fields in the Mexican Gulf, the Dutch East Indies (now Indonesia) and the Middle East; in copper and iron ore in Africa; in bauxite in Dutch and British Guiana (now Surinam and Guyana); in nitrate in Chile; in precious metals in South Africa; and, perhaps most noteworthy of all, in non-ferrous metals in South America. Indeed, in 1929 two experts on mining observed that ‘the bulk of productive mineral resources of South America are owned by American interests’ (quoted by Wilkins, 1974:106). Outside the mineral sector, the growing industrial demand for rubber led both US and European tyre manufacturers to increase their capital stake in Liberia, Malaya and the Dutch East Indies. At the same time, rising real incomes in industrial countries prompted a further flurry of activity by MNEs in sugar, tropical fruit and tobacco. There was also a sizeable expansion of public utility investments in Latin America by US firms. Both US and UK MNEs extended their foreign sales and marketing ventures into production in these years.

Yet although the number of new subsidiaries set up by MNEs continued to rise throughout the period, it was only in the 1930s that the value of the global foreign direct capital stake exceeded its pre-war figure. Investments by continental European firms were directed mainly to other parts of Europe and the US, while those of US MNEs were strongly orientated to South America, Canada and the larger European countries. The first four foreign manufacturing affiliates of the largest Japanese corporations existing in 1970 were set up between 1920 and 1938 (Vaupel and Curhan, 1974). During this period, many of the major Japanese cotton spinners established local production bases in China, mainly to defend their market shares (Kuwahara, 1989), while some of the general trading firms (for example, Mitsui and Mitsubishi) were active in setting up import/export merchanting agencies on the West Coast of the US (Kawabe, 1989).

In general, the climate for transnational commerce was considerably less favourable than in the years prior to 1914. Increasing tariffs and other import controls inhibited trade based on the specialisation of country-specific resources and capabilities and efficiency-seeking foreign production. The resulting international economic environment encouraged import-substituting investment and the formation of cross-border cartels to protect their participants against destructive competition. On the other hand, new technologies and organisational advances helped to push out the industrial and territorial boundaries of firms and to encourage product and process diversification. The demand for raw materials and foodstuffs from developed countries outstripped their supply from these countries. Sometimes this resulted in more FDI, for example, by European firms in their colonies and US firms in Latin America and the Caribbean. In other cases, it led to the replacement of imported materials by synthetic substitutes which the home country could produce.

The net result of these developments was to increase defensive market-seeking manufacturing investments and to slow down the growth of aggressive and efficiency-seeking
manufacturing investment. Resource-based MNE activity continued to expand, especially from continental European countries, but at a reduced pace as man-made materials (for example, rayon, plastics, synthetic rubber) began to replace their natural competitors.

Another feature of the inter-war years was the decline of syndicate and free-standing FDI, and an increase in all kinds of MNE activity. The growth of foreign production increasingly took the form of vertical integration or horizontal diversification. This was a period in which both the average size and the number of internal transactions by firms increased sharply. Cross-border M&As rose relative to greenfield investments. Asset-acquiring FDI (see Chapter 3) increased as firms sought to protect or strengthen their market positions and/or reduce their production or transaction costs. At the same time, the strategy of domestic oligopolists widened to embrace international markets.

In a continuation to her pioneering study of early FDI in the US, Wilkins (2004) examines the experiences of foreign investors during the turbulent period of 1914–45. While in 1914, portfolio investment had accounted for three-quarters of all foreign investment in the US, by the end of the Second World War, this ratio had become much lower, although portfolio investments still exceeded direct investment. It was also during this period that the US went from being a net debtor, to being a net creditor in the world economy.

In addition to analysing the development of both foreign portfolio and foreign direct investment, Wilkins also examines their interconnections, introducing new evidence of what she calls ‘cosmopolitan finance’ (p. 189), which firms used to tap into the buoyant financial market of New York in the late 1920s. Indeed, cosmopolitan finance took a number of different forms, where both portfolio and direct investment were used, and where both inward and outward transactions took place. For example, Ivar Kreuger, who controlled a large business empire that included the Swedish Match Company, used his investments in the US not only to support manufacturing activities there, but also to finance substantial activities in Europe and elsewhere.

In comparison to the free-standing firms, which typically raised finance in their home country in order to undertake investment abroad, cosmopolitan finance provided a means for firms to invest abroad in order to gain access to financing in their home country or elsewhere. Although integrated capital markets have made this form of investment a historical curiosity, this evidence forms a part of a broader argument made by Wilkins (1999) that portfolio and direct investment have been (and are) related in multiple ways that have not been sufficiently explored in the literature.

For much of the inter-war year period, international cartels flourished. Trade restrictions also forced MNEs to replicate the same value-added activities in several countries, with the result that sustainable levels of production were rarely attained. Governments both tolerated the suppression of domestic competition and encouraged international market-sharing schemes. The net result was that either markets were assigned to firms of particular nationalities or, as Franko puts it, ‘the oligopolistic matching of the markets gave way to entry en famille in manufacturing subsidiaries jointly owned by international rivals’ (Franko, 1976:95).

The propensity of firms to engage in one form of international economic involvement rather than another again varied by sector, country and enterprise. There were, for example, few cooperative agreements in the fast-growing motor vehicle industry, where
the technological and marketing advantages of US MNEs were particularly strong. Each firm produced a limited range of products. Substantial economies of scale enabled US producers to acquire and apply a knowledge of production, management and marketing techniques which were not available to motor manufacturers elsewhere in the world. Also, the earlier experience gained by American firms in machine tool technology and the Taylor system of organising production was to prove an invaluable O-specific advantage (Foreman-Peck, 1982). By contrast, in the electrical equipment industry and some branches of the chemical and heavy engineering industries where cartels were rife, these conditions were largely absent.

Moreover, contractual technological exchanges were favoured by the recuperating large companies of Western Europe – particularly those of German origin – as a way of penetrating the American market without a substantial capital investment. This also explains why joint ventures were more common among European firms investing in the US than vice versa. At the same time, the patent pooling and international cartel agreements that became increasingly popular during the inter-war years, also placed foreign multinationals, and particularly German multinationals, under suspicion for actually impeding the scientific development of indigenous American firms. However, the evidence presented by Wilkins (2004:607) on industries such as chemicals, where foreign MNEs has substantial ownership advantages, suggests that foreign investment had a positive rather than negative effect on the technological development of US firms.247

During this time there was also a falling back of some kinds of vertical direct investments as new international commodity markets were set up. On the other hand, in those primary sectors characterised by large indivisible costs where high barriers to entry kept the number of firms small and the need to protect against fluctuations in output was especially important (for example, oil, tropical fruit, rubber and several nonferrous metals), MNEs tightened their hierarchical control.

6.5.2 Market-seeking Investments

The pattern of country-specific O advantages of established US and European manufacturing MNEs prior to 1914 continued throughout the inter-war years. For example, because of the structure of their supply capabilities and the size and nature of their domestic markets, US firms continued to gain strength in many fabricating industries. Indeed, by 1939, they probably accounted for two-thirds of the world’s foreign direct capital stake in the engineering and motor vehicles sectors. Added to the new product and process innovations in these fields were important developments in managerial, organisational and working practices. Enlarged domestic markets also enabled US firms better to exploit the economies of vertical and horizontal integration which had prompted the growth of many domestic corporations prior to the First World War.

With a few exceptions (for example, the match, steel, tobacco and insurance industries, which lost some of their earlier competitive advantages),248 US MNEs maintained a vigorous growth in the 1920s. Most of this growth was directed to Canada and Western European countries which, between them, accounted for 72% of all US outbound manufacturing investment between 1919 and 1929. Between 1925 and 1929 alone, 303 new American factories were set up in Europe and Canada – 31% of all those operating in 1929 (Lewis, 1938:599). According to the comprehensive data collected by Jones and Bostock
(1996), there was a notable surge of US investment in the UK, with 121 new manufacturing subsidiaries established in the 1920s, and 112 in the 1930s, of which 40 and 23% were acquisition entries, respectively.

Most of these were intended to produce goods in which US-owned firms had a competitive advantage, namely, the newer metal-using and technology-intensive processing industries, and the high-income, product differentiated, consumer goods sectors. Their impact was viewed with some disquiet by the Europeans – particularly in the UK and Germany – so much so that the Americans were often forced to disguise their origins or enter into joint ventures with host country partners (Wilkins, 1974). Anxiety was also voiced in other parts of the world, such as Latin America and Australia. By contrast, in Japan, inward investment was generally welcome, although frequently it was undertaken jointly with one or other of the leading Japanese companies or Zaibatsu. Mason (1987, 1992a) documents a number of cases of knowledge transfers by European and US MNEs in the 1920s, including those by Western Electric (US), Dunlop Rubber (UK) and Siemens (Germany).

As American corporations expanded into more foreign countries, the character of their O-specific advantages changed from those based on the possession of particular intangible assets to the way in which these and other assets were organised and coordinated across national boundaries. Increasingly, as MNEs added to their foreign assets (that is, engaged in sequential investments) and established a presence in more countries, the role of their affiliates changed from being simply appendages of the parent firms to becoming part of a systemic network of cross-border value-added activities. While the advent of the global enterprise was not yet nigh, the movement towards the globalisation of products and markets certainly began in the 1920s, and was primarily of US origin.

British and European MNEs continued to develop new O-specific advantages in the processing industries. In Europe, where the ratio of material costs to labour costs was so much higher than in the US, there was a greater reluctance to rely on foreign-sourced raw materials (for example, rubber, fertilisers, dyestuffs). Rather, every encouragement was given to the development of synthetic substitutes and the more efficient use of existing materials. More specific reasons, such as the introduction of state-supported health insurance and retirement schemes in Germany, conditioned other innovations. In his analysis of European MNEs, Franko (1976) suggests that while in the US most innovations were directed to a large middle-income market and were of a labour-saving kind, in Europe the markets served were at the luxury or lower end, labour was relatively cheap and many materials were either expensive or had to be imported. Also within Europe, conditions differed. For example, French institutional structures and vocational training opportunities were generally less conducive to innovation than their German counterparts. Nevertheless, the French helped to pioneer the synthetic rayon and aluminium industries.

The European MNEs further developed their competitive advantages in two types of activities. The first was in the processing sectors, and particularly the chemical industry. Between 1920 and 1939 the growth of US patents granted to European chemical firms completely outstripped those granted to North American firms (Cantwell, 1992). By 1940, the Germans were producing 90% of the world’s output of synthetic dyestuffs. The second was in niche markets in the fabricating industries. The Germans again led the way in supplying luxury motor cars and high-quality electrical products, or, as Franko (1976:25) puts it, ‘in the supply of unique goods or goods produced with a unique process’.
The two most noticeable characteristics about UK market-seeking MNEs in the inter-war years were the growth in their number and their preference for Commonwealth locations. In a survey of 448 pre-1939 UK manufacturing MNEs, Nicholas (1982) found that 52% of those set up post-1914 were located in such areas compared with 34% prior to 1914. Indeed, Lundan and Jones (2001) have demonstrated that the influence of such ties is visible even today in the patterns of FDI stock and trade within the modern Commonwealth. Partly, this preference reflected the fact that the leading British enterprises of the time were very orientated towards Commonwealth territories, partly because they frequently followed the lead of US and German MNEs, and partly because they generally regarded such territories as easier to penetrate than the tougher industrialised markets (Stopford, 1974).

In the case of British chocolate manufacturers, the war so damaged their exports to the Canadian and Australian markets that they found the only way to regain those markets was by FDI (Jones, 1984b). For a very different reason, George Kent, the UK instrument producer, set up a Canadian affiliate to attack ‘on their own ground US companies selling water meters and instruments in Europe’ (Archer, 1986:299). However, the company chose Canada rather than the US because American firms were less active in the former country. There was some investment by UK firms in the US and Europe in the inter-war years, although, by the late 1930s, the political climate in Germany had reduced the flow of new MNE activity to a trickle. Again, most of the newcomers were in the processing and relatively mature and low-technology sectors. Indeed, the record suggests that UK MNEs in these sectors generally improved their global competitive performance in the inter-war years (Houston & Dunning, 1976).

In the technologically advanced and vertically integrated fabricating sectors, however, the UK lagged behind. This has been put down to the lack of incentives offered to UK firms to modernise or rationalise its activities, deficiencies in the British educational system and the slowness of UK firms to adapt to the kind of managerial and organisational structures most suited to these sectors (Chandler, 1980).

As in the period before the First World War, the leading UK MNEs continued to be managed by their owners. While this sometimes resulted in strong entrepreneurial leadership (for example, Robert Barlow of Metal Box, Eric Bowater of Bowater and Harry Jephcott of Glaxo), family-owned companies were generally less willing to engage in any form of expansion that might necessitate a dilution of ownership or control. In addition, MNEs such as ICI, Courtaulds, Pilkington and Metal Box limited their foreign production because of cross-border licensing or cartel agreements. In some cases, cartels expressly disallowed FDI by their members. In 1933, for example, British manufacturers of wire nails reached an agreement with their continental counterparts which prohibited the latter from erecting nail factories in Britain (Jones, 1988). In other instances, UK firms were permitted to produce in Commonwealth countries, but not in the US. Examples include arrangements concluded between ICI and DuPont, and Metal Box and Continental Can.

If the character of the O-specific advantages of market-seeking MNEs in the inter-war years was broadly similar to those of the previous period – except that those germane to cross-border ‘learning cost externalities’ (Kogut, 1983) were beginning to be of some significance – the factors influencing the location of the value-adding activities arising from these advantages changed dramatically. Protectionism in the form of tariffs and
other import restrictions escalated. Empirical studies at the time (Southard, 1931; Marshall et al., 1936; Royal Institute of International Affairs, 1937) concluded that most market-orientated FDI in developed countries was defensively motivated. In Canada, Marshall et al. found that tariffs were ‘of overwhelming importance in the branch plant movement’ (p. 201). By contrast, the same writers estimated that only between 15 and 20% of Canadian–American branch factories owed their existence ‘in any measurable extent to transportation savings’, while the factory costs of US companies in Canada were ‘in most cases definitely higher than those in the parent company’ (p. 207).

In Europe, Southard (1931) concluded that US firms were prompted to establish branch plants mainly by their need to customise goods (particularly consumer goods) to local supply capabilities and demand idiosyncrasies, to save on transatlantic transport costs (especially for bulky, perishable or fragile articles) and by the prevalence of non-tariff barriers (for example, discriminatory government procurement policies and ‘buy home produced goods’ sales pitches). Nationalist pressures by the Australian, Indian, Italian and Irish governments were identified by Nicholas (1982) as a powerful inducement for UK manufacturing investment in those countries, while Egypt’s tariff reform of 1930 directly led to three major UK textile firms setting up factories in that country (Tignor, 1987). Some US firms also sought to forestall the entry of European firms into US markets through the acquisition of European companies.

During these years, too, as markets became less secure and more compartmentalised, firms sought locations that were politically, culturally and sociologically similar to their own. This explains the preference of UK investment for Commonwealth countries and US investment for Canada, Latin America and parts of Asia. By contrast, the political situation in Europe was volatile, while local firms were buttressed by cartels and government protectionist policies.

Finally, as pointed out above, although the transaction costs of cross-border hierarchical activities fell in the inter-war years, the benefits perceived to arise from alternative organisational forms were greater. Recession, monetary instability (which led to distorted price relationships) and a relaxed attitude towards collaborative agreements promoted a climate in which territorial and market-sharing agreements flourished. The result was that a major impetus for forward integration was removed. Moreover, because of segmented markets, MNEs with subsidiaries in several countries did not find it beneficial to engage in inter-plant product specialisation. Intra-firm trade remained small. The result of all these forces was that, although the internalisation of domestic (and particularly US) markets continued to increase, those across national boundaries were mainly confined to selling activities.257

The role of some investing governments was no less important. After 1929, for example, the export of capital from the UK was restricted by exchange control. At the same time, British policy looked more favourably on foreign manufacturing than it had done in pre-1914 days. In part, this change of attitude was influenced by the expansion of intra-industry oligopolistic competition and the recognition that in some instances home and foreign investment might be complementary, rather than substitutable, to each other.

There is little substantive evidence as to the reasons why firms internalised their cross-border intermediate product markets in the inter-war years. Stopford and Turner (1985) assert that UK companies generally eschewed the licensing option because of a lack of enforceable patent legislation or difficulties in monitoring the licensees’ performance.
However, a review of company histories and archive material reveals other reasons why UK firms opted for FDI rather than a cooperative non-equity arrangement. These include the difficulty of finding suitable subcontractors or licensees; the failure to agree on acceptable contractual terms and conditions; and the concern lest a licensee might become a future competitor of the licensor (Archer, 1986).

6.5.3 Resource-based Investments

Supply-based FDI in mining and agribusiness recorded a mixed performance in the inter-war period, and was largely dominated by American and British interests. Perhaps the most dramatic increase occurred in foreign-owned oil production. We have seen that before 1914, US MNE activity was mainly designed to seek markets for US oil. By the 1920s and 1930s, however, American companies were investing large sums of money in the exploration and production of crude oil in Latin America, the Middle East and the Dutch East Indies. By 1928, Venezuela had become the second-largest supplier of oil to the UK (Wilkins, 1974). When the US placed a tariff on Venezuelan oil imports in 1932, American petroleum affiliates in Venezuela began exporting to Europe. At the same time, as American oil companies opened up new sources of production, built new pipelines and refineries, increased their tanker fleets and widened their distribution networks, the two main European oil companies – BP and Shell – also diversified their production interests, and by 1939 had invested in most of the territories of their US competitors.

Except in some of the newer metals, FDI in mining rose only slightly during the inter-war years. As in the oil sector, US and British MNEs made most of the running, although the Belgian-owned firm Union Minière du Haut Katanga was a leading nonferrous ore producing company in Katanga, while there were impressive German and French interests in bauxite in Southern and Eastern Europe (Franko, 1976). Frequently, these ventures were partly or wholly state owned. However, as mentioned earlier, the inter-war years saw the establishment of several American and European energy and mineral cartels, particularly in coke, tin and copper. There was also some mineral investment in European colonies, while investments in rubber plantations in Malaysia and Liberia, and in forestry products in various parts of Africa and Asia, grew rapidly.

Generally speaking there was little secondary processing activity by MNEs in the developing countries in this period, and few attempts by host governments to disinternalise foreign investments in natural resources. But in the late 1930s, new commodity and futures markets (for example, in rubber, tea and coffee) began to emerge, which were eventually to erode many of the advantages of vertical integration. In 1968, Reddaway et al. (1968) observed that by the late 1950s few UK firms directly owned foreign assets in the raw materials sectors which they had dominated half a century earlier. One other feature about supply-orientated investments in this period was that an increasing proportion of their output was supplied to industrialised countries other than the investing country. There was also some increase in cross-border intra-firm trade.

6.5.4 Other Investments

The limited amount of FDI in services in the inter-war years reflected the deceleration of MNE activity in other sectors. However, there were exceptions to this rule: for example,
Japanese trading companies were active both in Europe and the US. In Europe, Mason (1992b) observes that such companies not only expanded their range of traded products, but also assumed increasingly important roles as sources of market intelligence for home-based firms. Japanese insurance companies, such as Mitsubishi Marine and Tokio Marine, also set up or expanded their British operations in the inter-war period.\footnote{259}

In the US, in the 1930s, the branches and agencies of the Yokohama Specie Bank were financing more than half of Japan’s imports from the US and were a major participant in financing Japan’s exports to the US (Wilkins, 1990b). By that time, all the major trading companies had branches in the US, each of whom played a critical role in fostering trans-Pacific commercial transactions, technology transfers and assisting in the start-up of US joint ventures in Japan. The trading companies were further supported by a network of Japanese-owned shipping and insurance companies. Indeed, Wilkins goes as far as to argue that the inter-war Japanese direct investments in the US ‘provided the basic infrastructure for Japanese commerce’ (ibid.:598).

By contrast to the growth of Japanese trading companies and banks, those of UK origin recorded a lower rate of growth in the inter-war years. This was partly due to a loss of trade by the UK manufacturers to their foreign (especially Indian and Japanese) competitors following the First World War. But UK banks also lost some of their initial O\footnote{259} advantages in foreign markets with the advent of local banks, the creation of central banks, the growth of banking regulations, the relative decline of the City of London as the world’s leading financial centre, and the inability or unwillingness of UK banks to adapt their organisational structures to respond to changing environmental circumstances (Jones, 1992a). At the same time, UK trading companies and banks had strong incumbency advantages that allowed them to maintain a strong market position, and even to extend their activities, for example, by moving from trading to motor vehicle distribution, and by extending their local lending operations (Jones, 1993a, 2000).

6.5.5 The Inter-war Years: Conclusions

In spite of a less hospitable international economic and political climate, MNE activity continued to grow in the inter-war years, particularly in the 1920s. The most significant features of the period were:

1. the maturing of US direct investment and, in particular, the emergence of the diversified and integrated MNE;
2. the growth of defensive market-seeking investments, particularly in Europe;
3. the entry by foreign investors into new resource-based activities, particularly oil, non-ferrous metals and phosphates;
4. the substitution of foreign production by international cartels in several sectors which had previously attracted a great deal of FDI; and
5. the role played by the Japanese trading companies in Japanese–American commerce and Japanese economic development.

These features together with the organisational and communication advances of the period led to a further pushing back of the territorial borders of firms and the opening up of new markets. At the same time, the developing world continued to attract the bulk
of resource-based investment and the developed world most of the market-seeking invest-
ment. There were glimpses of efficiency-seeking FDI as foreign affiliates began to spe-
cialise in some of their product and process activities and to engage in cross-border intra-firm trade. There were also the beginnings of strategic asset-acquiring activity as MNE oligopolies moved towards more global production and marketing.

6.6 THE EARLY POST-WAR PERIOD: 1945–60

6.6.1 Some Facts

If the inter-war years witnessed a maturation, but deceleration, in the growth of inter-
national business, the years since the end of the Second World War have seen almost unin-
terrupted expansion of all kinds of trade and investment. The period, which has seen the emergence and maturation of global capitalism (Dunning, 2001b), may be conveniently divided into two phases. The first – up to around 1960 – was one in which the US domi-
nated new MNE activity. Of the increase in both the world direct capital stake since 1939 and in the number of manufacturing subsidiaries of 174 of the world’s leading MNEs identified by Vaupel and Curhan in their 1974 study, the US accounted for about two-
thirds. The second period, spanning the following three decades, has witnessed the increasingly important role first of continental European, then Japanese and finally some developing countries as international direct investors. This period has also seen the opening up of new territories, especially China and Central and Eastern Europe, to foreign-owned production, the liberalisation of many domestic and cross-border markets, the advent of the internet and e-commerce, advances in regional economic integration, and the emergence of some truly global MNEs.

The effect of the Second World War was similar to that of its predecessor in that each of the main European belligerents was forced to divest many of its foreign direct assets. However, unlike the 1914–18 war, the Second World War generated a series of major technolog-ical advances, while its aftermath produced an international economic and political climate particularly favourable to cross-border business activities. Also, it was not too long before the UK and the leading continental European nations, apart from West Germany, began to rebuild their foreign investments. By 1960, for example, the foreign direct assets of French and Dutch companies had exceeded their pre-war levels.

As a percentage of both world output and trade, the global FDI stake rose modestly between 1938 and 1960. During this period there was a continuation of the pre-war trend for MNEs to favour developed countries for new venture activity. In 1938 something like two-thirds of the foreign assets owned by corporations were located in developing coun-
tries; by 1960 the proportion had fallen to 40%. Partly this reflected another major structural change, namely the increased interest shown by international firms in market-
seeking activities, which were aimed at circumventing trade barriers of one kind or another. In 1960 about 35% of US- and British-owned foreign assets were within the manu-
facturing sector, compared with about 25% in 1938 and 15% in 1914. By contrast, interest in agricultural and public utility activities declined markedly, while – taken as a whole – mining investments recorded about average rates of growth. Yet some of these latter investments, notably those made by UK and US MNEs in nonferrous metals (copper in
Chile and Peru, bauxite in the Caribbean and so on) and oil in the Persian Gulf, grew rapidly.

Although this period saw the start of enforced divestment or nationalisation programmes by some host countries and the setting up of new international producers’ cartels, it was not until the 1960s that the growing economic power of some developing countries was fully revealed. Apart from state-owned oil companies, European MNEs were not very active in the primary sector; the major capital exporters in the 1950s, namely, the Netherlands, France and Switzerland, preferred to invest in manufacturing, trade and service activities (including finance and insurance). As in the inter-war years, UK MNEs directed their attention mainly towards Commonwealth countries. Indeed, such countries increased their share of the total capital stake from around one-half in the 1930s to over 70% in 1960. During the early post-war period, first South Africa, and then Australia and Canada attracted the bulk of the new UK direct investment. By contrast, the focus of interest of US MNEs was strongly directed to Canada and Western Europe.

Two other points might be made about this era of IB expansion. First, the relative significance of new foreign subsidiaries, surveyed by Vaupel and Curhan (1974), which were established by greenfield ventures (as compared with acquisition, merger or reorganisation) fell from 55% in 1946–52 to 48% in 1959–61; the corresponding figures for the pre-1914 period and 1919–39 were 67 and 58%, respectively. Second, in the case of both US- and non-US-based MNEs, the proportion of affiliates in which they had a 95% or more equity stake fell from 60% in 1946–52 to 54% in 1959–61.

Both market-seeking and resource-based MNE activity rose sharply in the immediate post-war period. As before the war, the former was directed mainly to developed countries, particularly Western Europe and Canada, and the latter largely to developing countries as well as to Canada and Australia. There was a less noticeable increase in efficiency-seeking investment, and hardly any MNE activity aimed at acquiring new competitive advantages. However, the first half of the post-war period did herald a number of important changes in the organisation and location of FDI. These are described in the following subsections.

### 6.6.2 Changes in the Organisation of International Business

Several events in the first decade and a half after 1945 combined to affect the organisational form of international business. First, as Chapter 2 has already described, the US dominated the supply of new capital, innovations and entrepreneurship for much of the period. Second, these were years of considerable advances in non-codiﬁable technology, managerial expertise and organisational capabilities, the international market for which was extremely imperfect. Third, anti-trust legislation, particularly in the US, made both domestic and international mergers or combines much more diﬃcult to conclude than in pre-war days. Fourth, the advent of jet travel and the computer initiated a new era of transport and communication facilities which reduced hierarchical transaction costs. Fifth, while for the first decade after the war international markets of almost all kinds were in disarray, the underlying economic environment for FDI and trade, created at Bretton Woods and Havana, was both more congenial and stable than that which faced policy makers in the inter-war years. Add to these factors the types of industrial and service sectors in which world output was expanding the fastest, the countries which were
most eager to entice foreign entrepreneurship, technology and capital, and the relative unattractiveness of alternative routes of resource transfer, and it is not surprising that international production rose so markedly in these years.

This period also saw a continuation of the pre-war trend to a more integrated product and market structure on the part of established MNEs. At the same time, a reading of the many country studies of FDI published in the late 1950s and 1960s suggests that efficiency-seeking foreign production, as we know it today, was still the exception rather than the rule within the manufacturing sector. Certainly, intra-firm manufacturing imports and exports by MNEs were a small fraction of their current level and, for the most part, these firms engaged in little cross-border product or process specialisation.

Indeed, the early field studies of Dunning (1958), Stonehill (1965), Brash (1966) and Safarian (1966) all suggested that, in the main, US manufacturing subsidiaries were truncated replicas of their parent organisations and, after a learning period, tended to conduct their affairs with minimal parental interference.

This leads us to a general observation. While the setting up of a foreign affiliate may be likened to that of establishing a new branch plant of the parent company in the home country, it has also some of the characteristics of a *de novo* firm. This being so, a purely Chandlerian explanation (for example, Chandler, 1962) of the growth of a large enterprise within a country may not be wholly applicable to the initial decision to undertake foreign production. This is not only because the majority of MNEs are small or medium-sized firms, but because a foreign investment decision, unlike its domestic counterpart, is often initially prompted by the need to protect an *existing* market, that is, to relocate rather than to expand production. If, then, we include all kinds of barriers to trade associated with traversing space between two countries, quite a lot of manufacturing and service investment over the past hundred years – but especially in the inter-war and early post-war periods – originated in this way. For example, some 75% of the UK and US MNEs operating in the mid-1970s first set up outside their home countries in the post-1945 period (Vaupel and Curhan, 1974). The proportion was probably nearer 85% in the case of German firms and 95% in the case of Japanese firms.

Both in the capital-intensive resource-based and in the technology-intensive manufacturing sectors, there is some evidence of the bunching of new activities by rival MNE oligopolists in this period (Knickerbocker, 1973). We have already argued that this behaviour is a form of risk-minimising strategy which, in a wider context, helps to explain much of the imperative among MNEs to integrate their global activities. At the same time, capital investment entails its own uncertainties which, as and when these outweigh the risk-reducing aspects of internalisation, may lead firms to prefer a cooperative or contractual route to servicing foreign markets.

Some measure of the risk involved in FDI can be obtained by examining the rates of survival of foreign investors in a given host country. In the UK, the data compiled by Bostock and Jones (1994) indicate that of the 165 cases (out of a total of 1,017) that exited in the 1850–1962 period, 72 did not survive past one decade, and a further 51 did not survive past two decades. Between the 1890s and the 1930s, about 10–13% of new entrants disappeared within a decade. Furthermore, of the 90 exits recorded in the database between 1908 and 1962, 36 had been acquisition entries, a proportion slightly higher than their share of all entries (Jones and Bostock, 1996). Further comparisons made by Fletcher and Godley (2000) reveal that longevity (the average time between entry and
exit) in the retail sector appears to have been rather longer than it was in the manufacturing sector. This is rather surprising, since the degree of irreversible investment and risk in the former case was arguably lower. This might, however, reflect the relative weakness of British manufacturing, which encouraged entry, whereas the British retailing sector was arguably more competitive, and posed a higher threshold for entry for foreign firms.264

6.6.3 Changes in Locational Determinants

In the 1945–60 period, the overriding and unique variable that influenced the locational choice of value-added activity by international firms was the world shortage of US dollars. In particular, this frequently obliged US firms to produce overseas to sell their products. There were also push factors at work, such as the growing differential in labour costs between the US and other industrialised countries and a revival of American anti-trust policy which checked M&A growth in the domestic market. Anxious to be the leaders in exploiting their new technological and marketing advantages in foreign markets, US oligopolists in the motor vehicle, pharmaceutical, electrical goods, computer, industrial instrument and other industries were quick to establish branch plants in Europe, Canada, Australia and in some wealthier Latin American countries. Again, investing firms initially perceived these ventures less as an expansion of their domestic activities and more as a replacement for part of them.

Much early post-war European direct investment was also of this kind and there was a certain pattern to it. First, a sales and service facility was set up to promote exports, then came local production using imported materials and components, followed by production with a higher local value-added content. This process was frequently observed in the 1960s in both UK and US manufacturing investments. Again, rising markets, often protected by import controls, were the main inducements, together with the fear of losing existing or potential customers to competitors. The abandonment of international cartel arrangements led several UK firms to set up production facilities in the US, while others saw such investment as the best way to obtain access to American technology.

The rapid growth in industrial output following the end of the Second World War led to an unprecedented demand for raw materials to sustain that output, so increasingly the main industrial countries were forced to seek new sources of supply. For reasons exactly parallel to those prompting backward vertical integration in the 19th century, large firms purchasing primary products for processing and fabrication sought to internalise their sources of supply. Thus the surge outwards to supply-orientated investment was in direct proportion to the growth in manufacturing output and domestic incomes in the industrialised north. At the same time, there was growing concern among the producing nations about the increasing presence of foreign firms in their key natural resource sectors. This was not just a matter of the ability of such firms to extract monopoly rents. No less important was the perception by host governments of the way in which local resources were used, their rates of exploitation, and to whom, on what terms, and by what means they were sold. There was also disquiet about some of the ways some MNEs earned (or were perceived to earn) their economic rent, for example by manipulating cross-border transfer prices. Many of these costs of FDI were attributed to the internalising of transactions between MNEs and their affiliates.
The story about the reactions of recipient countries to these events is well known; we shall consider these in some detail in Part IV. Suffice it to say at this point that, by the mid-1960s, several host governments were encouraging or enforcing divestments by MNEs in many resource-based sectors, while attempting to change the terms and conditions in which others – particularly new investors – might be involved. Public fiat replaced firm fiat, while as a result of the increasing competition among MNEs and the growth of indigenous firms, the markets for many intermediate products became less imperfect.

The consequence of these events was that there was a decline in the relative importance of supply-based foreign investments in the 1960s and 1970s, except in some resource-rich developed countries, such as Canada, Australia and the UK (for North Sea Oil), and in countries in the Far East whose governments were of a similar political persuasion to those of the main investors. It was, for example, in this last region that Japanese investors made their first major thrust in the 1960s. Four decades later, they have a much larger stake in resource-based activities than either their US or European counterparts – and particularly so in Asia and the Pacific region. These investments are closely controlled, either directly or indirectly, by Japanese industrial or trading companies.

6.7 TOWARDS THE GLOBALISATION OF PRODUCTION: 1960–2000

6.7.1 Introduction

It is commonly agreed that the start of the First World War marked the end of the first global economy. The figures cited earlier indicated that by 1914, the total outward stock of FDI was around $15–18 billion, of which Britain held the largest share. As a proportion of world output, FDI amounted to 9% in 1914. This level was not to be reached again until the 1990s (Jones, 2004).

This is because in the aftermath of the First World War, the major trading nations resorted to competitive devaluation to boost exports, and impediments to imports to try to ‘export unemployment’. The impediments to trade were accompanied by limits on immigration, and by the early 1930s, the first global economy began to close in on itself. The difficulties of maintaining the parity of the sterling to the gold standard, and its eventual disappearance as the reserve currency of the global economy, signalled the transition from the first global economy, dominated by Britain (Pax Britannica), to the second global economy, dominated by the United States (Pax Americana). While the two decades following the Second World War were a period of transition, the second global economy began to take shape in earnest in the late 1970s. Today, the possibility that a transition to the third global economy might be about to take place, led by the EU, or indeed by China, has been suggested by scholars who are concerned about the imminent exhaustion or collapse of the dollar (Gray, 2004).

Chapter 2 has already described the most recent trends in the growth and pattern of FDI and MNE activity. In particular, it emphasised the growing number of countries generating outward direct investment and the convergence in the net outward direct investment position of the leading industrial nations since the mid-1970s. Over the past 40 years, international production has increasingly come to resemble international trade in
the sense that countries now view the activities of their own MNEs, and those of the
affiliates of foreign MNEs in their midst, as a way of benefiting from the international
division of labour and the regionalisation or globalisation of markets. Opportunities for
such specialisation and growth could not have occurred except within a relatively free
trading and investment environment.

Although the activities of home- and foreign-based MNEs have assumed a greater
significance in the most industrialised market and developing economies, perhaps the
most significant features of IB activity since 1960 have been threefold. First, the predom-
inant form of MNE involvement has shifted from market-seeking and resource-seeking to
efficiency-seeking and, more recently, to strategic asset-acquiring investment. At the same
time, the first two kinds of investment have been increasingly viewed from a global per-
spective and as part of a geocentric or transnational organisational strategy by MNEs.
Inter alia this is shown by the very considerable growth in all forms of intra-firm trade –
both between foreign affiliates and parent companies, and between affiliates within devel-
oped countries – especially in such integrated regions as the EU and North America.

Second, the organisational forms of IB have become more pluralistic. In particular, all
forms of non-equity cooperative ventures have mushroomed. In the beginning of the 21st
century, IB scholars are as much concerned with explaining the growth of cross-border
strategic alliances and networks of suppliers and customers as part of the global network
of MNE activities as they are with FDI per se.

Third, in the past three decades many MNEs have evolved new attitudes and strategies
towards their international activities. Divestment and new investments now go hand in
hand. Expansion in one sector or territory is often accompanied by contraction in
another. Organisational forms and incentive structures are constantly being revised to
meet new environmental, technological and social challenges. In particular, subsidiarity
in decision making is now part and parcel of the global strategy of many MNEs. As
fast as new cross-border alliances are formed, old ones break up. Increasingly the MNE
is coming to resemble a controller of a system of interlocking value-added activities, the
composition and organisation of which is constantly adjusting both to exogenously deter-
mined events and the priorities and strategies of the MNEs themselves.

Later chapters in this volume will concern themselves in more detail with these devel-
opments, while a final chapter will speculate a little about the future course of MNE activ-
ity. To place them in historical perspective, however, they represent a continuum in the
evolutement of IB, the nature and form of which has been fashioned by technological
developments, the influence of governments on the structure of resources and capabilities
within their jurisdiction, and the level and form of international commerce.

Certainly, one of the most distinctive features of the world economy of today is the ease
with which some kinds of assets and intermediate products that determine a nation’s pros-
erity and growth are able to move across national boundaries. As a vehicle for housing
and controlling the organisation and location of these resources and competences, MNEs
remain in a class of their own. Yet at the same time, it is the availability and quality of L-
bound institutions, resources and capabilities which MNEs need to complement their own
O-specific advantages which are increasingly determining their global competitiveness

The following subsections consider some of the more important organisational and
locational changes as they have affected MNEs over the past 40 years.
6.7.2 Changes in Organisational Form

The past 40 years have seen considerable changes in the organisation and management of cross-border value-added activities, the net results of which have been not only to decrease the role of MNE hierarchies in some sectors and in some countries and to increase it in others, but also to alter the shape and form of such hierarchies. Supporting the former tendency has been an improvement in the efficiency of intermediate product markets. Reinforcing this has been the voluntary divestment by MNEs and the enforced use of the market route by some host governments in many primary industries and in some key secondary and tertiary sectors. So, international production, initially designed to exploit a unique intangible asset, the value of which is usually time limited, has tended to fall except in countries where user capacity is still inadequate. By contrast, MNEs continue to flourish in innovating sectors in which technology is idiosyncratic, complex and not easily codified, as well as in sectors where the governance over a geographically dispersed set of assets and capabilities brings its own particular benefits.

However, both these phenomena are part of the same story and fit in well with the ideas contained in the product or industry technology cycles. Where MNEs are conceived primarily as transferors of institutions, resources and capabilities, and as tutors in the use of these and related assets, their presence in any particular country is likely to be a transient one, unless they can upgrade these advantages or create new ones. Hence, as was noted earlier, one would expect the outward direct investment of a country to be positively related to the quality and rate of growth of its indigenous entrepreneurship, incentive structures and innovatory capabilities, both absolutely and compared with that of its competitors.

However, quite apart from the ebb and flow of these kinds of international production, the most marked organisational developments of the past 20 years have been the emergence of the truly global enterprise and the mushrooming of all forms of cooperative alliances. This is the natural extension of what Mira Wilkins has referred to as the ‘third phase’ in MNE development (Wilkins, 1974). Here the motive for foreign production is not so much to gain the economic rent that marketable advantages can earn, as to capture the economies of integration and diversification arising from such production. This multidivisional or meta-national form of MNE activity may result not only in more efficiency-seeking production between a group of foreign affiliates, or between their affiliates and their parent companies, but also in making use of these same affiliates to tap into or create new competitive advantages.

Asset-exploiting and efficiency-seeking investment tends to be of two kinds. The first is a reorganisation of a group of largely import-substituting activities in a number of countries which were initially designed to meet domestic needs. If and when the markets are large enough and/or become integrated, then the MNE may find it economic to pursue a different strategy based upon the economies of product or process specialisation and intra-group trading. Second, corporate integration may take the form of export platform manufacturing investment or downstream processing of primary products, where the division of labour tends to be between different stages of the value-added chain and is based on international cost and marketing differences. By contrast, asset-augmenting investment, which is aimed at tapping into the L-bound assets, knowledge and capabilities in the host country, is more likely to be conducted via M&As between developed countries,
or indeed, by developing country MNEs looking to gain access to brand names, distribution channels and technology in developed countries.

The expansion of these and similar forms of FDI has been made possible by a reduction of barriers to trade between countries, by advances in transport and communication technologies, and by continued improvements in transnational organisational competences. However, in some cases (particularly within the EU), what in fact has happened is that an MNE has transferred an organisational system to each group of its affiliates located in a particular region. It is less the potential gains from internalised transactions between parent and affiliates that has led to new foreign production, and more those that might result from common governance of the value-added activities of the affiliates. In this case, systemic advantages experienced in the multidivisional form in the parent company may be usefully replicated at a regional level. Examples are the benefits of centralised purchasing, the use of sophisticated accounting systems, new institutional modes, the reduction of environmental risks and the ability to move top personnel between subsidiaries.

Once again, one observes differences in the modes of international economic involvement by MNEs from different home countries and according to the countries in which they invest. Very often these reflect industry- or firm-specific characteristics. Reference has already been made to the interdependent behaviour of MNE oligopolists. In the late 1960s and early 1970s, this was noticeable in the timing of US direct investment in the European semiconductor and drug industries. Likewise, in the 1990s Japanese-owned motor vehicle and electronic MNEs were actively seeking new production outlets in both Europe and the US.

Davidson and McFettridge (1985) have suggested that international transfers of technology are more likely to be internalised if the transferor already operates an affiliate in the recipient country and if previous transfers have been internalised. Certainly, the preference of US manufacturing MNEs (relative to those of other nationalities) for the full ownership of their affiliates in the 1970s was at least partly because of their greater degree of international product and process integration. In the last decade, however, it would seem that many of the benefits of vertical integration can be captured through contractual agreements between MNEs and their suppliers. Indeed, recent research (inter alia by Contractor et al., 2002) reveals that the observation by Davidson and McFettridge about repeated transfers of technology applies no less in a non-equity relationship, provided that the parties trust one another and are committed to advancing their joint interests.

Although, since around the mid-1960s, the US share of world direct investment has been steadily falling, it is the established US MNEs that have most pursued a Chandlerian strategy towards international production. Even so, in industries such as pharmaceuticals, the biotechnology revolution has meant that in addition to engaging in FDI, particularly in the form of acquisitions, large MNEs are now enmeshed in a myriad of cooperative and contractual relationships with smaller biotechnology firms (Galambos and Sturchio, 1998; Malerba and Orsenigo, 2002). Similarly, in the computer industry, network relationships, which in previous decades consisted mainly of supply relationships, now also involve strategic technology development (Cloodt et al., 2006). At the same time, the growth in market- and asset-seeking M&As over the last decade has also prompted interest in examining the historical evidence on the use of acquisitions as an entry mode.
Previous subsections have suggested that changes in the advantages of alternative modalities for organising the use and location of the competitive advantages of firms have played a significant role in affecting the level and patterns of international production over the post-war period. In particular, the internalisation model explains why, in sectors where the market for transacting either inputs or outputs (including intermediate outputs) has improved, the contribution of MNEs has fallen. But in other sectors, where the O-specific advantages of firms have become more idiosyncratic or related to the coordination of interrelated activities, it has become even more important. We have also argued that while Chandlerian-type theories may not be very helpful in explaining the initial foreign investment decision by firms, the growth of established subsidiaries of MNEs – particularly those located in large integrated markets – is increasingly following the pattern of their domestic counterparts. Indeed, it might be hypothesised that the generally faster rate of growth of international production, vis-à-vis domestic production, may be attributed to the anticipated gains that stem specifically from the common governance of foreign value-added activities.

For example, both BP and Shell had allowed their American affiliates to operate as nearly autonomous units throughout the 1950s, 1960s and 1970s. However, by the 1980s, both companies were seeking to integrate their operations on a global basis, and in the process of doing so, they needed to reduce the autonomy afforded to the American operations. For BP, which was a latecomer to the US market, having entered in the late 1960s to exploit oil fields in Alaska through what, over time, became a majority share in Standard Oil of Ohio (Sohio), this meant acquiring full control of Sohio in 1987 (Bamberg, 2002). For Shell, which had been active in the US oil industry since before the First World War, and which had built Shell Oil into a large, autonomously run company, this meant acquiring the remaining minority share in 1985, and thus subjecting Shell Oil once again to direct control from abroad (Priest, 2002).

The expansion of European and Japanese direct investment for most of the 1980s and 1990s illustrated the increasing benefits of investing in, rather than exporting to, the US. Again, this shift in the pattern of international production was primarily of location substitution although, as Chapter 2 has suggested, that part of it which took the form of M&As was most certainly intended to protect or advance the global strategy of the investing companies. For example, Siemens, which up to the 1950s had mainly engaged in patent exchanges and other types of technology transfer, developed a significant export market in the US in the 1970s, but only began to undertake foreign investment on a larger scale in the 1980s and 1990s, by acquiring a number of US firms (Feldenkirchen, 2002).

These gains may arise through a more efficient organisation of trans-border production within MNEs as well as between MNEs and other firms with which they have dealings. Chapters 8 and 9 will examine these issues in some depth. Suffice it to mention at this point that the past two decades have witnessed a profound metamorphosis in the cross-border bonding between firms. Complementary to the growth in M&As has been that in all forms of cooperative ventures, especially within the Triad. The difference between these coalitions and those that preceded them essentially lies in the way in which they are organised and assimilated into the global strategy of the participating firms. As we observed in Chapter 5, the MNE is now an orchestrator of a set of geographically dispersed, but interrelated, assets and capabilities. Some of these, which represent its core competences, it will wish to own, while others (which may be no less critical to its success) it will jointly supply.
or purchase from independent suppliers. Indeed, although in many ways very different, some of the early forms of MNEs, like the merchant groups analysed by Jones (2000) have parallels with modern forms of MNE organisation, such as the dragon multinationals described by Mathews (2006), which control an extensive network of activities, but whose ‘core’ remains relatively small in terms of ownership of assets.

6.7.3 Recent Locational Changes

We now consider some of the characteristics of changing the location of MNE activity over the past four decades. Partly as a result of the enlargement of markets – occasioned inter alia by rising living standards and regional economic integration – and partly as a consequence of changes in the production and marketing strategies of MNEs, the factors influencing the geographical distribution of FDI have dramatically changed. These now rest less on the kind of determinants of discrete market-orientated or resource-based investments, and more on those relevant to the spatial optimisation of an interrelated set of value-added activities. In this respect, there are considerable similarities between the interregional and inter-country specialisation of production. There are also parallels with the explanation of the location of similar activities across national boundaries but under separate ownership, which gives rise to intra-industry trade.

The best illustration of this latter form of FDI is that undertaken by MNEs in the two leading regionally integrated areas: the EU and NAFTA. To capture the economies of scale and centralisation of production while taking advantage of a free trade area, MNE affiliates, which were previously truncated replicas of their parent companies, have found it worthwhile to concentrate the production of particular products in one or more plants, the output of which is supplied to the entire region. The choice of location of these plants and the effect of rationalisation on the totality and distribution of the capital stake is determined partly by the disposition of existing capacity, partly by the relevant production and transaction costs, and partly by country-specific variables (for example, the availability of skilled labour and materials, transport and communication costs, consumer tastes, government regulations and so on). The result has been a geographical distribution of production which is based as much on the comparative resource endowments of a country as on the absolute advantages offered by particular locations.

At the same time, recent research by Jones and Miskell (2005) on the history of Unilever demonstrates that although Unilever was in support of European political and economic integration, it took decades for it to reorganise its operations to better exploit the scale opportunities offered by the integrated market. Indeed, its American competitor Procter & Gamble was much quicker to reorganise its European operations. Due to its sheer size, and its British–Dutch management, Unilever was certainly not a typical European firm, but arguably these characteristics should have made it easier for Unilever to adjust to the new economic situation, the emergence of which they themselves had supported. However, like many European firms, Unilever was entrenched in structures defined by nation states, which tended to reinforce the differences, rather than the similarities, between countries.272

In Europe, North America and, to a lesser extent, Latin America, the kind of trade associated with this type of efficiency-seeking investment is not predominantly based on differences in the distribution of factor endowments in the classical or neoclassical sense.
However, in other parts of the world, another type of efficiency-seeking investment – the export platform type – is of this kind. In the late 1970s, the most rapidly growing activity of manufacturing MNEs in East Asia, Mexico and some parts of Southern Europe was to take advantage of cheap, plentiful and well-motivated labour to produce products or processes that required such a resource. The main locational impetus giving rise to such activity was the growth of manufacturing capacity in a number of NICs and the generally liberal attitude of these countries to export-orientated FDI. However, in the 1980s and 1990s, as a result of inter alia the rising cost of labour in some NICs and advances in computer aided design and manufacturing technologies, several MNEs in industries such as electronics, textiles and clothing have found it profitable to relocate some of their activities back to their home countries.273

It is worth observing that much of the first and some of the second kind of efficiency-seeking production reflects a form of growth of foreign participation rather than an initial means of entry. Essentially, such production represents ‘specialisation within diversification’; the resulting benefits are entirely those of the economies of scale and scope. Some of these economies may be specific to geographical diversification, such as those which give rise to intra-firm trade. These strongly suggest that the common ownership of spatially separated production units does influence the way in which resources are allocated.

To conclude this subsection, we would make two other observations. The first is on the changing origin and destination of MNE activity. Chapter 2 has already set out some of the salient facts. However, from a historical perspective, perhaps the most interesting aspect of this phenomenon has been the growing number of countries that have become significant outward direct investors, while at the same time the established capital exporters have become hosts to an increasing volume of transnational activity. This phenomenon is entirely consistent with the predictions of the investment development path and, as far as East Asian countries are concerned, the stages of growth or flying geese paradigm analysed in Chapter 10. It suggests that, over time, as the relative economic, institutional and social characteristics of countries or regions change, and as the available technologies of transport and communication evolve, so does the strategic response of firms that invest or might consider investing in these countries. In turn, for reasons which later chapters will elaborate upon, the response of these firms leads to a realignment of the world’s investing and invested-in nations. To repeat just one example highlighted in Chapter 2: although the US continues to be by far the largest outward direct investor, its share of the world direct capital stock over the past four decades has steadily fallen from 47% in 1960 to 42% in 1980, 24% in 1990 and 19% in 2005.

The second point relates to the gradual liberalisation of the attitudes of many governments towards both outward and inward direct investment in the past decades. Particularly notable in this regard has been the emergence of a new wave of market- and asset-seeking FDI from developing countries such as China and India in the early 2000s, often taking the form of M&As (UNCTAD, 2006). At the same time, as a result of the learning process of governments, policies with respect to entry, performance and exit conditions of foreign firms have become more enlightened (see Chapter 19). Partly too, the events of the mid-1990s and early 2000s have demonstrated the volatile nature not only of foreign portfolio investment but also of (some kinds of) MNE activity. Thus, for example, UNCTAD (2003b) data reveal quite dramatic falls of inward FDI into the US,
Germany, the UK, Argentina and Hong Kong between 2000 and 2002, in stark contrast to the no less spectacular rise in such inflows in the previous three years. A similar pattern of volatility is evident in FDI outflows, where, both at the time of the East Asian crisis and in the post-2000 slowdown in world economic growth, many MNEs – from both developed and developing countries – cut back on their foreign operations to protect their domestic interests.

6.8 CONCLUSIONS

The growth of international production in modern history essentially reflects the way in which changes in the structure and organisation of the world’s resources and capabilities impinge on the cross-border production and transaction strategies of companies. While historically the role of the MNE has been both a proactive and reactive one – and is certainly very proactive in the early 2000s – the discovery of new territories, increases in population, advances in technology and the advent of global capitalism, and the response of governments to these developments, have been the prime movers.

Enterprises have reacted to these developments by realigning the extent, form and geography of their value-added activities. For most of the 20th century, the evolving MNEs tended to increase the range and depth of their value-adding activities. By the late 1980s, except in the case of some MNEs producing or originating from the poorer developing countries, the factory system had substantially replaced the ‘putting out’ system, and firms had integrated their production and marketing functions.

In the last 20 years, however, there has been a renaissance of the ‘putting out’ system, albeit in a new form. By the early 1990s, the large diversified conglomerates that had been formed in the 1960s and 1970s had undergone restructuring in order to focus on their ‘core competences’. Such competences consist of the unique firm-specific assets and capabilities that form the foundation of the firm’s competitive advantage. To maintain their focus on core competences, MNEs began increasingly to scrutinise their value chains in order to identify activities where the firm possessed no unique advantages. Then, in a series of ‘make-or-buy’ decisions, many activities that were previously performed within the MNE, began to be outsourced.

In its initial stages, outsourcing was mainly associated with ancillary activities such as payroll, billing, custodial and maintenance services. However, relatively rapidly, the ‘core’ activities related to the production of a product or service, such as programming or customer service (for example, call centres), also became candidates for outsourcing. Over the past decade, the cross-border outsourcing (offshoring) of such activities has been increasingly directed at countries possessing an educated workforce but relatively low wage levels, such as India, Ireland and Poland. As a result of these developments, contemporary MNEs are embedded in a network of contractual and cooperative relationships, where it is their role in coordinating activities across borders, rather than the ownership of assets, that is the distinctive feature.

In describing the history of MNE activity, we have made use of the eclectic paradigm set out in Chapter 5. More particularly, we have pinpointed a number of watersheds in the emergence and maturing of FDI, and have shown both how it has affected and been affected by changes in the O-specific advantages of firms, the L advantages of countries,
and the strategic response of firms to these variables, particularly as it affected the organisation of their global markets and production. We have seen that each watershed was triggered by a major technological or organisational advance, or by the actions of nation states, or groups of nation states, which have affected the motivation and capability of firms to manage geographically diversified assets as well as their attitudes towards the uncertainties associated with cross-border market failure.

Sometimes the trigger has been innovations which have reduced the cost of making transactions over distance and facilitated new forms of organisation and management. Sometimes the advances have come in the guise of new production technologies or the introduction of new products, which have had implications for the sourcing of foreign materials or the securing of distribution channels of firms. Sometimes the initiative has come from governments through advances in military technology to defend themselves against aggressive neighbours or through import controls to protect themselves against economic warfare. Sometimes the impetus has been an expanding market brought about by colonisation, population increase or rising incomes. Sometimes, new incentive structures and changing cultural values and perspectives have influenced both the content and impact of MNE activity.

In all these cases, the initiatives have had widespread consequences on the revenue and costs of both domestic and foreign production. They have affected the innovation of new products and methods; the organisation of value-added activities between and within firms; the organisation of transactions both between firms and markets and within firms as well as the location of these activities; and the interaction between the state and producing and transacting economic agents.

The history of MNE activity is, then, the story of a series of political, social and cultural events that have fashioned the ownership, organisation and location of international production. While much of the scholarship published in the English language has concentrated on the histories of US and European MNEs, recent decades have seen a rise in studies exploring the emergence and maturation of MNEs in different institutional and cultural contexts. The powerful role of the MNE in the contemporary global economy reflects its capabilities and willingness to organise, for good or bad, cross-border production and transactions more effectively than any alternative institutional mechanism. This chapter has sought to demonstrate that the eclectic paradigm takes us a long way in understanding the evolvement of MNE activity as a critical component of cross-border commerce. And, as later chapters in this volume will seek to show, it is also helpful for our understanding of the consequences of such activity on those most affected by it.
PART II

Inside the multinational enterprise

Throughout this volume, one recurring theme about the distinctiveness of MNE activity is the way in which resources, capabilities, markets and institutions are accessed, created and used across national boundaries. Part II considers some of the micro-organisational decisions which have to be made by individual MNEs. In contrast to later chapters, Chapters 7 to 9 discuss issues directly relevant to the management of international business.

Chapter 7 begins by examining the internationalisation process\textsuperscript{276} as an extension of the domestic value(-added) chain of economic activity. It then goes on to describe and evaluate attempts by business analysts to explain the evolution of IB from a firm exporting a single product to an MNE which organises and operates a network of globally integrated and diversified value-added activities. It also shows that different kinds of FDI follow a different path towards the broadening and deepening of cross-border production, and that, over time, the foreign affiliates of an MNE develop their own momentum. Important developments we must contend with in our explanation of the pattern of internationalisation are the emergence of ‘born global’ firms, the growing subsidiarity of decision making within multinational networks, the growing importance of a range of location-specific created assets accessible to affiliates, and an increase in FDI – often by way of M&As – aimed at accessing or acquiring such assets.

Chapter 8 considers the impact of the globalisation of economic activity on the organisational and institutional structure of the firms engaging, or wishing to engage in FDI, as well as on the content and locus of intra-firm decision making. The efforts of MNEs to coordinate a network of specialised affiliates, and to provide the right incentive structure to achieve and sustain integration, are the central issues in this chapter. In particular, knowledge management, including the extent to which, and the modality by which, knowledge may be transferred within the MNE, is central to our understanding of the modern multinational. Chapters 8 and 9 both analyse the economic and strategic determinants of the nature and character of intra-hierarchical decision taking, and also the form which inter-firm collaborative arrangements might take. In particular, it is shown that, depending on the strategic response of MNEs to any given OLI configuration, the incentive structures governing internal decision taking will vary between the hierarchical and the heterarchical, as well as being influenced by the extent to which MNEs believe they need to own assets located in foreign countries in order to deploy them to meet their global objectives.
Chapter 9 considers some of the alternative modes of cross-border activity undertaken by MNEs to that of the fully owned foreign affiliate. Again it argues that much of the theory set out in Chapters 4 and 5 can be usefully extended to explain the propensity of firms to conclude both joint and non-equity ventures (for example, strategic alliances); and also to engage in networks and related activities. This is because most economists and business analysts have been as much interested in explaining the extension of the control exercised by firms outside their national boundaries as in their structure of ownership. Chapter 9 shows that control may be acquired from various sources and exercised in various ways. Indeed, Part II concludes by suggesting that, in the past two decades, the MNE has become the nexus of a plurality of cross-border control and incentive mechanisms, and that the way in which it manages these to achieve its global objectives will substantially determine the extent to which it can sustain or advance its long-term competitive (or O-specific) advantages.

Finally we would urge the reader to consider Part II as a bridge between Parts I and III. It does not claim to be a comprehensive analysis of the internal workings of MNEs. Little attention, for example, is given to critical financial or marketing issues, or to human resource management in multinational firms. Its purpose is a different one. Together with Part I, its aim is to prepare the reader for the analysis which follows in Parts III and IV. In our examination of the impact of MNEs on the economies in which they operate, we shall repeatedly argue that this will critically depend on two main variables. The first is the content and quality of the institutions of the countries (or regions) in which the MNE activity takes place; and the macroeconomic and micro-management policies pursued by their governments. The second is the way in which MNEs, themselves, organise the cross-border governance of these activities, and the reasons for this. Part II will have succeeded in its objective if it identifies the main changes in the global economic and political environment determinants of this latter variable; and how these have responded over time to technological and institutional advances, and changes in the global economic and political environment.
7. Entry and expansion strategies of MNEs

7.1 INTRODUCTION

In Part I we sought to identify the motives for, and determinants of, international production, and to explain the historical evolution of MNE activity. In this chapter we consider FDI as part of the institutional and organisational strategy of firms. In doing so, we take a more micro-orientated and behavioural perspective of our subject, and consider the reasons why, and the situations in which, particular enterprises become foreign producers and/or increase, or change the content and pattern of, their global economic involvement. We also seek to identify the main determinants of the ways in which such international production may be owned and organised.

In Chapter 1 we defined an MNE as a firm that owned and controlled value-adding activities in more than one country. In Chapter 3 we suggested that MNEs engaged in foreign production to increase the value of the income-generating assets of their owners. Chapter 5 argued that this goal was achieved by efficiently coordinating their existing assets (together with those which they might acquire or lease) – their so-called O advantages – with the L configurations of countries. Chapter 5 further suggested that the value-added activities of MNEs incurred two kinds of costs – namely, production, that is, value-added and transaction, that is, exchange and institutional costs – which were likely to vary according to the nature and extent of these activities, the way in which they were coordinated and their location. Thus, for example, depending on whether production (the process by which less valuable inputs are organised to produce more valuable outputs) is undertaken by several firms or by just one, the costs of that production may be higher or lower. Similarly, where the production of goods or service involves the use of intermediate products at different stages of the value-added chain – as it usually does – the transaction costs (that is, the costs of organising these separate activities) are likely to vary according to whether this function is undertaken by the market, by a single administrative hierarchy, by some kind of a cooperative alliance, or by a network of firms. MNEs are likely to flourish wherever the production of two or more value-added activities are best coordinated under the same, rather than separate, ownership and control, and where the entrepreneurs and managers of the organising enterprises perceive it to be in their best interests to locate at least some of these activities in a foreign country.

Chapter 6 further suggested that the historical growth of the MNE reflected the interaction between three sets of forces. The first was the extent to which the resources, capabilities, markets and institutions necessary for the efficient production and distribution of goods and services are – in some sense or other – the privileged assets or rights of particular firms. As Chapter 5 argued, it is the possession of such assets or rights that frequently gives a firm a competitive edge over its rivals. The second was the extent to which firms found it profitable to organise the transactions relating to the acquisition and use of
these rights themselves, or to employ some other modality for this purpose; and also why, along with these transactions, the organisation of production, within and between firms, was becoming increasingly concentrated in the hands of a relatively few MNEs, rather than being shared among many. The third factor influencing the growth of foreign production was that, for a variety of reasons, firms were finding it increasingly to their advantage to augment their existing assets, or to produce goods and services from these assets, outside rather than inside their national boundaries.

Chapter 6 also highlighted the interaction between the growth of the human and physical assets, and the macro organisation of value-added activity. It emphasised that the expansion of MNE activity must be seen as part and parcel of the growth and spread of international capitalism, technological and organisational change, the discovery of new lands and materials, the emergence of new political and economic systems, the creation of strong and effective institutional frameworks, and of robust capital markets, and a substantial lowering of the costs of the cross-border movement of goods, assets and people. Each of these events has dramatically affected not only the availability and quality of goods and services together with their associated costs of production and transactions, but the ways in which that production and those transactions are owned and organised.

This chapter – indeed, this part of the book – looks at these and related issues from the viewpoint of the owners and managers of individual firms. It focuses, rather more than did the previous chapters, on the institutions underpinning the resources and competences, owned or acquired by individual business enterprises; and on the strategic management of these, wherever and whenever this involves the enterprises in value-added activities outside their national boundaries. This chapter, in particular, looks at the determinants of the nature, timing and form of the internationalisation process.

7.2 THE CONCEPT OF BUSINESS STRATEGY

By strategy, we mean a deliberate choice taken by the entrepreneurs or managers of firms to organise the resources and capabilities within their control (that is, their O advantages) to achieve an objective or set of objectives, over a specified time period, that extends beyond the day-to-day operations of the firm. In the economist’s world of perfect competition, strategy, management or entrepreneurship do not play a significant role. Resources and capabilities are generally assumed to be immobile, fungible and homogeneous. The firm is presumed to be a rational, but passive, economic agent with little or no freedom for strategic manoeuvre. Its institutions are required to be consistent with the demands of the marketplace. In order for it both to cover its opportunity costs and to maximise the value of its assets, the output and price of whatever it supplies are predetermined. Moreover, in equilibrium, each of the stakeholders in the firm, including the main decision takers, earn only the opportunity cost of their resources and capabilities.

Once market imperfections are introduced into the picture, the firm’s behavioural options are widened, and the owners and managers have positive and strategic roles to play. Their roles will vary according to the nature and extent of the market imperfections, the coincidence of interest between the various stakeholders in the business, their judgement of the probability and time profile of the outcome of alternative courses of action,
and the intra- and extra-firm incentive structures likely to affect the way in which the decisions necessary to achieve these objectives are taken.

Neoclassical economics initially analysed market imperfections by reference to their effect on the behaviour of participants in the market. In doing so, it limited its interest in institutions to those endogenous to markets. In particular, three kinds of structural market distortions were identified. The first was the power of the participants in the market to influence price by adding or withdrawing output from the total amount being sold (or purchased). The second were those arising from the ability of firms to differentiate, for example, by branding their products differently from those of their competitors. The third were those arising from the presence (or creation) of barriers to competition. Except in the case of oligopolistic market situations, the neoclassical economists took these imperfections as exogenous, and continued to assume that firms acted as profit maximisers.

However, as we have seen, the introduction of market imperfections broadens not only the choices of firms in their product and production portfolios, but also the range of both intra- and extra-firm institutions which might influence these choices. First, once it is accepted that a firm does not have to maximise profits to stay in business, then the possibility of alternative objectives and strategies to achieve these objectives arise. Initially economists and organisational scholars tended to focus on the output and pricing decisions of firms pursuing a range of non-profit-maximising objectives, for example, sales or wealth maximisation, or of some form of utility or constrained profit maximisation. Eventually they came to recognise that a more fundamental reappraisal of the incentive structures of firms was required, as any movement away from perfect competition was liable to affect the costs and benefits of using this particular exchange mechanism. Both transaction cost economics and that choice in strategic behaviour arise out of market imperfections. At the same time, both are also likely to be influenced by a widening of the institutions which may affect this behaviour and its underlying motivation.

Second, firms may themselves attempt to create new structural imperfections in anticipation of gaining larger profits. The traditional economics of the firm skirts this particular issue – mainly because it is not interested in organisational issues. Indeed, for the most part, it assumes either that the transaction costs of using markets are zero or that they are always less than that of any other organisational firm. However, the theory of market failure and of relational contracting (Williamson, 1979, 2000) suggests that this need not necessarily be the case. As Teece has elegantly put it: ‘By neglecting the institutional foundations of market structure, the conventional tools of economic analysis are rendered impotent before many strategic management problems’ (Teece, 1984:91).

When orthodox economists have tried to grapple with these issues, they have been primarily concerned with identifying the possible outcome of alternative behavioural strategies. As a result, the whole of the literature on oligopoly assumes a game-theoretic perspective which yields an indeterminate solution simply because of cognitive market failure. For example, one particular oligopolist may not only be uncertain as to how its behaviour (with respect to such decisions as price, output, range and type of products supplied, innovatory activities, types of markets served and so on) will affect its competitors, but also how they, in turn, will react to this behaviour. Most economic models then seek to identify the consequences of certain types of behaviour without explicitly examining the institutions or strategies that might determine that behaviour.
A similar approach is taken to analysing information asymmetries, uncertainty and time. Most economics (as opposed to finance) textbooks pay little attention to the first, while the second and third tend to be treated as a cost that needs to be recovered through higher earnings (though the term ‘transaction cost’ is not usually used). Thus net income earned in five years’ time has a cost of not being earned today, which is equal to the interest that would have been earned today if reinvested over four years. Similarly, a project with a 50% chance of earning £5 million and a 50% chance of earning £4 million might be treated as of equal value to a project with a 100% chance of earning £4.5 million.

Over the last decade or so, another method for valuing the effects of uncertainty on investment decisions has been proposed by the real options literature (Dixit and Pindyck, 1994; Amram and Kulatilaka, 1999; Damodaran, 2000). The idea behind this approach is that when faced with considerable uncertainty, the firm would prefer to retain maximum flexibility regarding its resource commitments, and if the competitive situation allows, to wait as long as possible to obtain better information before making the investment. In essence, any investment under uncertainty can contain real options, if the investment is not viewed as a one-time deal, but rather as a sequence of smaller investments, where the continuation of the project can be reassessed after each step. Such ‘options to wait’ are valuable if the investor is essentially protected from downside risk, while enjoying the possibility of waiting for a favourable turn in the market to proceed with the investment. While, in theory, an option will never have a negative value, in reality the value of an ‘option to wait’ is tempered by the actions, or anticipated options, of competitors, if for instance a competitor can gain market share while another firm has chosen to wait.

By using a modified options pricing formula, it is possible to assess the value of the flexibility embodied in sequential investments, and to contrast this with a one-time investment decision evaluated on the basis of its NPV. While there are clear limitations to this approach – for example those arising from the idiosyncratic character of many corporate investment projects (such as investment in R&D), and the resulting difficulty in estimating risk (volatility) – there have been several attempts to model the MNE as a collection of real options (Buckley and Casson, 1998; Casson, 2000; Kogut and Kulatilaka, 2001). The real options approach has also been employed to explain joint venturing (Kogut, 1991; Folta and Miller, 2002) and sequential market entry (Kogut and Chang, 1996).

These, of course, are simple illustrations of the inadequacy of the market as a deterministic resource-allocative institution, the replacement or enlargement of which by extra-market institutions opens a new range of strategic options to decision takers. In fact, not only do most decisions set in train a whole set of interrelated outcomes, each of which is uncertain, but almost every decision, whether it is concerned with the best way to organise innovatory activities, or the introduction of a wage incentive scheme, impinges on the level of, and balance between, receipts and costs in a way that is difficult to estimate with any certainty. The alternatives chosen, then, will depend on the strategist’s estimation of the likely alternative outcomes – and/or those to whom decision making has been delegated; and the incentive structures affecting his or her decision making.

The approach of the business strategist is less formal and, understandably, more pragmatic than that of the economist. Instead of seeking generalised explanations to a particular problem, he/she is concerned with identifying particular solutions for an individual firm, or group of firms that possess similar characteristics, and the determinants
of the same. Although the emphasis is on specific areas of decision making, there is an increasing recognition that successful strategists are those who are willing and able to take a systemic and integrated approach towards the organisation of their value-added activities, including those that are undertaken outside their national boundaries. The following sections seek to apply some of these concepts to a number of issues concerned with the organisation, ownership and operations of MNEs. First, however, we consider the very nature of a firm’s economic activities from a business perspective.

7.3 THE VALUE-ADDED CHAIN

7.3.1 Some General Principles

The main task of a business enterprise – and it is unique to this organisation – is to engage in production. Production is defined as any value-creating or -adding activity. Such added value is achieved by converting inputs of lesser economic worth to outputs of greater economic worth. Put another way, the firm owns or hires the services of a set of human, physical or financial assets, for which it must pay at least their opportunity cost. In a profit-maximising model, the strategy of the owners of the firm is to coordinate and allocate these assets in such a way as to produce the maximum surplus (that is, economic rent) over and above their opportunity cost, all of which is assumed to accrue to the owners as profits.

These profits may be distributed to shareholders or reinvested in the business in the expectation of earning future profits or increasing the net value of the firm. Alternatively, in imperfectly competitive conditions, the owners of the firm may pursue other objectives. Surplus profits may be absorbed as managerial inefficiency, or they may be wholly or partly distributed to or appropriated by other stakeholders (for example, consumers and the owners of labour services) according to the goals they are seeking to achieve, and their respective bargaining powers.

In order to achieve its objectives, a firm must also engage in transactions. Even the firm that undertakes a single economic activity has to participate in two sets of transactions. The first is with the owners of the resources and capabilities it uses to produce the value added; the second is with the purchasers of the goods or services which are the output of the activity. These transactions are external to the firm, that is, between it and independent economic agents (for example, other firms and households), and they are usually organised by the market. Although these transactions involve costs, such as those identified in Chapter 5, they have to be incurred if the firm is to produce at all. Furthermore, the costs may not be independent of the benefits. The cost of coordinating labour inputs and monitoring employee performance may be directly related to the productivity of that labour. Higher transaction costs associated with the search for possible buyers may be partially or wholly offset by the additional sales generated by that search. In recent years, analysts have been giving increasing attention to such issues as corporate social responsibility, environmental sustainability, ethical investment, and consumer bargaining power, with respect to the conditions under which certain products are produced and transacted. Each of these is suggesting that simplistic profit-maximising models may not always reflect the de facto multiple goals of managers.
In a simple profit-maximising model, then, the primary objective of the firm is to buy its inputs and sell its output in a way that maximises the revenue for any given level of production less that of the (net) transaction costs incurred in earning this revenue. In addition, it will continue to increase its output until the marginal production and (net) transaction costs are equal to its marginal revenue. There are various problems associated even with this apparently simple accounting exercise. One is that because it is not always possible to measure transaction costs – particularly those associated with risk and interpersonal relationships – it is difficult to judge whether or not costs are being minimised or revenue being maximised at a given level of output, or, indeed, whether the right level of output is being produced. Another is that some transaction costs are not easily allocable to particular inputs, for example, the costs of monitoring labour performance so as to minimise shirking or opportunism by workers, or those of ensuring that subcontractors adhere to the terms of their contract.

As soon as a firm chooses to engage in more than one value-added activity, not only are both its transaction costs and benefits likely to increase, but also it begins to assume a role which, in theory at least, may be accomplished by other organisational modalities. By engaging in upstream or downstream value activities, in addition to the one which it is already undertaking, a firm internalises the market for what is being bought or sold. In so doing, it brings, under a single ownership, activities which were previously (or, in the case of a new activity, might have been) produced by two (or more) separate producers. A firm that diversifies its output, for example, from being a producer of refrigerators to being a producer of refrigerators and washing machines, also incurs additional transaction costs through the common governance of both activities. Presumably it believes that these costs are either less than those which would be incurred by using the market, or that there are compensatory gains to be reaped, such as economies of scope, and the sharing of common overheads, from internalising the market for the two products. Diversifying the location of production most certainly adds to a firm’s transaction costs, for example, those to do with reconciling formal or informal institutional differences, hierarchical control and intra-firm communications. However, again, these may be more than outweighed by the revenue gained from new markets, a reduction in the unit cost of transactions common to foreign and domestic production, the benefits of output specialisation, the cross-border arbitraging of factor prices and the spreading of risk and environmental volatility (Kogut, 1985).

The above analysis, then, provides the setting for understanding the decision of a firm to produce outside its national boundaries. This will occur when the firm perceives that the net benefits of supplying any given market, or set of markets, is best achieved by engaging in foreign production relative to some other modality of supplying that (or those) market(s). It could be, for example, that the firm considers that the costs of engaging in any activity, plus the (net) cross-border transaction costs of internalising the market for the intermediate product used in that activity, are higher than those either of engaging in the same activity in the home country and exporting its output from there, or of concluding the transaction with an independent firm in the foreign country.

7.3.2 Value-added Networks and MNE Activity

Let us now look at the process of the internationalisation of a firm. Here we introduce the concept of the value-added chain (or, as some writers, for example, Porter (1980,
1985), prefer to call it, the ‘value chain’) which identifies the various stages of economic activity that make up a production sequence of a specific product or service from start to finish. At each stage, up to the point at which the product or service is sold to the final consumer, an intermediate product is produced, which then becomes an input into the next stage of the process. The value-added chain of a cotton shirt, for example, would include the design of the shirt, the growing of the raw cotton, the spinning of the yarn, the weaving or knitting of the yarn into cloth, the manufacture of the garment (for example, cutting, sewing and packaging) and finally the marketing of the final product and its distribution to wholesalers and retailers. The value-added chain of a particular firm, by contrast, may cover only one of the steps outlined above, or indeed all of them.

At each stage of the chain, value is added to that created previously such that the gross value (of output) of the end product is equal to the value added (or net output) of each of the separate stages. Thus if \( R_A \) is the gross receipts from the sales of the final product \( A \) and \( N_{Ai}, \ldots, N_{Av} \) are the value added at stages \( i, ii, \ldots, v \) of the chain then:

\[
R_A = (N_{Ai} + N_{Aii} + N_{Aiii} + N_{Aiv} + N_{Av}).
\]  

(7.1)

However, the concept of a chain is not entirely appropriate for describing the production process. Indeed, as we shall see later, this is becoming less so over time because some intermediate products are not used by firms sequentially but jointly at various stages of the production process. These include common institutions and incentive structures, administrative, financial and advisory services, transport services and public utilities, and some professional (for example, auditing, advertising and legal) services. Although, in theory, it may also be possible to assign such complementary value-adding activities to particular stages of production, in practice it might be exceedingly difficult to do. Nevertheless, they are part of the value-added network of activities.

The choice of the particular value-added chain (or chains) and the stage of the chain in which a firm may be involved, will be determined by its perceived institutional, resource-based and marketing advantages, and the strategy it adopts to exploit these advantages (Tallman, 1991). As we have suggested elsewhere, such a strategy is likely to affect the firm’s future competitive position (Dunning, 1993a, 2000a). The geographical configuration of these activities will also depend on the firm’s perception of the relative attractions of alternative production locations. As Porter (1994, 1996) and Enright (2000b) have emphasised, a firm’s response to these attractions may be a critical determinant of its strategy.

So far, we have not discussed the organisation or ownership of the value-added chain or network, that is, how the various stages are coordinated with each other. The options open to a particular firm are numerous. They vary from each activity being performed by a separately owned producing entity, or in cooperation with another entity, to the entire network being under the common ownership of a single hierarchy. But, however they are organised, the activities in the network are linked by a series of vertical and horizontal transactional relationships. The precise form of these relationships will depend on legal requirements, business customs, and other institutional norms, and the perceived strategic and economic benefits offered by them. These are likely to vary considerably between countries, and in the same country over time.
The more it is believed that a hierarchical control of successive stages of economic activity will benefit the firm rather than using the market or forming coalitions with other firms, the more vertical integration will be the preferred organisational mode. The lower the transaction costs of the contractual relations and the less the production economies of internalising transactions, the more the organisation of exchange along a value chain is likely to be market orientated. While general conditions of production and distribution may favour some configurations over others, between industries, there are also notable differences within industries, such as in the longstanding preference of General Motors to rely on independent suppliers while Ford has at times attempted to integrate the entire value chain. Such differences illustrate that the costs of contracting and the costs of internalisation are dependent on the institutional assets (Oi) of the firm, and that firms with better relational capabilities are likely to experience lower costs over either mode of transacting, and in consequence, more flexibility in the design of their value-added activities.

Figure 7.1 illustrates four different kinds of value-added chain of growing complexity. Case 1 assumes that the firm is producing a product (Product A) which has four identifiable stages of production (i–iv). Each of these stages may also involve the purchase of support or complementary assets which may be either provided by the firm itself, or purchased from other firms. The output of each stage consists of the value of the intermediate goods or services which are either produced by the firm itself or bought from other firms, plus the value added by that firm. Such value added includes the payment for both production- and transaction-related activities; it also contains a residue of profit (which might be negative) which accrues to the owners of the firm. For the sake of exposition, we shall assume that all transaction costs are included in the costs of complementary assets. No attempt is made to break down the various components of value added (wages, interest, rent and so on). However, these and the prices of intermediate products may vary, *inter alia* according to the quantity of the products bought and sold, and the efficiency with which they are used to create value-added activities.

A broken line between the boxes indicates that the two activities are under common ownership and that the transactions are internalised. A continuous line indicates that they are undertaken by independently owned firms, and that exchange takes place through intermediate product markets. The firm is assumed to be a multi-activity firm (even though it sells only one final product) in that it engages in four stages of the production process. In Stages i and ii, a firm produces only in its home country, although part of this output may be exported. In Stages iii and iv, it produces part of its value added in a foreign country and part in the home country. The firm is also assumed to buy its factor inputs from, and to sell its final product to, the other market participants.

Case 2 in Figure 7.1 takes the analysis a step further. It now assumes that the firm produces two end products (A and B) and that, in each case, it engages in four stages of production. In other words, it is a horizontally diversified and a vertically integrated multi-activity firm. Second, it assumes that at least two of the value-adding stages in the production of both products are located in a foreign country. Third, as well as buying inputs from the factor services market, the firm is assumed to engage in two external transactions between the appropriate boxes.

Figure 7.1 also illustrates the location of the various stages of value-added activity. Product A is intended for sale in a foreign market. The firm is assumed to produce the final two stages of the production process in a foreign country, while the first three stages
are undertaken in the home country. A pharmaceutical company undertaking the final dosage, preparation and packing processes as well as the marketing and distribution of the final product in the country of sale might be an example of this kind of firm. In both cases, the presumption is that the firm finds it less costly to engage in Stages iii and iv of production in a foreign country than in its home country. Another presumption is that the firm finds it profitable to engage in the value-added activity itself rather than license the right to a foreign producer. (If the latter route were chosen, the broken line between Stages iii and iv would be a continuous line.)

Product B is destined for sale in the domestic market, but it is assumed that part of the value-adding process is imported from a foreign country. The broken transaction line indicates that the market for that intermediate product is internalised. We also assume that the entire output of the foreign affiliate is exported to the parent company, and that the latter relies exclusively on its foreign affiliate for the first stage of the production process. In Case 2, the fact that the first part of the value-added process is assumed to be undertaken abroad suggests that the MNE is a resource seeker (see Chapter 3), for example, an aluminium company investing in a bauxite mine in the Caribbean, or a rubber company seeking to own plantations in Liberia. However, an MNE might no less invest abroad to take advantage of relatively cheap labour in the later stages of the production process (for example, investment by a German MNE in the Malaysian semiconductor industry or by a Japanese firm in the Thai textile industry, which might both import intermediate products from and export final products to the parent company or home country).

A final situation is illustrated by Cases 3 and 4. Here, an MNE is assumed to produce two products (A and B) in four stages of production which are intended for sale in two foreign countries (1 and 2). Consider the possible dynamics of foreign production. In Case 3 we assume that the firm undertakes the first stage of production, for example, the R&D and design work for each of the products in the home country. Thus it is a multidomestic market-seeking MNE. The next stage of production of both products is concentrated in (foreign) Country 1; the final two stages of Product A are produced in Country 1, and those of Product B in Country 2. Both products are then sold to their domestic consumers. In Case 4, we assume that, as a result of (say) the removal of all trade barriers between the two foreign countries, the firm concentrates its output of Product A in Country 1 and of Product B in Country 2 although, for each product, it undertakes part of the first stage of production in the home country and part of the final (for example, sales and distribution) stage in both the home and foreign countries. Case 4 represents a change in the status of the MNE from a market-seeking to an efficiency-seeking investor, and from a multidomestic to a globally (or regionally) integrated company.

The simple concepts introduced in the previous paragraphs and illustrated in Figure 7.1 may be extended and refined to cover much more complex value-added networks. Chapters 8 and 9 will analyse some of the organisational strategies of MNEs and the kind of cross-border transactional relationships that they may form with their affiliates and/or with other firms supplying intermediate products, as well as with their other stakeholders (for example, suppliers of factor services). In most large MNEs, these relationships range from spot-market transactions, through a large range of collaborative arrangements with other firms, to joint ventures and 100%-owned affiliates.

As MNEs have become more globally orientated, and as they originate from a greater number of countries, we are observing that even the terms and conditions of non-equity
Case 1: One product – two countries

Home country

Product A

(i) (ii) (iii) (iv)

Stages of production

Foreign country

For sale in domestic market

For sale in foreign market

Case 2: Two products – two countries

Home country

Product A

(i) (ii) (iii) (iv)

For sale in domestic market

Product B

(i) (ii) (iii) (iv)

For sale in domestic market
Figure 7.1  The value chain: four possible cases
transactional relationships are increasingly reflecting a myriad of different legal, cultural and other institutional norms of the countries in or between which they are conducted. This, in turn, is affecting the transaction and production costs of alternative organisational arrangements. Cross-licensing agreements – a kind of barter or counter-trade in technology – have been commonly practised for many years, as has the sharing of human capabilities or physical resource capacities between firms. What is noticeable, however, is the dramatic increase in the number of such collaborative arrangements and the complexity and ingenuity of them. We shall take up these issues in more detail in Chapter 9. The point we wish to emphasise here is that various collaborative arrangements not only have affected the content and ownership of the value-added network of particular products and/or of the total activities of firms, but also have been affected by the incentive structures and enforcement mechanisms underpinning the network of activities. It is for this reason, if for no other, that we believe this demands a more holistic approach to evaluating the OLI configuration of firms, and the strategic response of managers to these variables.

The following section considers some of the possible phases in the evolution of an MNE from the one prior to the initial act of FDI through to a globally integrated network of cross-border value-added activities. In so doing, it also looks at the alternative strategies open to a firm at each phase of its internationalisation process.

7.4 ANALYSIS OF THE INTERNATIONALISATION PROCESS

7.4.1 Introduction

There can be no doubt of the growing plurality of the routes towards the globalisation of production and markets. Nor can it be disputed that changes in the external economic and technological environment over the last decade have fostered a sharp increase in the geographical diversification of the origin of MNEs, and the countries in which they locate their affiliates (see Chapter 2). Consequently, a schematic representation of the internationalisation process is likely to be useful in so far as it describes the possible alternatives, rather than as a depiction of the actual process of internationalisation of any individual firm.

We shall begin our discussion by briefly reviewing some critical aspects of the process theory of internationalisation discussed in Chapter 4. This theory relates experiential learning by firms to a pattern of gradually increasing international resource commitment, coupled with a widening geographical pattern of MNE activity. This discussion is followed by a brief introduction to the modern MNE as a network, which is necessary to appreciate the variety of configurations of organisational coordination and control that multinational firms adopt when they engage in cross-border activities. Chapters 8 and 9 will discuss these organisational features of the MNE in more detail.

7.4.2 Learning in the Internationalisation Process

In Chapter 4, we argued that while the process theory of internationalisation developed by the Uppsala school was useful in understanding the initial expansion process of many market-seeking MNEs, particularly from small home countries, it was less relevant to
explaining other motives for FDI. These include much of resource-seeking investment, asset-seeking (rather than asset-exploiting) investment, and the emergence of the so-called ‘born global’ firms discussed later in this chapter. Nonetheless, we believe that in drawing attention to the importance of learning in the strategies of firms, the model does usefully emphasise an aspect of the internalisation process that continues to be of central importance, although experiential learning is increasingly complemented by other forms of learning in the MNE network.

Indeed, learning through imitation, or as a result of deliberate searching and scanning for new information, is an increasingly important part of the knowledge-generating activities of MNEs (Forsgren, 2002). Furthermore, as Delios and Henisz (2003) have shown, institutional factors in the host country, such as the uncertainty over the policy environment, or the government’s credibility in committing to its policies, also affect the sequencing of investment and the type of learning undertaken by firms. In their study of 665 Japanese manufacturing firms in 49 countries, learning from an initial entry concentrating on marketing and distribution activities was preferred in low policy uncertainty environments. In high uncertainty environments, MNEs preferred to engage in joint ventures with local firms. The authors also found that in uncertain political environments, MNEs that had made their initial entry using joint ventures, were more likely to increase their resource commitment by investing in a wholly owned affiliate.

To the extent that multinationals are in the process of becoming transnational (Bartlett and Ghoshal, 1989), or metanational (Doz et al., 2001), so that the firm coordinates an interdependent network of intra- and inter-firm relationships, the objective of which is knowledge and institutional integration within the firm, the absence of indirect forms of learning in the process model is indeed a major deficiency. However, these criticisms and qualifications notwithstanding, we believe that the stages model of gradually increasing resource commitment still serves as a useful starting-point, particularly in the earlier stages of the internationalisation process, and in the case of less experienced, often smaller firms. Further insight into the factors facilitating the internationalisation process is offered by a network approach to understanding the evolvement of MNE activity, which we examine in the following subsection.

7.4.3 A Network Approach to the Multinational Firm

A complementary approach to the dynamics of the OLI configuration of firms was initially taken by organisational scholars who stressed the firm-specific advantages which arise from being part of a network of complementary activities, and who viewed the internationalisation process as one which is dependent on the advantages of cooperative cross-border relationships – especially between buyers and sellers. The thesis of the early network scholars (for example, Johanson and Mattson, 1987a, 1987b) was that, since firms are dependent on each other in the networks in which they operate, their activities need to be coordinated. However, rather than this coordination being determined by the market or individual hierarchies, it is fashioned by the web of transactions, forged by firms engaging in a series of bilateral exchange relationships. Since these relationships are likely to take time and effort to establish and develop, their precise form will depend not just on the immediate interests of the firm, but on how it affects the efficiency of the network as a whole (and hence, in the long run, its own efficiency).
With the expanding geographical reach of many contemporary MNEs, substantial changes have occurred in the systemic organisation of firms, some of which can best be characterised in terms of networks. As we have discussed, in addition to the changing configuration of their administrative structures, the boundaries of the MNE have become more porous, and have incorporated many forms of equity and non-equity relationships, such as joint ventures and strategic alliances. While some firms have long since had cooperative relationships with certain suppliers or customers, or indeed with particular governments, we believe that, in addition to the growth in inter-firm collaborative activity, the influence of the activities of national regulators, NGOs and other non-market actors on the firm has increased significantly along with global reach. In Chapter 5, we suggested that the relational capabilities derived from the firm’s institutional assets (Oi) are used in part to manage these demands. We shall return to this issue in Part IV.

The adoption of the terminology of networks is one way for scholars to try to come to terms with the complexity that presents itself in the organisation and operations of MNEs. At their most general, such networks are similar to the network models of linear programming, where series of nodes are connected by different carrying capacities, and one is looking for the optimal way to push resources through the network. Some nodes are usually better connected than others, and if such nodes represent affiliates or business divisions of the firm, these are of greater strategic significance within the MNE network. On the other hand, if parts of the network are not connected, there are said to be structural holes in the configuration.

Increasingly, what is being transferred between the different members of the network, in addition to intermediate goods and finished products, is all kinds of knowledge. Indeed, we might say we live in an age of alliance or knowledge capitalism (Dunning, 1997a; Dunning and Boyd, 2003). However, the kind of knowledge that is likely to be both valuable and rare is tacit knowledge, that is, that embodied in people and organisations, and in the learning relationships and shared experiences which people and organisations have with each other (Cantwell, 1991b; Spender, 1996). Since valuable knowledge is frequently tied to skilled employees and to local institutional mores, a great deal of it tends to be location specific. The challenge for the MNE then becomes to absorb the locally generated knowledge held by its foreign affiliates, and to leverage it with the financial and other resources available within the firm (Birkinshaw, 1996; Birkinshaw and Hood, 1998; Holm and Pedersen, 2000). From a structural perspective, the multinational has to find a way to coordinate its disparate parts in a way that allows it to pursue current market opportunities, while at the same time, being able to reach and ‘tap into’ various location-specific resources abroad. These changes in the structure and management of MNE affiliates will be discussed further in Chapter 8.

In addition to describing the systemic structure of an MNE, a network approach also allows us to emphasise the issues of control and coordination, and their institutional underpinnings, which lie somewhere between the arm’s-length transactions of the market, and administrative fiat within the firm. This is particularly pertinent when one extends the analysis from within the firm to encompass a number of different actors outside of the firm, whether they be suppliers, customers or competitors. The economics of these cooperative inter-firm relationships, such as joint ventures and strategic alliances, will be discussed in more detail in Chapter 9.
The following subsections take an incremental approach to the process of internationalisation of value-added activities by firms, but it should be stated at the outset that the sequence of events to be described, and illustrated in Figure 7.2, is not necessarily that which a given firm will follow. Resource-seeking MNEs are, for example, likely to pursue a different path of internationalisation from market- or asset-seeking MNEs. The steps we have set out should be taken as an illustration of increasing foreign resource commitments and complexities of cross-border coordination. While some firms may well go through the five phases identified, others, depending *inter alia* on their motives for foreign economic involvement, may leapfrog over one or more phases. There is also no indication of how long it might take a firm to proceed through any given phase. Later in this chapter, for example, we shall give some attention to both ‘born global’ firms; and also to those which venture abroad primarily to access new competitive (or O-specific) advantages rather than to better exploit existing advantages. Moreover, as the final section of this chapter will show, established and globally orientated MNEs are increasingly adopting a pluralistic and integrated approach to their modalities of entering new markets, or responding to changes in the global economic environment.

While the phases depicted here are more directly applicable to market-seeking manufacturing firms, we shall also attempt to incorporate the different phases of internationalisation of service firms, which as Chapter 2 has revealed, are becoming an increasingly important kind of MNE activity. To the extent possible, we shall also indicate the kind of entry mode (greenfield, acquisition, joint venture), that might be prevalent in each phase, depending on the motivation for the investment (see Chapter 3). We shall also note when, instead of FDI, alliances or licensing might be a preferred way to service the foreign market.

### 7.4.4 Phase 1: Exports and Foreign Sourcing

Firms initially engage in transactions across national boundaries for one of two reasons. The first is to acquire income-generating assets, or inputs into their value chain, at a lower real cost than they can from domestic sources. The second is to protect existing, or seek out new, markets for the output of their domestic value-adding activities. In both cases, however, the decision to become international is normally just one of several strategic options a firm may pursue. For example, the resources and capabilities which a firm uses in seeking and servicing foreign markets might be better spent on diversifying into new lines of activity in the home market, upgrading its supply capabilities, improving productivity in its domestic factories, or acquiring other indigenous companies. Alternatively, a firm seeking to acquire new assets by way of an M&A may choose to do so by engaging in a non-equity alliance with a foreign firm. There is always some uncertainty about the costs involved in entering into a cross-border business relationship, and while some firms may opt to engage in such a relationship as a strategic choice, others may be pushed by changes in the market for intermediate goods, or, indeed, that for the final product.

Although Phase 1 does not involve any FDI, there are, nonetheless, a number of possible ways a firm can become linked to cross-border activity. Consider just four cases. The first is where a firm wishes to outsource the production of intermediate inputs, or the final product itself, to a firm in a foreign country that enjoys a cost advantage as compared to domestic production. Indeed, the growth of contractual outsourcing is a hallmark of the
Phase 1
- Exported to foreign marketing and distribution agent

Phase 2
- Exported to own marketing and distribution affiliate

Phase 3
- Exported to own assembly affiliate

Phase 4
- R&D exported to own manufacturing affiliate

Phase 5
- Part of basic R&D for Product 2 exported

Source: Adapted from Ohmae (1985, 1987).

Figure 7.2 The possible evolution of an MNE
contemporary form of globalisation, and it is likely to encompass not just the outsourcing of intermediate manufacturing inputs, such as components or subassemblies, but also that of services, such as call centres. Interestingly, even before the current expansion of outsourcing operations, Korhonen et al. (1996) discovered that more than half of the Finnish SMEs that internationalised in the 1970s and 1980s, entered Phase 1 through imports of machinery, raw materials, components and final goods to be resold, rather than through exporting.

The second case is where a firm wishes to export its goods to a new foreign market. However, because of its relative ignorance or the uncertainties about the local demand conditions, a new entrant – particularly if it is a small firm – might wish to avoid the risks in making an investment in a foreign sales or purchasing outlet. Instead, it may prefer to buy the services of a local sales agent, that is, make use of the external market. On the other hand, where a market has to be created for a product, where the product needs to be adapted to the requirements of the local buyers, where multiple products are being marketed and there are net benefits to coordinating the sales of these products, or where an efficient after-sales usage, repair and maintenance service is a key ingredient of the product’s appeal, a firm may decide that the risk that a foreign sales agent will not adequately meet its needs is likely to outweigh any setting up costs of marketing and distribution facilities from the start (a Phase 2 entry). Chapter 6, for example, gave some historical illustrations of this form of entry by British MNEs into foreign markets.

The third kind of value-added activity consists of the production of goods or a service, the buying or selling of which requires a regular and continuing association between the parties to the exchange. This is the case where the product is idiosyncratic, is sold in small quantities, or is irregularly traded. Here, an initial market entry might take place directly with a supplier or a customer, even though the firm may use the services of a foreign broker to help it search for, or negotiate with, such suppliers or customers. Thus firms transacting non-standardised intermediate products (including proprietary rights and managerial services) will tend to sell these products (for example, license the rights to their use) to other firms which they perceive will best advance their own interests. By contrast, firms buying ‘custom made’ products from foreign suppliers will tend to develop ongoing contractual relationships with their suppliers. The OEM producers involved as suppliers in an outsourcing relationship are likely to fall into this category; and in due course, some of them may evolve into global producers in their own right, as for example was the case with Acer (Leung and Yip, 2003).

The fourth type of Phase 1 entry is one where the firm generates an output which is difficult or impossible to trade across space. Since some products and services cannot be transported over space, a foreign entry must take the form either of an FDI (Phase 3–5 entry) or, if the intermediate products are tradable, of a contractual agreement with a producing firm in that country. Such contractual agreements include turnkey construction projects – such as the construction of a highway or a power station in Africa by Chinese construction companies – or licensing agreements for hotel chains or franchising agreements for food and/or beverage service chains such as McDonald’s or Starbucks. In Phase 1 entry the construction company has no permanent presence in the foreign location, while the licence or franchise owner has little or no involvement in the day-to-day management of its licensees or franchisees, but instead earns income due to the exchange of an intermediate product (for example, codifiable knowledge).
However, if the construction company in the previous example set up a marketing office for the purposes of obtaining new contracts, this would constitute a Phase 2 entry, and if it set up an office that coordinated at least some aspects of project management for a variety of different projects, this would constitute a Phase 3, 4 or 5 entry, depending on the complexity and range of tasks handled by the local African affiliate. Similarly, whenever McDonald’s or Starbucks actually own and operate their affiliates abroad, this represents a Phase 3–5 entry. A special case are services where the buyer has to travel to the country in which the service is produced, as in the case of an Australian tourist seeking to purchase the services of a hotel in Fiji. In this case, the Fijian hotel owner earns invisible exports as the service is paid for in foreign currency, and if the hotel is part of a franchised chain, the franchise owner will have earned its contractual share as well.

In terms of resources transferred abroad, Phase 1 involves a minimal commitment, and relies heavily on contractual modes. While a firm selling its output to intermediaries may, in due course, wish to expand its activities by investing in foreign marketing and distribution, or by expanding the stages of value added performed abroad, a firm sourcing inputs from abroad may be content with long-term contractual agreements with suppliers, or it may wish to exert more control and to invest in its own facilities for foreign production either via an acquisition or a greenfield investment. Much will depend on the characteristics of the targeted market, the kinds of goods and services being produced and traded, the market structures in which firms compete, and the nature of the cross-border transactional mechanisms. The literature suggests that the value and significance of these variables will be strongly influenced by country-specific economic, political, institutional and cultural considerations. Firm-specific factors, such as the technical and managerial capabilities of the investing firm, its potential stake in the new market, its knowledge about competitors or potential competitors and the quality of the institutions of host countries, will also be relevant. Indeed, as it influences the determinants of trade and production, so the configuration of OLI advantages facing firms will affect their initial entry strategies into foreign markets.281

7.4.5 Phase 2: Investment in Marketing and Distribution

Apart from firms for whom the purchasing or selling of their products can only be accomplished through some kind of physical presence in a foreign market, those seeking to acquire an existing foreign company, or those who are selling or buying in specialised or unfamiliar markets where local expertise is especially valuable, most firms regard the use of foreign agents and distributors as a first step towards both market- and resource-seeking (but not usually efficiency- or asset-seeking) FDI. The reasons why firms might wish to internalise the market for selling the output of their value-added activities reduce to a trade off between the advantages of securing control over the form, the quality and terms of those activities, and the risks associated with the commitment of the resources involved.

To the neoclassical economist, the choice is primarily a matter of the efficiency of alternative organisational modes in maximising revenues and minimising costs, which include both production and transaction costs. The two obvious advantages of using foreign brokers are first, their familiarity with and experience of local institutions and demand or supply conditions, and second, their ability to exploit economies of scale and scope of
trade-related activities. The most familiar hazards are those commonly associated with principal/agent problems, especially where a particular agent serves many principals. These include the costs of ensuring that the distributor or import merchant operates in the best interests of the exporting or importing company (which may include not advancing the interests of the latter’s competitors).

Again, it is not difficult to identify the internal and external factors affecting the strategy of firms which might cause them to switch from using foreign sales or purchasing agents to setting up or acquiring marketing or purchasing facilities of their own. Clearly, if a firm did not choose the latter route in the first place, its post-entry country-specific learning experiences and its growth in sales might cause the balance of advantages between using an internal and external market to shift in favour of the former. While there is nothing inevitable about this process, it is likely that the more familiar and experienced a firm is, and the larger the buying or selling stake it has in a particular country (for example, with respect to the volume and type of products traded), the more it will prefer to own its marketing and distribution networks. At the same time, trade-related FDI may be undertaken by specialist trading companies, the larger of which may also perform a wide range of business services germane to both imports and exports.282

For example, in their study of 276 Danish firms, Pedersen et al. (2002) found that between 1992 and 1997, 17% had switched from using an independent export intermediary to an own sales organisation to serve foreign markets. As the firm gained more experience of the foreign market, it was more likely to invest in its own sales organisation, but this was tempered by the presence of switching costs, in the form of contractual restrictions and possible loss of customers (‘take-down’ costs), as well as the cost of setting up an own marketing and distribution affiliate.

However, for companies of all nationalities, FDI in trade-related activities is important, although the share of wholesaling and retailing in the outward FDI stock in services has declined from 17% in 1990 to 10% in 2004, due to the explosive growth of FDI in other service sectors (UNCTAD, 2006). Often these affiliates are parts of primary or secondary producing firms. In 1982, for example, as much as 52% of all US-owned trade-related foreign investments were owned by non-service (mainly manufacturing) companies (UNCTC, 1989). In 1999, non-service MNEs accounted for 41% of US outward FDI in services, and in 2000, for 10% in Germany (UNCTAD, 2004:105). Such services consist of the trading, marketing and financial services attached to exports from the home country, or those supporting the sales of a foreign affiliate in the local market.

Trade- and marketing-related FDI, of course, covers a wide spectrum of functions, and a firm may choose different entry routes for organising different functions. Advertising responsibilities, for example, might be subcontracted to a specialist foreign firm while after-sales servicing activities might be internalised. The major international airline companies own their own maintenance and repair facilities at some airports, while at others they buy these services from independent local firms. Japan’s sogo shosha (general trading companies) offer a synergistic and tightly controlled package of trading activities, in contrast to the marketing of Hong Kong and Taiwanese products, which tends to be dispersed among a large number of independent trading firms (Ellis, 2001). In recent years, however, the trade facilitating role of the sogo shosha has declined, particularly in relation to exports, as Japanese MNEs are undertaking more of the marketing and distribution function themselves (UNCTAD, 2004:133). As in the goods-producing
sector, the form of organisation chosen will depend on its perceived impact on the revenue-earning capacity of the MNE and the relevant production and transactional costs involved. Broadly speaking, the greater the presence or likelihood of market failure in the various trading functions, the more likely these will be internalised within MNEs.

Another case of a Phase 2 entry is that of a firm which, in order to efficiently exploit any competitive advantage it may possess, must combine these advantages with others possessed by a firm or groups of firms in a foreign country. Thus, for example, a US firm looking to export to the Chinese market may need to engage in a collaborative venture with a local firm to access the appropriate distribution channels. In such cases, while the firm might desire to gain the full control obtained through internalising the marketing and distribution function, opaque business practices and exclusive local networks might make it impossible to serve the market without having a local partner.

It should also be recalled that investment in trade-related activities might sometimes be a first step to the foreign production of goods and services. Indeed, the firm may already be engaged in such activities in other countries. Warehousing is an example. It is only a small step from the storage of finished goods to the holding of intermediate products or kits of parts, which require some inspection, assembling and packaging before being sold to the domestic or export market. Moreover, a trade-related presence may provide a firm with a better idea of its own capacity for foreign production, or that of local firms to supply its intermediate inputs. It might also offer the firm an insight into foreign technology, institutions and organisational structures, and also into the kind of product adaptations that need to be made to meet the demands of foreign customers. In short, a trade-related or marketing affiliate may provide a potential foreign investor with a useful insight into the prospects and opportunities for foreign production and, in so doing, reduce the set-up and transaction costs associated with that production. For example, in a detailed case study of a medium-sized Norwegian firm, Welch et al. (2002) found that purchasing connections made by it in Russia some years earlier were instrumental at a later stage in providing the firm with the connections and credibility that were required to obtain market access in that country.

At the same time, it is also possible that instead of the exporter expanding from the provision of goods to related services such as warehousing, this can better be undertaken by other specialist firms in the exporting country. For example, firms such as ATL Logistics in Hong Kong are increasingly undertaking the sorting and labelling of goods for clothing retailers before they leave China, so that these can be shipped directly to stores in the importing country. Alternatively, a company such as NYK Logistics in Shanghai may shrink-wrap goods intended for individual supermarkets, so that they can be processed more efficiently at the importing company’s warehouse.284

Finally, we need to consider a type of global firm whose internationalisation process has been accelerated, the so-called ‘born global’ firms.285 These are often technology-intensive start-up firms serving niche markets that have adopted flexible structures that can reach suppliers and customers around the world from their very inception (Madsen and Servais, 1997). Beginning with Oviatt and McDougal’s (1994) study of international new ventures, research on international entrepreneurship has explored small firm internationalisation, particularly in high-technology fields. These studies have sought to evaluate which channels are available for ‘born globals’ to reach international markets, and how their limited and often highly specialised resources, and the structuring of the
international ventures, affects the process of internationalisation (Gabrielsson and Kirpalani, 2004; Knight and Cavusgil, 2004; Kuemmerle, 2005).286

Judging the full impact of such firms is complicated by the fact that there is no agreed-upon definition of what length of time ‘born’ refers to, and exactly how the global nature of these firms is to be interpreted. To the extent that they normally supply a narrow range of products or services, have low levels of resources committed outside their domestic borders, and engage in exports as their primary cross-border activity, we would consider these ‘global’ firms to be more like those identified in Phases 1–3 of our scheme. Indeed, while ‘born globals’ typically earn a significant proportion of their revenue from abroad in the first few years, evidence on Israeli ‘born globals’ suggests that, in many other ways, these firms are following a relatively conventional process of gradually increasing resource commitment to foreign markets, where the establishment of marketing affiliates abroad is an essential step in their internationalisation process (Hashai and Almor, 2004).

7.4.6 Phase 3: Foreign Production of Intermediate Goods and Services

While Phase 2 is a critical step in the evolution of an MNE, both in its own right and because it can lead to further FDI, the amount of resources and capabilities committed is usually quite small. This is likely to change quite dramatically as and when a firm starts to engage in the foreign production of goods or services, as opposed to facilitating the sale or purchase of goods and services already produced. For many (but not all) manufacturing firms, initial greenfield (but not acquired) market-seeking activity tends to be in comparatively low value-adding activities, which are usually at the final assembling or initial processing stage of the value-adding chain. As and when local or regional markets enlarge, the economic viability of setting up or acquiring a foreign production facility is likely to increase.

The extent to which this actually leads to FDI largely depends on the types of intermediate or final products supplied, the nature of production processes utilised, and the quality of the local supply capabilities. If the domestic production process is capital intensive, or demands a lot of specialised equipment and highly trained labour, and if it cannot be easily scaled down, then it may be a long time before local production is started. If the optimum scale of plant is small and local inputs are readily and cheaply available, then foreign production may not only replace exports at an early stage; it may also be the initial modality of entry into the foreign market. It should be observed that the optimum level and locational requirements of production are likely to vary between the different stages of value-added activity, as, indeed, may the cross-border transport and transaction costs associated with these and other value-added activities.

Figure 7.2 depicts Phase 3 investment where a particular part of the manufacturing or service process is transferred from the home country to a foreign country. Thus foreign value-added activity might take the place of exports, or of its domestic equivalent where the FDI is intended to supply products to the domestic market, in place of either domestic production or production which might be undertaken by local firms in the foreign country. On the other hand, foreign production might supplement, or be quite independent of, its domestic counterpart. In any, or all, of these cases, either a completely new (that is, greenfield) value-added facility may be set up or an existing facility acquired.
With the advent of the internet and improved telecommunications, it is becoming increasingly economic to source many services, such as customer call centres, back-office functions and computer programming, from abroad. In such cases, the production of the service is located in places with a suitably trained and cost-competitive workforce, while the service itself can be transferred as an intermediate input back to the originating firm, or extended directly to customers around the world. BT’s decision in 2003 to locate its directory enquiries service to a call centre in India is an example of the latter, while the outsourcing of Philips’, financial services centre to Poland in 2004 is an intermediate input of the Phase 3 variety. In both cases, the outsourcing of intermediate services was made by greenfield investment in a foreign location. In other instances, where the MNE no longer feels it necessary or beneficial to maintain hierarchical control over such activities, outsourcing may be contractual and hence of a Phase 1 kind. In that case, a call centre in, say, India may be operated either by a local firm, or by a large contract service provider such as the US firm Convergys, which has set up affiliates in a number of developing countries (UNCTAD, 2004:158).

Where does licensing the property rights of the internationalising firm to a foreign producer enter into the picture? In our analysis of initial entry in Phase 1, we have treated the export of property rights in the same way as the export of final goods. However, if a company previously exporting final goods to its own marketing affiliates now finds, for one reason or another, that it is strategically or economically desirable to produce part or all of these goods in a foreign country, but that it is best to do so by concluding a licensing or franchising agreement with a foreign firm, then the firm will replace the export of the final good by an export of an intermediate product or service, for example, codifiable knowledge. The final product will then be produced in the foreign location by an unaffiliated firm, and subsequently sold to the firm’s own marketing affiliate (combined Phase 1 and 2 entry). However, if the firm decides to establish its own foreign assembling affiliate (either a greenfield venture or an acquisition), we have a Phase 3 entry, with the output being sold either through the firm’s own marketing and distribution affiliate, or by an independent agent. It is also possible that the assembling affiliate is the result of a joint venture with a foreign partner, as is the case of much of manufacturing investment in China, as a result of ownership restrictions imposed by the host government (Buckley et al., 2004).

The literature on the choice between producing a particular good or service in a domestic production facility and exporting it from there, or producing it in the country in which it is sold (or in a third country) is extensive, and reference was made to it in Chapter 4. Most of these studies emphasise the role of comparative manufacturing, organisational and marketing costs of exporting and local production, as well as expectations about future market size and growth, transport costs, government-related trade barriers, and incentives and/or disincentives offered to foreign direct investors. In a seminal paper, Buckley and Casson (1981) suggested that the point of switching would be negatively correlated with the relative importance of set-up and recurrent fixed costs to the total production costs of the investing firms, as well as the ways in which increasing familiarity with a foreign market may influence the choice of how best to service that market. In addition, they argued that licensing was likely to be the preferred servicing mode whenever cross-border transport and tariff costs and the intra-firm governance costs of FDI, were high. As and when these latter costs fell, they argued, firms might be tempted to switch their foreign involvement from licensing to FDI.
In the older models, trade and licensing were assumed to precede foreign production, rather than being perceived as a learning experience of the input and output markets in foreign countries, or, in the case of trade in intermediate products (for example, licensing or subcontracting), of foreign production as well. However, this experience value of non-equity forms of cross-border transactions has been noted in various empirical studies, and lies at the core of the Uppsala school theory of internationalisation discussed earlier. Since learning does play a role, a firm’s knowledge of foreign markets and production conditions is often a function of time, and the extent and form of prior foreign involvement. But other variables, such as the size of the firm and its interaction with local trading and other enterprises, may be no less important. As we have already discussed, a Phase 2 marketing affiliate may provide a potential foreign investor with a useful insight into the prospects and opportunities for foreign production and, in so doing, reduces the set-up and transaction costs associated with that production.

7.4.7 Phase 4: Deepening and Widening of the Value-added Network

While firms in Phase 3 perform intermediate processing, such as assembly abroad, firms in Phase 4 perform all the tasks related to producing a final good, and engage in the marketing and distribution of the final product, whether in the host market or for export. Using local technology and creative inputs to develop new products, the affiliate can gain what is known as a ‘product mandate’, giving it a more important role in the multinational network as compared to a simple assembly operation. In Phase 4, foreign affiliates control most stages of the value chain, engage in their own sourcing, and can begin to develop the kinds of contractual and cooperative connections that make them insiders in the host market. In general, while Phase 4 internationalisation is more focused on the capabilities of the affiliates themselves, in Phase 5, more attention is paid to the integration of the affiliates into the MNE network. One factor that generally separates Phase 4 affiliates from those in Phase 5 is the role of innovatory activities. Affiliates in Phase 4 would normally rely on R&D carried out in the home country of the MNE, or in an affiliate centre of excellence in another host country. Consequently, in Figure 7.2, Phase 4 is denoted by a transfer of all but the R&D stage of production to the host country.

Entry into Phase 4 often represents a continuation of the process of maturing of the foreign affiliate which was previously engaged in intermediate processing in Phase 3. Such activities usually require the least investment in human competences, physical capital and institutional infrastructure, and hence tend to involve the least risk. If successful, and if and when markets expand, local supply capabilities improve, or host governments offer more incentives, then more of the upstream higher value-added activities set out in Figure 7.2 may be transferred from the home to the host country. The more value-added activities can be adapted to the particular supply capabilities and market needs of the foreign country, and can benefit from a congenial innovatory environment, the more foreign production is likely to start earlier than it otherwise would. Moreover, over time, many of these capabilities can be elevated by improved training and education, upgrading the quality of resources, devolving more entrepreneurial responsibilities to local managers, networking with indigenous firms, as well as by the provision of appropriate support facilities (for example, roads, utilities, telecommunications) and the development of more-efficient production methods and organisational techniques.
Sometimes these improvements may be undertaken by the firms themselves, and sometimes they are provided by national or regional governments financed by regional or international agencies, such as the World Bank or the Asian Development Bank. Chapter 10 will show that as countries move through various stages of the development process, their capacity to attract inward investment changes, as is most recently illustrated by the rising share of inbound MNE activity now being attracted to Central and Eastern Europe and China (UNCTAD, 2006). Furthermore, both positive incentive structures (for example, tax concessions, investment allowances, regional subsidies, bilateral investment agreements) and negative incentives (for example, threat of loss of markets as a result of government procurement schemes designed to favour local producers, import controls, and the adverse actions of competitors) could encourage or impel firms to find ways of producing locally, and of incurring the relevant adjustment costs.287

In the case of resource-seeking FDI, which is primarily prompted by the presence of L-bound endowments, the initial entry is intended less to replace existing import markets and more to internalise them. While the locational options for the secondary processing of the natural resources are often wider, these downstream operations frequently require more sophisticated human and physical assets than are initially possessed by many of the countries that own the resources. Again, as economic development proceeds and the experience of the foreign affiliates engaged in primary production increases, the parent companies may be willing to invest more in secondary processing operations, particularly if prompted by host governments. Examples include forward vertical integration by US crude oil producers in Canada into refining and petrochemical operations, MNEs engaged in mining in South Africa expanding into the processing of aluminium, steel, and titanium, and Korean-owned fishing companies in Canada and the US going into fish processing operations (UNCTAD, 2007).

The sequential growth of MNE activity in this phase may take several forms. These include increased FDI in different value-added stages or expanding the number of products produced in one location, or expansion into multiple host countries, or a combination of one or more of these elements.288 Such growth may take the form of an acquisition or merger, or an extension of the firm’s existing facilities. An example is a widening of the range of products produced by foreign affiliates. In this case, the number of value-added chains in which there is a component of foreign production is increased. At first, the value-added activities of a greenfield facility are likely to be a truncated version of those undertaken in the home country. In such cases, the output of the foreign affiliate is confined to supplying the products that offer the best (and most secure) rates of return, while other products supplied by the MNE may continue to be imported from the parent company or another foreign affiliate. This could (though not necessarily) lead to other products being produced. For example, when Japanese electronics firms entered the US market in the late 1970s and 1980s, they did so by first entering in their core business areas, and subsequently expanding into non-core areas, using prior investment as a platform for future investment (Chang, 1995; Kogut and Chang, 1996).

More generally, such a widening of the product base (that is, horizontal diversification of the affiliate) is likely to occur either where there are opportunities of economies of scope to the affiliate as well as to the parent company, or where, for offensive or defensive strategic reasons, an MNE perceives a need to diversify its foreign asset base. In this latter
case, such sequential investment will normally take place through an acquisition, merger or strategic alliance.

Another form of sequential involvement is for an MNE, which has successfully penetrated one foreign market, to move into another (usually adjacent) market, which is consistent with the learning argument advanced by the Uppsala school. In her historical analysis, Wilkins (1970, 1974) tells of how in the 19th and early 20th centuries the markets in successive Latin American countries were penetrated by American MNEs. Investment by leading European MNEs in sub-Saharan Africa at the time followed a similar pattern (Franko, 1976; Archer, 1986). Both the geographical and industrial structure of Asian MNE activity in Europe has considerably widened since the first foray by Japanese firms into the UK in the early 1970s. Most recently of all, the ripple effect of the learning process involved in FDI is being demonstrated by the increasing number of European countries in which Central and Eastern European MNEs have a presence (UNCTAD, 2006).

Furthermore, the kinds of adjustments undertaken by firms can be country or industry specific. An example of the latter is the case of Japanese automotive firms, whose keiretsu-type advantages have been successfully transplanted to the automotive industry in the US, while Japanese electronics manufacturers have adapted much more to the prevailing standards in the US market (Kenney and Florida, 1995; Kotabe et al., 2003). Overall, as the kind of investment undertaken by Japanese MNEs in the US and Europe has evolved towards more knowledge-seeking investment, the traditional buyer–supplier relationships have become less important than other cooperative relationships for the success of the investment (Mason and Encarnation, 1994; Morgan et al., 2002).

Increasingly, it would seem that foreign investors have become ‘insiders’, either by undertaking an increasing proportion of their sales themselves or, depending on the relative production and transaction costs, by buying them from local firms in the local market. The completion of the internal market in Europe and the setting up of NAFTA in North America has stimulated this transition. The maturing of foreign production is also coinciding with the increasing autonomy of MNE affiliates, and their expanded role as ‘learning’ affiliates within the multinational firm (Birkinshaw, 1996; Birkinshaw et al., 1998; Holm and Pedersen, 2000). Such affiliates may not only act as disseminating channels of the technology and organisational practices of their parent, but also contribute to the generation of new knowledge both from their own R&D facilities and by accessing that of other firms.

Furthermore, sequential investment by the MNE in existing operations, which is often at least partly financed by reinvested earnings, is also likely to increase as MNE investment becomes more mature. In spite of its empirical significance, the issue of reinvestment has not received a great deal of attention in the literature. One exception is a study on 70 MNE affiliates in the UK by Mudambi (1998), which showed that those which had been established the longest were more likely to invest again in the same host location as compared to more recent entrants. Another study of 194 Japanese electronics affiliates in Korea, Taiwan and Singapore by Song (2002) found that such affiliates continued to operate, and even to invest, in the face of adverse developments in production conditions, particularly in respect of wage increases between 1988 to 1994. His study suggests that it is not just local experience in terms of duration that contributes to upgrading, but that investment in firm-specific capabilities and local sourcing also plays a role. Interestingly,
in his sample, the Japanese electronics firms were more likely to upgrade their operations in Singapore than in Taiwan and Korea, which may have been due to policies pursued by the Singaporean government to induce MNEs to upgrade their local capabilities.

It is also often the case that both resource- and market-seeking foreign investment by one group of firms might encourage investment by others (the ‘gold rush’ to invest in China in the 1990s is a case in point). In Chapter 4 we discussed the ‘follow the leader’ and ‘exchange of threats’ international strategies of firms competing in international oligopolistic markets. We suggested that the securing of incremental markets might not only help to lower the average fixed costs of the investing firm (for example, by spreading R&D and marketing outlays over larger volumes of output), but that it might also prevent a competitor from taking advantage of these economies of scale or scope. In such a situation, it follows that once foreign production becomes worthwhile, a group of MNEs might set up production units even though it might not be profitable for some or all of them, since it would be even less profitable if they stayed out of the market altogether. Naturally, this bunching of FDI will not always occur; in some instances the size of the local or regional market may just not be large enough to accommodate more than one or two producers. Moreover, even if and when it does take place, it need not do so in the same countries, particularly where the investment is designed to supply products for the export market.290

Not only might competitors want to match the moves made by another firm, but other firms in related industries might be prompted to invest as well. For example, the substantial investments made in the UK by Ford and General Motors in the inter-war years; and by Nissan and Toyota since the 1980s, led a large number of US and Japanese component suppliers to follow them. Similarly, the presence of local resource-producing companies (for example, oil exploration companies) has frequently led to investment by foreign downstream specialists, such as petrochemical or synthetic fibre companies. In the past, FDI by primary or manufacturing companies has prompted supporting or facilitating investment by service companies, including construction companies, banks, insurance companies, advertising agencies, hotels, car rentals and restaurants (UNCTAD, 2004). Such investment is rarely trade replacing; the major question is whether the potential investors choose to undertake the value-adding activities, based on their O-specific advantages, themselves, or sell the right to do so (for example, via licensing, franchising, management contracts) to independent foreign producers.

A special case of initial entry into Phase 4 occurs in instances where the seller of the products has to produce them in the country of consumption. Examples include goods which are costly to handle or transport, for example because they are perishable or have a low value to weight ratio, and services which need the instantaneous and joint presence of producers and consumers, such as some forms of medical consultancy, wholesale or retail distribution or import merchanting. Indeed, a recent report by UNCTAD (2004) on the (substantial) role of services in foreign investment and trade highlights the variety of different modalities adopted by service MNEs in their internationalisation process. These have varied from predominantly non-equity alliances in the case of airlines, to M&As and joint ventures in postal services, telecommunications, retailing and financial services. In legal and accounting services, the mode of entry has generally been governed by the local regulatory environment; while expansion has often been based on partnerships or alliances. In the case of privatisation investments in public utilities, such as electricity
generation and water and sewage systems, some FDI has been involved, in addition to build-operate-and-transfer contracts and management contracts.

Finally, we might make note of an issue that is the counterpart to our focus on international expansion. This is the issue of divestment, which may take place either as a result of the poor performance of a foreign affiliate, or due to a strategic reorganisation within the MNE.²⁹² A study by Benito (1997) on a sample of 153 FDIs made by Norwegian firms between 1982 and 1992 confirmed the empirical significance of divestments, as more than half of the sample investments were divested within a decade. Benito also found that greenfield affiliates were less likely to be divested than those acquired via M&As, although the motivations for the divestments were not known. Another study by Mata and Portugal (2000) using a comprehensive sample of foreign (fully or partially owned) affiliates in Portugal, distinguished between a sale (capital divestment) and a closure (liquidation) of the foreign affiliate. This study found that greenfield affiliates were less likely to be sold than acquisitions, although they had a greater hazard of being liquidated.

In summary, if successful, an initial act of foreign production creates its own momentum, and is likely to lead to sequential investment in the form of either (or both) vertical integration or (and) horizontal diversification, as well as to the encouragement of related and supportive activities. A possible exception to this general statement is where one firm acquires another to gain certain strategic assets, but sheds others which add little to its existing competitive advantages. As we have seen, this kind of FDI – along with the conclusion of cross-border strategic alliances – is becoming a more important component of MNE activity, particularly within the Triad, and by some developing countries (UNCTAD, 2006). The recent growth of all forms of efficiency- and strategic asset-seeking FDI by well-established MNEs wishing to complement their assets or governance advantages with those of other (foreign) firms, suggests that some of the earlier explanations of the ways in which firms internalise the markets for their intermediate products may be less relevant than they once were. In addition to intra-Triad M&As, examples of asset-augmenting FDI in this phase include joint ventures or acquisitions by firms from countries such as Taiwan and South Korea, and most recently from China and India, to gain existing brand names and access to distribution channels in Europe and the US (van Hoesel, 1999; Makino et al., 2002). Indeed, much of the asset-seeking investment has been orientated towards acquiring knowledge-intensive or institutional assets or new markets, and such investment will be considered as part of Phase 5 internationalisation in the following subsection.

7.4.8 Phase 5: The Integrated Network Multinational

In their foreign market entry and expansion strategies, most MNEs coordinate, at least to some extent, their foreign and domestic operations. If they did not, there would be no point in their making the FDI in the first place. Chapters 8 and 9 will examine in more detail some of the cross-border institutional and organisational mechanisms which an MNE might adopt. For the moment, we would observe that it is possible to conceive of a continuum of control over foreign production which ranges from zero to complete; that this control may be exercised for a variety of reasons; and that the degree of control and coordination exercised will vary over time (for example, with learning and experience) according to industry-, firm- and country-specific factors.
In its discussion of efficiency-seeking or rationalised investment, Chapter 3 was mainly concerned with the kinds of value-added activities in which MNEs engage. But well before such foreign production takes place, there are certain decisions which affect the prosperity of resource- or market-seeking affiliates, which are likely to be centrally controlled and coordinated by the parent company. Examples include those related to R&D activities and capital expenditure, accounting procedures, institution development and market servicing. The rationalisation of international production is but one step in the process towards the regional or global integration of intra-firm production and transactions.

Phase 5 in the evolution of an MNE investment envisages a distribution of value-added activities between the home and foreign countries rather similar to that described between two foreign countries in Figure 7.1 (Case 4). In this phase, the parent and the foreign affiliate produce different products, each of which is sold in world or regional markets, and, in practice, frequently traded within the MNE. Part of the R&D for each product is also undertaken at the location of the subsequent stages of production. This phase is then different from the preceding four, each of which was concerned with the geographical allocation of the stages of production of a particular product along the value chain.293

Clearly, if and when this fifth phase in the evolution of an MNE (illustrated in Figure 7.2) is reached, will depend on a variety of factors. These include the range and types of products produced, the extent to which product or process specialisation may lead to economies of scale or scope, the opportunities for such economies offered by countries in which the investment is currently being made, or contemplated, the ease with which intermediate or final products can be traded across national boundaries, the intra-firm transaction costs involved, and the attitude and strategy of the MNE towards the management of its foreign value-added activities. Such intra-firm product specialisation and integration of markets is likely to be accompanied by a sharp increase in the trade between the various production units of the MNE. Chapter 14 will show that the kinds of activities associated with intra-firm trade have a number of contextually related characteristics. Among the activity-specific characteristics are the opportunities to exploit plant economies of scale, and the importance of cross-border incentive structures and communication facilities. The most important country characteristic is that there are few or no barriers to trade. Only MNEs that take a global or regional view of their foreign activities, and which believe that they have to integrate their domestic and foreign operations, are likely to practise a strategy of cross-border specialisation.

As indicated earlier, an important component of Phase 5 activity is strategic asset-seeking investment, which may take the form of both joint ventures and M&As. We can identify two major strands of this type of FDI. The first is apparent in the figures on global M&A activity, particularly in some of the mega mergers of recent years such as Time Warner-AOL, Daimler-Chrysler and HP-Compaq (see Chapter 2 for some evidence of recent trends). In such cases, which often combine efficiency- and strategic asset-seeking motivations, the acquiring firm desires to acquire control of an intact package of knowledge, capabilities and productive assets that the target firm has to offer.

The second strand of asset-seeking investment is specifically related to the sourcing of knowledge assets abroad. Research a propos both the leading manufacturing and business services firms reveals that the access to foreign-based technological and managerial competences is becoming an increasingly important determinant of a firm’s global com-
petitiveness (Dunning, 1996; Dunning and Lundan, 1998; Dunning and McKaig-Berliner, 2002). Such investment is often prompted by the fact that many knowledge assets are geographically confined, and can only be accessed by having a presence in the area. This is certainly the case in industries such as semiconductors, clustered around Silicon Valley, and biotechnology, clustered around major public research centres in Boston, New York (New Jersey), San Diego and Cambridge, UK. Research has revealed, for example, that US biotechnology firms with higher innovative output are more likely to receive foreign equity participation, while in the US semiconductor industry, foreign firms are more likely to cite local patents than are domestic firms. This fact would seem to suggest that the reason for the foreign firms’ presence is to learn about (and to contribute to) the local cluster (Almeida, 1996; Shan and Song, 1997; Kuemmerle, 1999a).

If knowledge-seeking investment occurs via acquisitions, acquiring firms have to achieve integration within the firm, while in the case of joint ventures and strategic alliances, integration is accomplished largely at an inter-firm level. Apart from the differences in the financing of the capital expenditure between the equity and non-equity forms of ventures, the relative efficiency of the incentive structures within the firm, as compared to those between contractual firms, is likely to be the critical determinant of the long-term performance of these ventures. The general impression is that M&As seldom increase shareholder value in the long run, and often contribute to ongoing managerial problems within the firm. Indeed, evidence from recent meta studies on post-acquisition performance suggests that while the target firm’s shareholders typically experience gains in the short run, the acquirer firm’s shareholders end up no better or worse off than before the merger (Agrawal and Jaffe, 2000; Bruner, 2002; King et al., 2004). While there is no reason to expect that one form of coordination is inherently better than another, non-equity modes can be an alternative means for the MNE to reach its objectives, provided that the inter-firm incentives can be set correctly. We shall return to this issue in Chapter 9.

There are comparatively few MNEs that practise a globally integrated product and/or process strategy of a Phase 5 kind (Rugman and Verbeke, 2004b); and hardly any of them have developed a genuine reciprocal resource and organisational relationship between their various production units (Hedlund, 1986; Bartlett and Ghoshal, 1989; Doz et al., 2001; Birkinshaw et al., 2003). The handful that have evolved to this phase have included some of the largest motor vehicle, consumer electronics, computer and hotel companies. Yet even these have not been prepared to allow the management of all their affiliates to participate in decisions about the configuration of all their value-added activities, notably R&D. Indeed, in recent years there has been some reversal away from the globally integrated matrix form by such firms as ABB and Procter & Gamble, due, so it would appear, to its inherent complexity (Westney, 2003).

Furthermore, product strategies are likely to be based on an intra- rather than interregional allocation of resources. For example, according to the data provided by Rugman and Verbeke (2004b), only nine out of the 365 firms with sufficient data from the Fortune Global 500 are global in the sense of having 20% or more of sales in each part of the Triad, while not having more than 50% in any one region, and as many as 320 firms have more than half of their sales in the home region. There may be some specialisation of activity between countries in the Triad, but there may also be such specialisation between countries within the Triad, for example, within the EU. The question of whether the regionalisation of production by MNEs is a step towards globalisation, or is a substitute
for it in the presence, or likelihood, of intra-regional trade and investment barriers, is a subject still under investigation.

However, as the following chapter will show, the organisation of MNE activity is currently undergoing considerable change as firms seek to gain the benefits of global integration, while meeting the demands of their local customers, suppliers and host government. Moreover, it is not just the activities of the fully owned affiliates of MNEs that are being restructured, but all cross-border transactional relationships, including exporting and all forms of cooperative alliances. International joint ventures and non-equity alliances are an integral part of the strategy of efficiency- and strategic asset-seeking MNEs. These changes are affecting both the route towards, and the form taken by, the process of internationalisation. Contemporary thinking suggests that MNEs are best regarded as the nerve centres of systems of intra- and inter-firm relationships, bound together by a common entrepreneurial vision, and able to draw upon a fund of organisational and technological expertise in each of the markets in which they operate.295 However, the network relationships of the modern MNE are more multifaceted and varied than in the past. Partly this is because recent economic and political events have demanded a reappraisal of the institutions of cross-border governance, and partly because the costs and benefits of inter- and intra-firm relationships differ so much according to the activities and the parties involved in the exchange.

In Phase 4, we asserted that some foreign affiliates had acquired a special status within the MNE of which they were part by receiving a ‘product mandate’, and by virtue of having become insiders in the host market. In Phase 5 we believe that such affiliates are more likely to achieve strategic importance as specialised ‘centres of excellence’. This means that the affiliate has global responsibility for developing and advancing excellence in one area of competence within the firm (Holm and Pedersen, 2000). However, transferring and utilising the localised knowledge and institutions accessed or created by the affiliate to the rest of the firm is strongly dependent on the ability of the MNE to set appropriate incentives to achieve integration.

A novel solution to the question of knowledge integration is offered by the meta-national firm (Doz et al., 2001). MNEs, such as Nokia (Finland), Shiseido (Japan) and Acer (Taiwan), are said to benefit from being born in the wrong place, and needing to break free of geography. While established competitors might try to redesign their existing organisations by cultivating centres of excellence, and by investing heavily in better information systems and in knowledge management, metanational firms are more likely to focus on identifying and accessing new technologies, turning them into innovative products, and finally scaling up the innovations globally. Their key advantage is an unconventional process of prospecting for knowledge from everywhere in the firm’s operating environment. For example, Doz et al. describe how Acer modelled its organisational structure after McDonald’s, by dividing itself into 40 independent local companies that assemble computers according to local needs. By labelling some subsystems as perishable, Acer cut in half its inventory of these rapidly changing items.

An idea similar to that of the metanational is that of the so-called ‘dragon multinationals’, which use their network connections for leverage (Mathews, 2002b). These are large MNEs mostly from East Asia including, again, Acer (Taiwan) and Li & Fung (Hong Kong), but also Ispat (India) and Cemex (Mexico). These latecomer firms have managed to overcome their peripheral locations and lack of specific capabilities by deftly
identifying, accessing and combining resources and capabilities globally and leveraging them within their operational ambits. What is distinctive about the dragon multinationals is their accelerated rate of internationalisation, and although they are generally quite large, in this sense they are also akin to the ‘born globals’ discussed earlier. These are firms that are very global and have grown to a substantial size in spite of a limited home market, and severely restricted domestic resources and capabilities. They have accomplished this growth by maximising the utility of their network relationships, and by not expanding the core of the firm uncontrollably.

Finally, we might mention the case of Bharti Enterprises, which is notable for having grown to a large business empire by outsourcing all of its core operations to foreign MNEs. Such relationships include, for example, a 10% equity participation by Vodafone in the mobile communications market, contracts with Ericsson and IBM to operate the network infrastructure, and a joint venture with Wal-Mart to enter the fragmented retail sector. However, the case of the Bharti group is not an example of internationalisation as such, since it is primarily concentrated on the Indian market. Rather, it is an example of ‘reverse’ outsourcing, which effectively exploits the competences of integrated foreign MNEs looking to expand their activities in the Indian market.

7.5 CONCLUSIONS

After discussing the concept of the value-added chain and its relevance for our understanding of the foreign activities of MNEs, this chapter has traced some of the main entry strategies into foreign value-added activities which might be pursued by firms that previously engaged only in domestic production. It has also attempted to describe the phases of internationalisation through which a firm may progress, and how these are dependent on the initial motivations for FDI, as well as the range of feasible entry strategies available to the firm.

We would emphasise, once again, that there is nothing automatic or inevitable about the movement of a firm’s value-added activities through the phases described. Nor are these the only foreign entry and growth strategies which a firm may pursue. The growing complexity of MNE operations and new organisational forms, for example ‘born global’ firms, asset-seeking M&As, and most recently of all private equity managed MNEs, has resulted in notable ‘phase jumping’ between Phases 1 and 4. Indeed, we have suggested that much of the received literature on the internationalisation process is less relevant to much of the contemporary foreign production by intra-Triad MNEs than it is to explaining the first-time market- and resource-seeking FDI in developing countries and in Central and Eastern Europe; or that undertaken by the burgeoning small and medium-sized MNEs.

Clearly, too, the modality of a firm’s global involvement will be related to its organisational structure, information systems and governance procedures. To understand the pattern of incremental and sequential investment by firms, as well as that of the multitude of cooperative alliances being forged by them, new models or conceptual frameworks are required – perhaps on the lines of a network institutional approach earlier described. It should also be emphasised that the form of entry by firms into new foreign markets, or that of the expansion or restructuring of existing FDI, will be determined by
the industry- and country-specific characteristics, and by the strategic response of firms to the OLI configurations with which they are faced.

Some of the changes in the internationalisation processes of firms are likely to reflect exogenous events. Most noticeably, over the past two decades, entry and expansion choice has widened as a result of falling communication and transportation costs, the liberalisation of several cross-border markets, and the reconfiguration and/or upgrading of national and supranational institutions. These have opened up new opportunities for MNE activity, particularly in Central and Eastern Europe, and in China and India. Furthermore, growing regional integration within each part of the Triad has created new opportunities for established integrated MNEs. By contrast, some of the change is endogenous to the firms themselves. The growing appreciation of the importance of knowledge, capabilities and institutional efficiency as the core competences of firms has led to more strategic asset-seeking investment, which up to now has largely taken the form of M&As. At the same time, the focus on knowledge and learning has greatly widened corporate networks by increasing the number and variety of cooperative relationships.

We have also sought to demonstrate in this chapter that with a wide range of international activities and possible modes of coordination, the importance of the institutions of governance within the firm (Oi), and the relational capabilities derived from them, has become paramount. Such capabilities underpin the ability of integrated MNEs to coordinate their activities in Phases 4 and 5, but they are also needed to facilitate the growth of firms in Phase 1 that rely on extensive contractual outsourcing to gain a competitive advantage. At the level of home and host countries, governments also play an important role in affecting the relative costs and benefits of the different modalities of servicing a market. In particular, we have highlighted the role of infrastructure and institutional development in encouraging firms to move from purely marketing and distribution activities to foreign production, and also to expanding their foreign production by increasing local sourcing, and gaining an insider status in the local market. There is some evidence to suggest that such fully fledged affiliates contribute more to the host economy, as well as representing a unique resource and listening post for the parent firm. The following two chapters will explore in more detail the changes in the internal organisation of MNEs, and the growth of cooperative relationships.
8. The organisation of MNE activity: the internal network

8.1 INTRODUCTION

It has long been recognised that the way in which a firm organises and coordinates its value-added activities will not only influence the efficiency with which its competitive or O-specific advantages are utilised, but may also constitute a valued competence in its own right. It was Alfred Chandler (1962, 1977, 1990) who first emphasised the importance of organisational innovation as a factor influencing the emergence and growth of the large US enterprise in the latter part of the 19th century; and particularly in those cases where firms were led to shift their transactions of intermediate products (at dependent stages of the value-added chain) from external markets to managed hierarchies.298

Chandler further suggested that such organisational change, which, he accepted, was initially triggered by a series of technological innovations and the emergence of managerial capitalism earlier in the 19th century, would necessitate a fundamental restructuring of the locus and geography of decision making. As the size of firms and the roundaboutness of production increased, so did the number and complexity of intra-firm transactions. In consequence, it became important to more clearly delineate and define the boundaries of managerial responsibility and governance, and the lines of communication between the headquarters of a company, its regional and branch offices, and its operating units. Likewise, a replacement of external markets by administrative fiat meant that it was necessary to construct more formalised incentive structures, control and enforcement mechanisms, communication channels and administrative procedures to guide internal decision takers.

In examining the implications of these changes for the internal governance of firms, Chandler argued that the unitary (U-form) or functional structure of organisation – in which decision-taking responsibility was linked to stages in the value-added chain or the transactions associated with these stages – became less suitable as a firm became more diversified along its value-added chains or in its input or output markets. He suggested that its interests were likely to be better served by a multidivisional (M-form) structure, which consisted of a hierarchical division of labour based on the products produced or the geographical areas served, rather than on the functions performed by a firm.

We have already asserted in Chapter 1 that the distinctive feature of an MNE is that it is a geographically diversified multi-activity firm. We have further suggested – and will elaborate on this point in this chapter – that the entry of a firm into a foreign arena is likely to impose additional, and often quite different, demands on its organisational structure and the distribution of its decision-making responsibilities. These consequences are likely to be most marked in the case of globally integrated MNEs where traditional
organisational norms based on vertical and unidimensional hierarchical relationships are proving increasingly ineffective.

With these introductory remarks in mind, this chapter considers alternative structures of the internal governance of MNEs, and how these have been affected by globalisation. It also suggests that the ways in which an MNE coordinates its domestic and foreign value-added activities (from the purchasing of factor services and intermediate products, through the various stages of the value chain), and the determination of which activities to engage in, and where to locate them, crucially affect not only its global marketing and production strategies, but also how these impact on the home and host economies in which it operates.

In this chapter, we shall address three main organisational questions in the light of the institutional framework introduced in Chapter 5.299 First, we shall describe and evaluate some of the organisational structures that MNEs adopt, and how these have changed as they have become a more important force in the global economy. Second, we shall examine some patterns of the locus of decision making within MNEs, and in particular, the extent to which decisions are taken at the headquarters of MNEs or are shared between different parts of the organisation. We shall pay particular attention to the increasing independence of some types of MNE affiliates, and the development of so-called ‘centres of excellence’. Third, we shall offer some explanations as to why MNEs choose to organise their internal markets and decision-making processes in the ways in which they do. In doing so, we shall pay especial attention to the importance of country-, industry- and firm-specific characteristics influencing the nature, extent and location of MNE activity, and the strategies of MNEs towards international production.

8.2 THE ORGANISATIONAL FUNCTION: SOME GENERAL OBSERVATIONS

8.2.1 The Need for an Organisational Structure

The way in which a firm organises the deployment of its competitive or O-specific advantages, and the structure of its organisation required to fulfil this goal, given the global political and economic environment in which it operates, we believe will depend primarily upon six main factors:

1. the ownership structure and legal status of the enterprise;
2. its age and size;
3. the number and character of the value-added activities undertaken and the transactions related to these activities;
4. the extent and form of its relationship with other firms (for example, competitors, suppliers and customers) and non-market actors (for example, regulators, NGOs);
5. the geographical spread of its activities; and
6. its international product and/or marketing strategies.

Consider, for example, two extreme types of firms. First, take the case of a small privately owned firm supplying a single product from one location to a perfect competitive
market. Here the organisational function is confined to the minimum. Chapter 3 has already shown that in such circumstances the firm has little room for strategic manoeuvrability. It undertakes few internal transactions, while the consequences of all its decisions are perfectly known.

Now, consider some possible ramifications of a growth in the output of this firm. This may be accomplished in a variety of ways. For example, the firm might simply increase the output of its existing product. As a result, the number of its internal and external transactions will increase and these will place more demands on its organisation and its institutional capabilities. These may necessitate some delegation and/or specialisation of decision-making responsibilities by function, for example, purchasing, production, finance, personnel management, marketing and so on. Where the expansion takes the form of an acquisition, or partial acquisition, of another company, the implications for the organisational division of labour are more immediately apparent.

At the same time, or alternatively, a firm may seek to widen its range of value-added activities. This it can do by vertical integration or horizontal diversification. The object in each case is usually to increase sales or reduce production and/or transaction costs by capturing the economies of common governance. However, this in itself may require new or modified incentive structures and organisational forms. Third, a firm may choose to expand its horizons by way of diversifying its markets and/or the location of its production. This may also require a reappraisal of its organisational structure. In each of these examples, a firm’s choice under conditions of environmental uncertainty is likely to widen its strategic options, and enlarge its organisational function to include that of the management of uncertainty per se.

Now consider a firm that produces a large range of products, each of which requires different kinds of factor inputs and intermediate products, and which sells its output to national (or, indeed, regional or subnational) markets. In addition to owning many foreign affiliates, it engages in many cross-border strategic alliances. Assume, too, that the firm competes in oligopolistic and high-risk markets, and that its O-specific advantages rest in its ability to innovate and to manage a diverse group of assets located in several countries. Let us finally assume that the firm has a complex ownership structure. Its shares are quoted on all the leading stock exchanges. In the case of such a firm, the institutional and other costs of devising and maintaining an efficient organisational structure and mechanism for acquiring, deploying and monitoring factor services, intermediate inputs and markets are likely to be considerable. On the other hand, the costs of using other (for example, external) routes of organisation may well be even greater.

Most multinational hierarchies fall somewhere between these extreme prototypes, although the fact that, unlike uninational firms, they produce in different countries is likely to introduce a new organisational dimension, *inter alia*, because of differences in cross-border cultures, political and economic systems, language and ideologies, and institutional structures. Moreover, the organisation of particular functions may vary according to both the nature and purpose of FDI, and the countries in which it is made. Thus, technology-intensive producer goods firms may have different organisational needs from resource-intensive consumer goods firms. Similarly, foreign subsidiaries producing in developing countries may need to be organised differently from firms producing exactly the same products in developed countries. The structure of intra-corporate relationships in a globally *integrated* MNE pursuing a geocentric product sourcing and marketing
strategy is likely to be very different from that in a multidomestic MNE practising an ‘every tub on its own bottom’ strategy. Finally, the organisational needs may change over time, with changes in the nature of their activity, in technology and in the environment.

8.2.2 Strategic Responses to Organisational Needs

Organisational structure both influences and is influenced by corporate strategy. The network of a firm’s decision-making apparatus is likely to reflect the values and entrepreneurial vision of its chief executive and its board of directors, as well as a complex set of historical, cultural and ideological factors that make up its competitive strengths and weaknesses. Finally, the environmental, ideological and institutional framework facing a firm may vary from country to country. To this extent, organisational structures and intra-firm relationships are, in part at least, likely to be country specific.

Let us now give two brief examples of the way in which firms faced with the same parameters described in the previous subsection might react differently. The first example is risk and the second technology acquisition.

Risk and MNE strategy

Risk may be classified in various ways. In a classic article, Ghoshal (1987) has distinguished between four types of risks. The first he defines as macroeconomic risks. These are risks which are normally beyond the ability of an individual firm to influence. They include such events as wars and national disasters as well as exogenous shifts in market forces (changes in wage rates, commodity prices, exchange rates). The second are policy risks. These risks arise because of the uncertainty about the future actions of home or host governments. They include possible changes in taxation, controls on inward or outward direct investment, performance requirements and anti-trust legislation. The third type of risks are competitive risks. These stem from uncertainties about competitors’ behaviour, including, for example, their reaction to a change in one’s own global strategy. The fourth are resource risks. These embrace the uncertainties surrounding the acquisition of the resource and intermediate inputs, as and when required and on the terms required. To these four kinds of risks, others might be added, including those associated with selling intermediate or final products. These include not only the uncertainty of demand, but also the behaviour of buyers who, in some sense or other, act as an ‘agent’ of the selling firm, or by their actions are able to affect its behaviour.

Some risks are common to all firms; others are specific to those engaged in foreign-based value-adding activities; and a few are uniquely firm specific. Perhaps the most obvious kind of risk associated with FDI is the uncertainty that surrounds the future value of foreign currencies or the domestic currency in international markets. Others may be of lesser or greater importance. They include political risks, resource risks and institutional risks (for example, with respect to attitudes to work and authority, honouring contracts, incentive structures and so on). On the other hand, the flexibility of the geographically diversified MNE in dealing with environmental volatility may give it an advantage over competitors that engage in production in only a few countries (Kogut, 1985). The visibility and prominence of large MNEs also makes them likely targets for NGOs, which makes good governance (for example, transparency and accountability) an essential aspect of dealing with potential risks to firm reputation.
The literature suggests that a firm may respond to the presence of risk in a variety of ways, each of which may require modifications to its organisational structure. First, it may seek to avoid risk simply by reducing its exposure to risk-bearing activities. At first sight, this might seem to simplify the firm’s organisational needs, but this would not be so wherever the activities previously undertaken by other firms now have to be undertaken by the firm itself. Second, a firm may insure itself against some risk. Again, the effect is likely to be ambiguous. On the one hand, insurance reduces the need for self-protecting measures. On the other hand, because the firm has externalised its risk-bearing function, it may engage in more risky activities than it otherwise would have done (also known as ‘moral hazard’). Third, a firm may attempt to lessen its risks by a variety of hedging devices. An obvious example is in the foreign exchange market where a firm hedges forward to protect itself against a fall (or rise) in the currency in which it is transacting goods. Both insurance and hedging entail costs, and these costs represent the price that a firm pays for reducing the uncertainty (variability) of its returns.

The effect of risk on the internationalisation of a firm’s value-added activities depends, first and foremost, on the types of risks being considered. In addition, it depends on the attitude of the main decision makers of the firm to risk bearing. Chapter 4 has shown that the risks associated with the failure of cross-border markets to take account of economies of common governance of separate but related transactions may act as an inducement to FDI. On the other hand, FDI may bring with it its own risks (for example, the possibility of the expropriation of the assets committed and/or the normal commercial risks of an unprofitable investment). An increase in political or institutional risk which might reduce the value of a firm’s foreign assets may then lead firms to prefer to share financial risks by engaging in a joint venture or concluding some other form of cooperative alliance. This point was further discussed in Chapter 7 in considering the benefits of alternative modes of entry into foreign markets. From the viewpoint of transaction costs, the same reasons that make the market alternative expensive might also make internalisation more expensive, but not necessarily in the same measure. We shall return to the costs and benefits of various types of cooperative ventures in the following chapter.

**Technology creation and acquisition**

Chapter 4 has suggested that the ability of firms to create or acquire technological assets at an economic price is one of the key competitive advantages of MNEs. At the same time, the way in which an MNE organises the generation or purchase of its technology can be a crucial ingredient in its success. For example, being self-sufficient in innovatory capacity will normally require not only the establishment of an R&D department, but also the integration of that department with the rest of the firm. On the other hand, an independent technology-purchasing capability may reduce the transaction costs of dealing with outside suppliers of technology, for example, in respect of price and quality of output. Although possibly a less risky strategy, the conclusion of collaborative alliances with other firms to finance joint R&D programmes or manufacture a wider range of products may require further internal restructuring. Buying technology on the open market or by contractual arrangement may be a third option which makes its own organisational demands.

In general, the more numerous and complex the technologies required to produce a particular product, and the more products (or production processes) supplied by a firm, the
more complex its organisational structure is likely to be. The development and acquisition of knowledge-based assets by equity and non-equity means has occupied a large part of the IB literature over the past decade. A related issue occupying scholars in the management literature is knowledge management, by which is meant the acquisition and/or generation and dissemination of new knowledge within the organisation, whether such knowledge is of a technical or marketing kind. The desire by the MNE to cultivate some of its subsidiaries into ‘centres of excellence’ is an example to which we shall return later in this chapter.

8.3 ORGANISATIONAL STRUCTURES OF MNEs

8.3.1 Some General Points

We first turn to consider some organisational structures of MNEs identified in the literature. In practice, no MNE is likely to fit exactly into one or other of these typologies. Each enterprise is, to some extent, unique and is likely to embrace an amalgam of different organisational structures. Moreover, the optimal, or perceived optimal, organisational structure of any particular MNE may change over time as, for example, it widens or reduces its product range or increases its degree of multinationality. Indeed, in their description of formal organisational structures, most IB textbooks tend to look at these as they evolve from the point at which a firm first engages in foreign production through to when it operates an integrated network of subsidiaries in a large number of countries. Westney and Zaheer (2001), for example, identify six archetypes of MNE organisation; international division structure, geographical area structure, global product organisation and global functional organisation, matrix organisation and a front-end/back-end organisation. Figure 8.1 summarises four of these organisational structures. For further details, the reader is invited to consult specialist books on the organisation of IB, such as Ghoshal and Westney (1993 [2005]) and Birkinshaw et al. (2003).

In the years since Bartlett and Ghoshal (1989) introduced the transnational solution, interest and belief in the ability of organisational structure or restructuring to solve the problems of international responsiveness and coordination has declined. Franko (2003b) attributes this to MNEs becoming more outer-orientated, on account of their being forced to respond directly to pressures from financial markets (influenced by institutional investors such as large pension funds) and product markets (influenced by global customers). At the same time, the point at which geography is likely to enter as a variable into organisation design, has moved further down the list of priorities, as MNEs increasingly favour cross-border organisations based on related activities (Westney, 2003). What is of central importance, however, is how integration between and within the internal and external networks of the MNE is achieved; and how effectively the firm is able to gather and disseminate knowledge. While most contemporary management research, and indeed our own chapter division in this volume, separates the issues of integration within the firm, and the relationship between the firm and its external (alliance) partners, the MNE must integrate these two systems if it is to derive full value from its network.

We begin our analysis by sketching some possible ways in which an MNE’s organisational structure might change in response to the increasing complexity of product markets,
and the more pressing demands for integration. We argued in the previous chapter that entry and expansion in foreign markets can take a variety of forms, and many firms do not proceed in a stepwise manner. Firms from small open economies such as Sweden, the Netherlands or Singapore tend to internationalise at an earlier stage, and to a greater extent, than firms that sell their products in a large home market, such as the US and China. Firms in some technological niches can be ‘born global’, and internationalise their sales in a matter of a few years, while those in many other low- or medium-technology industries may still be grappling with the more basic issues related to the international dispersion and coordination of their activities years later.

Firms in knowledge-intensive industries have experienced a substantial transformation as they have begun to envisage the firm as a learning network, and individual affiliates as contributing nodes in that network. An appreciation of organisational epistemology, or knowing how you know what you know, is a critical step in understanding the value of both knowledge and the appropriate incentive structures as firm-specific resources. Indeed, much of the recent academic literature dealing with the structural transformation of the MNE has been focused on the challenges facing firms in high-technology industries (for example, computers, electronics, pharmaceuticals), as they seek to gather dispersed knowledge, and to make it available within the firm.

For globally integrated MNEs, the emergence of global customers – customers who are aware of global price and quality differentials, and demand uniform conditions in all markets (and who may, themselves, be globally integrated MNEs) – has led to a diminution of the role of the foreign affiliate as an integrator. If the MNE cannot use its affiliates to tailor the product range to suit local needs, simple price discrimination becomes quite difficult. The emergence of global customers and cross-border transparency in pricing has lessened the market-related influence of the affiliates, since more product-related decisions have to be made globally. At the same time, the role of affiliates in the knowledge generation within the firm has increased their resource-related importance within the MNE (Birkinshaw, 2001).

8.3.2 Organisational Governance of Domestic Firms

First let us consider the organisational structure of a firm prior to its engaging in FDI. Dependent on the variables identified in Figure 8.1, the division of responsibilities is likely to take a ‘U’ or ‘M’-form. We have already suggested that the U (or unitary) organisational structure is generally likely to be suitable for a small, single-activity firm in which the number of decisions requiring coordination is relatively small, and can be adequately handled by an individual or small team of individuals. However, some large, tightly knit, family-owned firms are also likely to opt for this organisational hierarchy in which the locus of decision making is likely to be highly centralised.

The M- (or multidivisional) form allows for some specialisation of responsibilities. In a firm that produces and sells only in its domestic market, such specialisation is likely to be either by ‘product’ (or activity) or by ‘function’ (or area) of decision making. It also formalises a vertical system of intra-firm communication and decision making. If the former, then each product division is likely to have a similar organisational structure, with each product manager being responsible to the group product manager or the chief
executive officer (CEO). Within each product group, those in charge of the individual functions will report to the group product manager. By contrast, a functional division of responsibility will normally confer a separate decision-taking authority over that function across all activities, with the board of directors acting as the main planning and coordinating entity.

Even in the case of a purely domestic firm, there is no one ‘right’ organisational form. Nor, once identified, is the ‘right’ organisational structure likely to be a permanent one. However, as a general rule, and ceteris paribus, the more numerous and diversified the end products, the more likely it is that the firm’s organisational form will be product based. By contrast, the fewer the end products and the more vertically integrated a firm is along its value-added chain, the more likely it is to be organised on a functional basis. Again, the organisation of most domestic firms has elements of both structures, but with one or the other tending to be the dominant form.
8.3.3 The Impact of Internationalisation on Organisational Governance

Once a firm engages in foreign transactions it is faced with new organisational challenges. These may be met in a variety of ways. Initially, the most likely response is for the firm to establish a new international division responsible for its foreign activities (Case A in Figure 8.1). The *raison d’être* for such a division is that the firm perceives that, because of differences between the domestic and foreign political and economic environments and the added intra-firm communication costs, a new kind of arrangement is needed to organise and govern the value-added activities conducted abroad. However, where these activities become extensive and/or where a multiproduct firm begins producing outside its national boundaries, then it is likely that each of the product divisions will be given
responsibility for incorporating the foreign dimension into their sphere of control. This is particularly likely where firms produce a range of technically sophisticated products, and where it is essential that managers be fully familiar with the nature and performance of the goods and services for which they are responsible. Alternatively, a firm that is already governed on functional lines might take on board the international dimension for each function.

MNEs that organised their foreign activities primarily by way of an international division (or divisions) have included IBM, Xerox and DuPont. MNEs that organise some or all of their activities by global product divisions, each of which embraces both domestic and non-domestic business, are numerous, and include firms such as Danone and Unilever (Case B in Figure 8.1). MNEs that tend to prefer a more functionally orientated division of organisational responsibilities – these tend to be the exception rather than the rule – and organise themselves by global functional divisions include British Airways and ExxonMobil, whose operations cover different parts of the value chain within one industry.

In deciding the appropriate organisational mode, all MNEs will need to strike a balance between adapting their products, production methods, wage policies, marketing techniques and sourcing requirements to the needs, aspirations and capabilities of foreign suppliers, customers, workers and governments. They will also have to maintain institutional and strategic flexibility while exploiting the maximum benefits from the economies of scale, scope and geographical diversification. As one pair of scholars have put it, the multinational mission involves balancing ‘local demands’ and ‘global vision’ (Prahalad and Doz, 1987). Indeed, their integration–responsiveness framework has been an established way to approach the challenges of global integration for nearly two decades, although recent developments suggest that, as more product-related decisions are having to be made globally, the product-related role of affiliates has been reduced while their resource-related importance within the MNE has increased (Birkinshaw, 2001).

Another way of viewing the choice of organisational structure is to identify the nature of a firm’s core competences, and the motives for its foreign production, and relate these to the characteristics of the environments in which it produces. For example, where a firm contracts to buy a standard raw material, it may be appropriate for its central purchasing department to buy that material for all its production outlets so that it can obtain the maximum quantity discounts. By contrast, where a product needs to be specifically tailored to the needs of local customers and/or requires the purchase of specialised components or other inputs, it may be better for these to be sourced by the foreign affiliate. Similarly, while the monitoring and arbitraging interest or exchange rate movements might best be handled centrally, negotiations with organised labour may be more properly delegated to local personnel managers. The accounting and finance function is likely to be centrally coordinated, whereas discussions involving host governments (apart from those involving a substantial commitment of resources from the parent company) will tend to be conducted by the management of local affiliates.

As a firm becomes more internationally orientated, a third form of hierarchical organisational structure, based on the geography of a firm’s markets and products, becomes possible. The more countries to which a firm exports, or in which it produces, the more likely it is to set up regional divisions responsible for particular groups of countries. In some instances, this may be accompanied by the establishment of regional offices, which
assume some of the organisational responsibilities of the parent company, and particu-
larly those relating to region-specific issues (for example, monitoring and analysing the
legislation and policies of host country governments). MNEs that veer towards a geo-
graphically orientated organisational structure include Cadbury Schweppes and Nestlé;
and the majority of professional service, hotel and transportation companies.

An MNE may evolve other organisational governance forms as it becomes more inter-
nationalised. Vertically integrated resource-based firms (for example, in the metals indus-
tries) might divide responsibility according to stages along the value-added chain
(for example, mineral exploration, smelting and refining). In other cases, the division of
responsibility may reflect the characteristics of the major customers (for example, con-
sumer, industry, government). In practice, many MNEs employ a hybrid organisational
structure that has characteristics of different types of organisation. For example, fol-
lowing changes in its business strategy in 2004, Unilever reconfigured its global product
divisions into just two groups (foods, and home and personal care), at the same time the
operating companies that comprise each division were restructured on a geographical
(regional) basis.

The organisational structure adopted by an established MNE will then vary according
to the raison d’être for its investment, the number and location of its subsidiaries, the kinds
of end markets served, its experience of foreign operations, its product or process diver-
sity and its global management strategy. As a general rule, MNEs whose foreign sub-
sidiaries produce a limited range of products for sale to an idiosyncratic domestic market
are likely to be organised along geographical lines. By contrast, the greater the product
diversity of a firm and the more it pursues a rationalised investment strategy, the more it
is likely to be organised on product lines. This is the case for many of the larger motor
vehicle, engineering and telecommunications MNEs. As we shall see later, other variables
will also influence (limit) a firm’s choice of organisational structure, including its country
of origin and the countries in which it operates.

### 8.3.4 The Organisational Structure of Global Firms

As a firm increases its geographical scope and the value-added intensity of its foreign
involvement and produces in more countries, it may need to change its organisational
structure once more. Again, the choice will depend on the nature of the firm’s foreign
involvement, particularly on the extent to which it adopts an integrated strategy towards
its foreign and domestic activities. A single-product MNE which replicates its domestic
production in foreign countries and relies on essential inputs from its parent company’s
suppliers will have different organisational needs from one that supplies specialised prod-
ucts for each of the markets in which it produces. In turn, the multidomestic MNE will
have a different set of linkages with its parent company than one which is part of an inte-
grated strategy.

The more globalised a firm becomes in its main functions, the more it is likely that
adaptations will be required to any hierarchical organisational structure. Usually, this
involves two types of balancing act. The first, as already described, is that between achiev-
ing the benefits of cross-border integration and those of the responsiveness of individual
MNE affiliates to national capability and need. While this varies according to country-,
industry- and firm-specific circumstances, as we have seen, the trend has been towards a
greater sharing of global decision making among managers from different parts of the MNE’s organisation, as well as a more lateral exchange of information and ideas which act as building blocks to a professionally managed heterarchy (Hedlund, 1986; Hedlund and Kogut, 1993).

The second type of balancing act is that which tries to achieve the advantages, but not the disadvantages, of a geographical and product-based organisational structure, and the mixture of these structures at the primary level may itself take various forms. The greater the product diversification and the fewer the countries in which MNEs have production outlets, the more likely it is that the enterprise’s organisation will be product orientated. The more specialised the output and the greater the multinationality of the company, the more likely it is that the organisational structure will be geographically based. The greater the role played by foreign affiliates in the global success of an MNE, the more likely that intra-firm decision making will become lateral and multidimensional.

An examination of the largest and most diversified MNEs suggests a wide variety of organisational structures. Yet there are common features. All seem to group some activities according to the countries in which they are located with the appropriate managers in each affiliate interacting with their opposite numbers in the parent company. In other functions – particularly those involving complex technical matters – the allocation of decision making is still primarily structured on a product basis, and is more likely to be hierarchical than heterarchical. Again, the appropriate internal pattern of relationships will depend on the transaction costs of the organisation of the relationships. Will the common governance of product-related relationships be less or more than that of geographically orientated relationships? Will the idiosyncrasies of country-specific resource and demand configurations outweigh, or be outweighed by, the harmonisation of national policies fostered by regional customs unions? Will such regional integration lead to a strengthening of the power of the regional offices of MNEs – and if so, will this hasten the demise of MNE hierarchies? Some years ago, Kenichi Ohmae (1990), for example, suggested that some MNEs had reached a stage in their organisational development which might be called ‘global localisation’ and which, inter alia, required a reappraisal of the role of the head office as a decision-making unit. He pointed to the growing importance of the role of regional headquarters in Japanese MNEs, such as Nissan, Yamaha, Honda and Matsushita, arguing that ‘decomposing the corporate centre into several regional headquarters is becoming an essential part of almost every successful company’s transition to global competitor status’ (p. 88). The great extent to which large MNEs derive their sales from only one or two regions of the Triad (Rugman and Verbeke, 2004b) is a further indication of the importance of organisation on a regional basis, whether as a first- or second-order consideration.

In an attempt to meet some of the conflicting organisational demands identified in previous subsections, some MNEs have adopted a hybrid form of organisational structure known as the matrix structure (Case C in Figure 8.1). It is so-called because one organisational form (for example, based on products) is superimposed on another (for example, based on geography). Instead of a hierarchy wherein a product manager has control over various regional managers, both kinds of managers will be of equal status, and their responsibilities will overlap. In MNEs adopting matrix structures, lines of communication flow laterally across main dimensions; both product- and regional-specific expectations are utilised in solving problems and responding to opportunities. However, as many
analysts have pointed out (for example, Westney and Zaheer, 2001), dual-responsibility structures create their own problems. To resolve competing claims for scarce resources and to minimise the conflict of interests between different interest groups, they often require some kind of managerial ‘supremo’ whose task it is to reconcile interpersonal differences and maintain an efficient two-way communication between the home office and the lower units. Examples of MNEs which, at one time or another, have adopted matrix structures include Ciba-Geigy, Hewlett-Packard (HP) and ABB. Of these, Ciba-Geigy was split in 1996 into a chemical company (Ciba) and a pharmaceutical company (Novartis, after a merger with Sandoz), HP merged with Compaq in 2002, and ABB changed to a new front-end–back-end structure in 2001 (Westney, 2003).

If the MNE is to achieve operational flexibility, yet fully capture the benefits of geographical diversity and the economies of cross-border governance, its organisational mentality will need to shift from one based on a pyramid of vertical control relationships to one based on a network of cooperative and lateral relationships. Various authors have expressed this view in different ways. Ghoshal and Nohria (1989), for example, have argued that the organisational structure of an MNE should be suited to the resources available to its operating units, their stage of development and the stability (or otherwise) of the external environment in which they operate. In particular, they distinguished between hierarchical, federative, clan-like and integrative structures – the last of which, they argued, is the most appropriate for managing subsidiaries that face complex environments, and which have abundant local resources. Ghoshal and Nohria used the expression ‘differentiated fit’ to suggest that the character of a firm’s organisational structure must match that of the environment in which it operates. They asserted that, as the technological, economic and political content of the global environment has become more integrated and multifaceted, it has become necessary for MNEs to replace their archetypal organisational systems, based on functional geographical, product or matrix structures by others that better enable them to be both more responsive to national contingencies, and yet exploit the benefits of cross-border linkages.

On similar lines, Ghoshal and Bartlett (1990:603) have pleaded for a reconstruction of inter-organisational theory to encompass the MNE as ‘an internally differentiated interorganizational network of value activities’. Doz and Prahalad (1991) put the case for an organisational structure to be based on the combined consequences of multi-dimensionality and heterogeneity of MNE activity. They suggested that more emphasis should be given to the managers of individual subsidiaries as the basic unit of decision making. By contrast, Hedlund and Kogut (1993) preferred to emphasise the heterarchical attributes of the MNE, which, they suggest, best illustrate the structure of decision making in a company whose resources and competences are globally dispersed, yet whose organisational and institutional advantages increasingly rest on efficient horizontal communication – particularly at the functional and project levels.

Current thinking on the appropriate organisational structure of MNEs suggests that none of those so far identified can fully meet the needs of global corporations which engage in a substantial amount of intra-firm trade among industrialised and/or integrated economies. We argued in Chapter 7 that the predominant metaphor for the structure of the multinational is a network of relationships both inside the MNE and between the MNE and other organisations, where some relationships are equity based while others are not. The problem for the MNE is to find a structure that allows it to coordinate its range
of dispersed activities, in respect of both its internal and external networks (Nohria and Ghoshal, 1997).

It should also be noted that some aspects of MNE organisation reflect not just internal pressures for control and coordination, but also the changes that have taken place in the global economy. This is evident, for example, in the extent to which several large MNEs have chosen to establish regional headquarters in each part of the Triad. Particular locations, such as Hong Kong and Switzerland, have become hotspots for regional MNE headquarters due to the high quality of their business services, and in the latter case, the tax advantages and attractive lifestyles they can offer to the MNEs and their employees (Enright, 2000b; UNCTAD, 2002:57; Wanner et al., 2004). There is also some indication that many headquarters functions are becoming candidates for outsourcing, while others, such as finance, are increasingly on the move. In the latter case, the presence of the MNE in established financial centres such as London, New York and Frankfurt helps to enhance its global image, and enables the market to be better aware of any changes in the strategy or governance of the MNE (Birkinshaw et al., 2006).

A recent solution to the integration-responsiveness problem has been the so-called ‘front-end–back-end’ structure, which consists of a front-end or customer-facing part of the organisation, and a back-end or production-related part (Case D in Figure 8.1). Such a structure has been adopted by some ICT firms, such as Cisco Systems and IBM, and also by some former matrix organisations such as HP and ABB (Westney, 2003). The front end is designed to meet and anticipate the needs of global customers, and to provide holistic solutions to their problems, including products or services that might not currently be on offer. The back end is designed to adjust flexibly to the changing demands flowing from the front end. With increasing reliance on both component outsourcing and OEM production, the back end is as much a logistics and coordination centre as it is a site of production. As and when the front and back ends have become increasingly specialised, the question is raised of whether or not they should remain as part of the same organisation. In transaction cost terms, as long as the gains from a coordinated interdependence within the firm outweigh the costs of operating as two independent units, the two halves should stay connected, but there is no simple or definitive long-term solution concerning the appropriate boundaries of the MNE.

Another novel solution to the structural configuration problem is not to adopt traditional large firm structures in the first place. As we discussed in Chapter 7, a new generation of ‘born global’ firms have adopted flexible structures that can reach suppliers and customers around the world from their very inception (Madsen and Servais, 1997). However, most of the ‘born globals’ described in the literature so far are focused niche players, whose growth is likely to be limited by the size of the market, and whose coordination problems are therefore likely to be of a less demanding nature. Furthermore, much of the discussion is focused on firms who internationalise their exports rapidly, but who still remain in Phase 1 of their organisational evolution according to the classification introduced in the previous chapter.

Perhaps potentially more interesting than the ‘born globals’ are the metanationals (Doz et al., 2001) and dragon multinationals (Mathews, 2002b) identified in the literature. Metanational firms are said to have the benefit of being born in the wrong place and needing to break free of geography. While established competitors might try to redesign their existing organisations to enable global innovation by investing heavily in better
information systems and knowledge management, metanational firms start from different beginnings. The focus here is on identifying and accessing new technologies, turning them into innovative products and finally scaling the innovations globally. According to Doz et al. (2001), a study of metanational firms such as Nokia (Finland), Shiseido (Japan) and Acer (Taiwan) suggests the following principles:

1. global spread is not a distinctive advantage;  
2. there is no single lead market that each and all companies need to follow;  
3. valuable knowledge is scattered; and  
4. valuable knowledge is sophisticated and sticky.

The key to successful metanationals is, then, an unconventional process of prospecting for knowledge everywhere in the firm’s operating environment. For example, Acer modelled itself after McDonald’s by dividing itself into 40 independent local companies which assemble computers according to local needs. By labelling some subsystems as perishable, and thus treating them as if they were about to expire, Acer cut in half its inventory of these rapidly changing items.

A similar idea is expressed by Mathews (2002b) in his study of a group of dragon multinationals from East Asia, including Acer (Taiwan), Li & Fung (Hong Kong), Ispat (India) and Cemex (Mexico). These latecomer firms have managed to overcome their lack of O-specific advantages by identifying and combining resources globally, and leveraging them within the firm. The dragon multinationals, although still a small group, are firms that are highly internationalised, and have grown to a substantive size, in spite of a peripheral home market and severely restricted resources. They have accomplished this by maximising the utility of their cross-border network relationships, by accessing complementary assets to their own, and by concentrating their global activities on their core capabilities (Mathews, 2003). The metanationals and dragon multinationals thus represent a new generation of large MNEs that may be among the first ones not to have inherited their structure from the firms of the second industrial revolution.307

In a recent paper, Zander and Mathews (2004) suggest that the variety of these ‘hyper-modern’ MNEs might be characterised along two dimensions: the degree of ownership of resources (the I in our framework), and the degree of heterarchy or hierarchy in organisation design.308 The first quadrant (hierarchical and highly centralised, with internalised ownership of resources) contains consolidating MNEs such as Wal-Mart that are similar to the traditional MNE, but that excel in using their O advantages (and market power) to manage the value chain more efficiently. In the second quadrant (hierarchical and centralised, but relying on outsourcing), so-called pipeline MNEs such as Dell retain product design and marketing as their core activities, while employing an open innovation model, where partnerships with other firms complement the firm’s own development activities. The third quadrant (heterarchical and decentralised with internalised ownership of resources) is exemplified by cellular MNEs such as Acer, which is made up of a worldwide cluster of independent corporate entities. In the final quadrant (heterarchical with outsourcing), the instant global network MNEs include firms such as the global start-ups and ‘born global’ firms discussed in Chapter 7. Such firms are typically concentrated in high-technology niches, and use the existing networks of the established players to bring their products to the market.
8.3.5 Organisational Structures: A Résumé

To conclude, as a firm proceeds through various stages of its internationalisation, so its organisational structures may need to be modified. At the same time, technological advances and changes in the international economic and political environment have themselves led to a reappraisal of existing decision-making systems. Regional integration, in particular, has necessitated a more multidimensional approach to the creation and transfer of cross-border financial and production information as well as to resource usage. The associated escalation of intra- and intercorporate linkages has meant that a pyramidal multidivisional organisational structure, based on the principle of unity of command, may no longer be the best for exploiting the economies of common governance. An alternative system, which allows a better circulation of cross-border information and decision-taking flows between managers responsible for particular product and geographical areas, is needed.

In the 1970s and early 1980s, the matrix form of organisation was created to overcome some of these problems. It did so by increasing the responsibility and decision-making power of the head office of an MNE to rationalise its global activities across product lines and geographical borders, to spearhead new innovatory activities, to seek out and exploit new markets, and to adjust more readily to the demands of an uncertain and ever-changing world business environment.

However, because it made for a more intensive network of intra-firm communication, the matrix structure created its own organisational challenges, notably those that arose from ambiguities over the locus of management responsibility, and a conflict of goals and strategies between the members of the network. These problems were most likely to give concern where the foreign affiliates of the MNEs had become powerful entities in their own right. In such cases, the head office is best regarded less as a centre of control, and more as a means by which the constituent parts of the organisation make their own inputs into the decision-making process. This is what Ghoshal and Bartlett (1990) refer to as a ‘transnational solution’, which itself demands a governance structure suited to the needs of an integrated network of dispersed and interdependent resources and capabilities.

A novel solution to these coordination problems is the so-called ‘front-end–back-end’ structure, which entails a separation between the customer-facing part of the organisation, and the organisation of production. The front-end organisation is charged with providing complete solutions to global customers, while the back-end organisation needs to adjust flexibly to the changing demands flowing from the front. A possible problem with this structure is the degree to which the two ends start to develop into two separate organisations, rather than interdependent parts of the same organisation. Other emerging forms of MNE organisation to which we have referred are the ‘born global’, metanational and ‘dragon multinational’ firms. Although such firms differ greatly in their size and degree of internationalisation, each typifies a form of accelerated internationalisation that is achieved by leveraging their resources using the MNE network. While many such firms may still revert to more traditional structures at a later stage in their growth, they are interesting examples of the possibilities inherent in a network-based business system.

The choice of organisational structure will also influence the response of MNEs to changes in their domestic or foreign environments. The desire to minimise the production and transaction costs of decision making, and to rationalise institutional complexity, will
affect the extent to which there is coordination of that decision making within the corporation, and the form of organisational governance. The greater the costs of cross-border hierarchical interaction, and the less those of organising individual affiliates to meet the goals of the parent company, the more the organisational structure of these affiliates is likely to follow that of an independent local firm. By contrast, where there are marked economies of common governance, the organisation of affiliates is likely to be integrated into that of the MNE system as a whole. Similarly, the choice of organisational structure (for example, between a functional, product and/or geographical division of responsibilities, or a hybrid of these) will rest on the comparative production and transaction costs involved. The previous subsections have sought to suggest some of the variables that influence an MNE to choose one organisational form rather than another.

Finally, cross-border cultural differences are likely to play a major role in influencing the organisational structure of MNEs. This is partly because new organisational practices, institutional structures and work methods take longer to diffuse across national boundaries – particularly between markedly different cultures – than do technological innovations (Kogut, 1990; Dunning, 2003c). Here, just one example must suffice. Boisot and Child (1996) argue that in its transition to a market economy, China has followed a different path from Western countries, whose route to market capitalism involved a shift from fiefs to bureaucracy and to market capitalism. The Chinese path, they assert, goes from fiefs to clan, and then to a form of capitalism they term ‘network capitalism’. While network capitalism in the Western context is still usually contractual, and the enforcement of property rights is a matter of law, in the embedded form of network capitalism, long-term relationships are used to mitigate uncertainty and reduce risk.

8.4 THE LOCUS OF DECISION MAKING

8.4.1 Introduction

Taken literally, the locus of decision making refers to who has the responsibility for making decisions within an MNE. Clearly, in reaching any decision, the decision maker is dependent upon, and influenced by, the information, experience and advice of many constituents. Consequently, the pattern of decision making in any firm represents the input of a network of decision makers across activities, functions and countries.

While the organisational structure of a firm partly determines the locus of decision making, no less important is the strategic expectations of its foreign operations. Exactly in what respects, and how best can these operations contribute towards its global objectives? Recalling that we are primarily interested in this issue to improve our understanding of the determinants of MNE activity and its interaction with the nation states in which it is located, we shall discuss the issue of the locus of decision making under four headings. First, what exactly is meant by it? Second, what determines the allocation of decision-making responsibility within an MNE? Third, how, in practice, do MNEs allocate decisions among their separate operating and administrative units? And fourth, what are the likely repercussions of this for the spatial distribution and economic impact on MNE activity? The final issue will only be touched on in this chapter, but will be explored more fully in Part III.
Over the years, organisational scholars have focused on two kinds of issue concerning decision making in the MNE. The first is the extent to which the locus of decision making is centralised in the headquarters of an MNE or is delegated (that is, decentralised) to its regional offices or affiliates; and also of how this locus is likely to vary according to the kinds of decisions that have to be taken. The second concerns the nationality of the decision makers (the composition of top management teams) and whether they are appointed by the MNE or one of its affiliates. Empirical research suggests that the answers to these questions vary substantially according to the OLI configuration facing MNEs, and their strategic response to that configuration.

8.4.2 An Economic Approach to Decision Making

Any explanation of the locus of decision making within a firm must relate to the number and character of the decisions that have to be made. Within the small single-activity firm, decisions may be taken solely by the owner-cum-entrepreneur. As a firm grows, the responsibility for at least some decisions may have to be delegated to ‘agents’ appointed by the owner. Usually these agents are ‘functional’ decision makers. As the firm becomes multi-activity, so the network of decision makers increases. As well as functional decision makers, there may be others who are product specialists.

The setting up of a foreign or domestic affiliate requires a new team or network of decision makers who have to relate not only to each other, but also to those in the parent company. It is at this point that the locus of decision making becomes an important issue. It is because the economic and institutional environment facing foreign subsidiaries is different from that facing the parent company, or its domestic subsidiaries, that the delegation of decision making may be different in an MNE from that in a unnational firm.

Why should any decisions taken within an MNE not be centralised? Why should the owners or senior management located in the head offices of such enterprises choose to delegate at least some decisions to the managers of their affiliates? In answering these questions, we shall turn once again to the framework of the eclectic paradigm. More particularly, we shall argue that the structure of decision making within hierarchies or heterarchies depends, first on the willingness and capabilities of the managers and administrators of the subsidiaries to take the kind of decisions which are perceived, by those at the head office, to be in the best interests of the MNE as a whole. Second, it depends on the comparative costs of siting decision-making units in one country rather than another. We shall now elaborate on these two points.

Economic theory suggests that there are three main reasons why MNEs should not wish to delegate decision making to their affiliates. First, when viewed as self-contained profit centres, the objectives of the affiliates may not always be in accord with those of the MNE of which they are a part. Such a conflict of interest will be most pronounced where:

1. there are differences in the perceived objectives of the affiliates and those of their parent company and/or of the strategies required to best advance these goals; and
2. there are costs or benefits arising from the decisions taken by, or on behalf of, the affiliates, which are external to those affiliates, but internal to the MNE of which they are part.
Furthermore, the real costs of decision making and/or related support services may be higher in the host than in the home country. Finally, for one reason or another, the parent company may be more efficient at undertaking these activities than its regional or branch affiliates.

Applying the eclectic paradigm to these criteria, the first and third reasons suggest that the choice between the centralisation and delegation of decision making, and also the nationality of the main decision makers, may be likened to that between the hierarchical and market route of organising the disposition of O-specific advantages. For example, it might be hypothesised that the more the O advantages of an MNE stem from the common governance of geographically dispersed activities and/or from proprietary knowledge which is idiosyncratic, uncodifiable, costly to transmit and liable to be inefficiently or inappropriately used, the more likely it is either that the top decision makers of the affiliate will be nationals of the home country, or that their decisions will be most closely guided or controlled by the management of the parent company.

The second reason for MNEs to centralise decision making has to do with the distribution of decision-making resources and competences across national boundaries, and where the views of the management of the parent company differ from that of its affiliates on the best way to utilise these resources and competences. Given the same ‘output’, then, wherever the (marginal) cost of decision making is less in the home country than in the host country, such decisions are unlikely to be delegated. Quite apart from economies of scale and scope in decision making, management support costs may vary between countries. In some cases, it may be desirable for management to be in close proximity to the market and for decisions to be customised to local requirements. In others, it may need to be close to the core of the firm’s value-added activities. We have seen for instance, that the emergence of global customers tends to favour coordinated decision making at the global level.

Using the above framework, it is possible to offer some general hypotheses about the locus of decision making. First, centralisation is most likely where the O advantages of the MNE are highly idiosyncratic and need specialised and experienced support services, or when they arise from the common ownership of geographically diversified activities. Second, centralisation is likely to be preferred when the relative real costs of decision-taking services are higher in a foreign location. Third, centralisation may be preferred where intra-firm market failure means that the transaction costs of delegating decisions to the management of the affiliate are perceived to be unacceptable to the management of the parent company.

A somewhat different, though related, economic approach to analysing the locus of decision making has been taken by scholars who view organisation in hierarchies as paralleling that of a metropolitan–hinterland relationship of countries, with levels or tiers of decision-taking activities (Hymer, 1970; Cohen et al., 1979). The top level of decision making is responsible for identifying the objectives of the firm, determining its long-term strategy, coordinating information flows and setting organisational control and procedures. The next tier is likely to be concerned with translating this strategy into operational production and sales targets, and assigning the necessary tasks and duties to accomplish these targets. The bottom tier has the responsibility for executing the plans laid down by the second level of decision takers.

The suggestion here is that as a firm becomes an MNE and/or increases its multinationality, the division of responsibilities and tasks among the headquarters, regional
offices and affiliates changes. Where the need to coordinate the global activities of the firm is most obvious, the locus of decision making remains at the centre. Where the emphasis is on regional coordination, but the managers of operating units need a great deal of local information and contacts with local firms to fulfil the function efficiently, the locus of decision making may be largely decentralised to regional offices and/or local affiliates.

Much of what has so far been written is largely applicable to the various forms of asset-exploiting FDI. It is, however, somewhat less relevant to explaining the organisational changes demanded by asset-augmenting FDI, which, as we have seen, has become an important aspect of intra-Triad MNE activity over the last decade or more. Here, especially where this takes the form of M&As or cooperative alliances, the affiliates’ roles from the start may be much more important. Essentially these reduce to two forms. First by affiliates creating new competitive advantages in their own right, for example, via innovatory activities and human resource development; and second by acting as an intermediary or agent on behalf of the organisation of which they are part, for accessing external resources, capabilities and markets, which reflect the L-bound advantages of the country or region in which they are situated.

8.4.3 A Strategic Approach to Decision Making

Perhaps the most significant strategic factor affecting both the organisational structure and locus of decision making within an MNE is the firm’s philosophy or ethos towards its foreign value-added activities. In 1969, Howard Perlmutter wrote a classic article in which he identified three orientations an MNE might take: ‘ethnocentric’, ‘polycentric’ and ‘geocentric’. In a later contribution, jointly authored with Balaji Chakravarthy (1985), he added a fourth: regiocentric orientation. Perlmutter argued that the locus of decision making in an MNE was likely to vary with these orientations, which, in turn, reflected its country of origin as well as its size and degree of multinationality.

The ethnocentric firm, whose attitude towards its foreign affiliates is rather like that of a mother country towards its colonies, is likely to permit little decentralisation of decision making. Where it does, it will do its best to ensure that such decisions conform with the wishes of the parent firm. More often than not, it will be a market- or resource-seeking MNE in the early days of its internationalisation process. Product development is determined primarily by the needs of home country customers, and the organisational structure is likely to be based on hierarchical product divisions. R&D is highly centralised, in most cases, while the chief executive officers of the affiliates of ethnocentric MNEs are expatriates appointed by the parent organisation.

By contrast, a polycentric MNE is best described as a federation of loosely linked multi-domestic affiliates. Its strategic decision making is tailored to suit the resources, institutions and cultures of the countries in which it operates. In consequence, it is likely to be highly decentralised in its decision-making procedures, although critical decisions affecting the allocation of the core assets of the MNE may continue to be centralised.

A regiocentric MNE is one which tries to blend its own strategic interests with those of its subsidiaries on a regional basis. The governance of regiocentric MNEs is likely to be mutually negotiated between the headquarters and the regional offices and to be geared towards balancing the advantages of regional integration, and responding to national
needs and aspirations. Marketing is likely to be standardised within the regions, but not across regions. Also, firms pursuing a regiocentric philosophy are likely to adopt some type of a matrix structure of decision making in which product and regional orientations are juxtaposed.

A geocentric MNE is one which tries to adopt a globally integrated approach to decision making. Such an approach will adopt a mixed strategy towards the locus of decision making. This will, essentially, depend upon the location of individuals with whom the decision maker has the most transactions. On technical matters (for example, those relating to R&D, product and market development, finance and capital expenditure) the decisions are likely to be centralised simply because most discussions and transactions are likely to be undertaken between the different units of the MNEs. By contrast, those having to do with distribution channels, personnel recruitment, purchasing, and negotiations with host governments are apt to be decentralised, because most exchanges of information, goods and services are likely to be between firms or individuals in the host country (that is, external to the MNE). In all cases, however, the influence of the parent company (which may extend to guidelines on philosophy and strategy, even on matters which are decentralised) is much greater than in the first case.

Irrespective of the strategic orientation of the MNE, it is clear that methods of control and coordination have moved away from rigidly defined hierarchical channels and more to the sharing of heterarchical values and systems. Classic studies by Doz and Prahalad (1981, 1984), Bartlett (1986), Doz (1986), and Bartlett and Ghoshal (1987a, 1987b, 1989), and more recent work by, for example, Birkinshaw (2000a), all point towards a more pluralistic or multidimensional approach to decision making in contemporary MNEs. We have indicated that the network, composed of both the internal and external relationships of the firm, best describes the structure of the modern MNE (see Chapter 7). Central to the network form is the potential for learning and knowledge transfer within the network. This chapter has concentrated on the internal network of the MNE, and specifically on the management issues related to affiliate–headquarters relationships. In the final section we shall explore the various roles that different subsidiaries assume within the multinational network, and the consequences of their diversity on the ability of the multinational to appropriate knowledge flows from its subsidiaries.

8.5 AFFILIATE ROLES AND EVOLUTION

8.5.1 Introduction

While much of the literature on the management of MNE affiliates has explored the implications of different affiliate roles in different contexts, Rugman and Verbeke (2001) have formalised such analysis by presenting a framework in which firm-specific advantages (FSAs) can be location bound or mobile, and drawn from home country, host country or network sources. They make a further distinction between two kinds of mobile resources developed within MNE affiliates – regular nonlocation-bound FSAs, and subsidiary-specific advantages (SSAs) – that are global in scope, but not easily transferable within the firm. The affiliate can thus be involved in the creation of many FSAs, some of which may be specific to its ownership, which are valuable on account of their being
unique, and yet limited in applicability, due to their limited transferability within the firm. The crux of their argument is that, as long as the resources developed anywhere within the MNE network are not location bound, and can be transferred within the MNE, the implications for affiliate management are relatively minor. If, however, the affiliate is involved in developing its own SSAs, issues of control and coordination become paramount.

We have suggested that, in the modern MNE, local knowledge residing in or accessed by its various affiliates and partners needs to be leveraged with the resources, capabilities and institutions of the parent firm. To enable this, the headquarters has to be able to maintain a repository of knowledge and incentive structures within the firm, as well as to disseminate best practices. As the knowledge itself is dispersed throughout the firm and/or the network of which it is part, knowledge of what kinds of resources are available throughout the network needs to be available to the strategic decision makers. Since the value added of MNEs is increasingly derived not from production, but its knowledge of markets, management processes and its entrepreneurial vitality, the core competitive resources of many MNEs are increasingly knowledge based, and influenced by its institutional (Oi) advantages.

The contemporary way to view the MNE is as a network characterised by flexibility and decentralisation, representing a hybrid between markets and hierarchy (Powell, 1990). The concept of the firm as a network is often combined with the resource-based or dynamic capabilities view of the firm, in order to explain how path-dependent capabilities are built at multiple levels inside and outside the firm (see Chapter 5). While knowledge acquisition and development using cooperative agreements – an issue that we shall investigate in the following chapter – has become increasingly important, the importance of knowledge generation and usage within the firm should not be underestimated.

We can identify two major streams in the growing literature on the role of affiliates and their evolution. On the one hand there are studies that focus on analysing and explaining increasing affiliate independence, and seek to demonstrate how more autonomous affiliate roles have evolved in the main areas of production, marketing and R&D. The other major emphasis in the affiliate literature has been on organisational learning and knowledge transfer within and between firms. These strands are not strictly separate, and the conception of the MNE as a knowledge network is widely accepted in both views. Rather, the differences reflect the somewhat different starting-points of these enquiries. We shall discuss these in turn.

8.5.2 Affiliate Autonomy

The increasing autonomy of MNE affiliates has been documented in a number of studies. The first group dates back to studies of Canadian affiliates in the 1970s, which examined whether affiliates which were assigned a world product mandate (WPM) with respect to product development or marketing responsibilities, could prevent the ‘hollowing out’ of Canadian affiliates (Rugman and Bennett, 1982; White and Poynter, 1984). Continuing in this tradition, Birkinshaw (1996) examined six Canadian subsidiaries of US MNEs that held 32 product mandates. He found that subsidiaries stood to lose their mandates if their development work was unrelated to the overall strategy of the MNE of which they were part, or if they had no distinct capabilities that would enable them to add value to the product.
Other scholars who have examined foreign affiliates with product mandates include Papanastassiou and Pearce (1994), who focused particularly on their export orientation, and the development of their R&D capabilities. They identified three types of affiliates. The first was the truncated miniature replica (TMR) affiliate, which they defined as an import-substituting affiliate that produces and sells locally the established products of the MNE. The second type of affiliate was the rationalised product subsidiary (RPS), which is involved in the production of intermediate goods. The third type of affiliate they considered was the world or regional product mandate (WPM/RPM) affiliate. Based on a survey of MNE affiliates in the UK in 1999, Pearce and Tavares (2002) predicted that the proportion of product mandate affiliates was on the rise; and that this, while decreasing the threat of exit of ‘footloose’ subsidiaries, presented the MNE parent with a growing challenge of coordination and control.

The second approach to affiliate roles was taken by Taggart (1998), who rather than concentrating on product mandates, based his study on the integration-responsiveness framework of Jarillo and Martinez (1990). In a study of 171 Spanish manufacturing subsidiaries in the UK, he found that there were affiliates that belonged to all four quadrants of the model – namely, quiescent, receptive, active and autonomous affiliates – and, that, over a five-year period, firms frequently moved in a consistent manner from one quadrant to another. In contrast to the findings of Jarillo and Martinez, however, since Taggart found a number of subsidiaries in the quiescent category, this raised concerns about the continued viability of these affiliates.

A third approach to managing the coordination issues within MNEs is provided by the procedural justice approach introduced by Kim and Mauborgne (1991, 1993). Building on this approach, Taggart (1999) classified affiliates along two dimensions of decision making, namely, autonomy and procedural justice, which he argued reflected the affiliate managers’ views on how fairly they were treated by headquarters. The vassal and militant roles were associated with low procedural justice, while the collaborator and partner roles were those associated with high levels of procedural justice. Using a sample of 265 MNE affiliates in Scotland, Wales, Ulster and Ireland, Taggart found that, as affiliates progressed from vassal to collaborator, militant and finally partner roles, their performance against other firms in their industry improved. At the same time, however, they became less focused and influenced by their parent company’s view of their performance.

The fourth and final approach we wish to consider relates to the emergence of affiliate ‘centres of excellence’ within the MNE network. In their edited volume, Holm and Pedersen (2000) bring together an impressive range of studies using a common methodology for investigating the extent to which affiliates in an MNE network are becoming more self-contained in their governance structures. A centre of excellence in this context is defined as an affiliate recognised by other units of the MNE for its excellence, regardless of whether it is formally designated as such by the headquarters. The range of home countries in these studies covered the Nordic countries, the UK, Germany, Austria, Italy, Portugal and Canada. In total, the study involved 1,793 subsidiaries in the late 1990s, of which 391 were American, and, as might be expected, nearly a half were subsidiaries acquired through M&As in the past 20 years. The overall occurrence of subsidiaries that could be classified as centres of excellence with distinct competences ranged from 5% in development activities to 20% in marketing and sales.
Building on their work in the centres of excellence project, Frost et al. (2002) argued that the level of aggregation in previous studies had been too high, since only some activities undertaken by an affiliate are likely to be a source of its excellence. In a study of 99 Canadian affiliates, they defined a centre of excellence as ‘an organisational unit that embodies a set of capabilities that has been explicitly recognised by the firm as an important source of value creation, with the intention that these capabilities be leveraged by and/or disseminated to other parts of the firm’ (ibid.:997). A particularly interesting finding from this study was the number of examples of subsidiaries that had incrementally increased their competences over time, supported by several injections of parent-firm investment.

The continued investment of parents in their subsidiaries, whether through reinvested earnings or additional FDI, has not received much attention in the literature, with the exception of studies on so-called ‘sequential investment’ (Kogut, 1983; Chang, 1995; Kogut and Chang, 1996; Song, 2002). In particular, the use of budgetary control as a means of managing the interdependencies in a multinational network is underexplored. Mudambi (1999) has suggested that if one of the roles of the MNE headquarters is to allocate capital efficiently within the firm, then, as subsidiaries gain independence, the efficiency of the internal capital market would necessarily suffer. He tested this proposition on a sample of foreign subsidiaries of engineering firms located in the UK. He found that internal capital markets were used by the MNEs, but that there was a trade-off between the efficiency of the internal capital market and affiliate independence. However, he also acknowledged that internal capital markets were particularly critical in situations where external markets fail for one reason or another, implying that for a Triad affiliate with ample opportunities for external financing, the issue was less salient.

8.5.3 Knowledge Transfer

As decision making in MNEs has become increasingly decentralised, much of the recent literature on affiliate strategy has focused on the part that affiliates may play in knowledge generation and transfer. In particular, scholars have examined what kind of knowledge is likely to be transferred internally, and what kinds of incentives need to be in place if affiliates are to create and share their local knowledge within the MNE network.

In a classic article, Kogut and Zander (1993) turned their attention to the properties of knowledge that affect its transferability, and, specifically, on how the division between tacit and articulated knowledge influenced the form of transfer. Using data on 82 transfers of innovative technology by Swedish MNEs, they found that tacit knowledge was more efficiently transferred within the firm, and indeed, in their view, provided a rationale for the existence of the MNE in itself. Subsequent studies have refined the view of knowledge as tacit or articulated, for example, by distinguishing between its observability (how easy is it to reverse-engineer a product or a process) and system embeddedness (Birkinshaw, 2002).

Another important aspect of the work of Kogut and Zander (1993:625) was their conception of MNEs as ‘social communities that specialize in the creation and internal transfer of knowledge’. Subsequent studies by the authors further developed the idea that organisational identity was the basis on which knowledge was shared within the firm (Kogut and Chang, 1996; Kogut and Zander, 2003). We believe that this idea fits quite
comfortably with the institutional perspective we presented in Chapter 5. The firm provides the context within which the formal and informal rules and incentives that guide the process of experimentation and learning are set. In addition to the attributes of the knowledge being transferred, we believe that the success of knowledge transfer within the firm depends on the willingness and motivation of both the transferor and the transferee, which are strongly influenced by the incentives that are part of the OI of a firm.

Both these aspects are apparent in a study by Almeida et al. (2002), who investigated knowledge transfer and absorption using cross-border patent citations in the US semiconductor industry. The authors created three matched samples321 of patents from (i) foreign MNE subsidiaries, (ii) their US alliance partners (who had no activity in the home countries of the foreign MNEs), and (iii) a group of similar patents unrelated to those in either of the previous groups. They found that the MNE was superior to alliances and markets as a vehicle for transferring knowledge across borders, while further qualitative evidence from interviews suggested that knowledge building was enhanced by standardised formats for information sharing, and the credibility and quality of the knowledge source.

In their examination of whether MNE affiliates were recipients or transmitters of knowledge, Gupta and Govindarajan (1991) distinguished between four types. These were, respectively, the global innovator (high outflow–low inflow), the integrated player (high outflow–high inflow of knowledge), the implementor (low outflow–high inflow) and the local innovator (low outflow–low inflow). Furthermore, they hypothesised that different types of affiliates were likely to be managed using different control mechanisms. These included formal integrative mechanisms (such as a matrix structure), the ratio of expatriate managers in the affiliate, corporate socialisation, and the use of outcome- or behaviour-based forms of control, and contingent factors such as the tolerance of affiliate managers of ambiguity, their need for autonomy and their locus of control.

Some indication of the empirical importance of parent–affiliate and affiliate–affiliate knowledge and input–output flows is given in two more recent studies. The first is by Gupta and Govindarajan (2000) of 374 affiliates of 75 MNEs from the Triad, which found that the extent of knowledge transfer was dependent on the available channels for transfer, motivation and absorptive capacity, and that flows between parents and affiliates tended to be the most prevalent. Another study by Schmid et al. (2002) analysed the cross-border flows of inputs and outputs in a sample of 2,110 European affiliates. Although the authors were not able to distinguish between parent–affiliate and affiliate–affiliate flows, they discovered that, while some MNE affiliates were well connected with respect to the extent and criticality of flows, for the most part, the affiliates were still likely to be recipients rather than the originators of flows within the MNE network.

**Affiliate innovation**

The transfer of technological knowledge (much of which is tacit) is an important part of the knowledge flows within an MNE, and one that has received considerable attention in the literature, particularly in connection with affiliates that undertake R&D activities. Out of this large and growing literature, we can highlight only a few contributions here, and this subsection will limit itself to those studies that deal with issues of affiliate roles and organisation.322 We shall address other issues related to knowledge-intensive affiliates, such as external technology sourcing, locational clustering and spillovers in Chapters 9, 11 and 16.
Almost inevitably, with the broadening of the technological scope of manufacturing firms, the evolution of the affiliate role in product development will tend towards the establishment of some type of technology development, and the emergence of some innovative subsidiaries. Papanastassiou (1999) conducted a survey on 145 manufacturing affiliates in the UK, Belgium, Greece and Portugal in 1993 in which she sought to identify the sources of technology used by the affiliates. She found that the most important source was derived from elsewhere within the MNE group, rather than the host country, or generated by the affiliates themselves. She also found that while the affiliates of US MNEs were younger than European ones, it had taken them longer to engage in their own R&D activities.

Another survey by Pearce (1999) was carried out in 1994, and included 190 UK manufacturing affiliates. The sample firms reported that little change had taken place in their assigned role, and they did not expect much change to occur in the future. The TMR affiliates producing established products were still equally prevalent as RPSs and WPM/RPM affiliates. However, the new WPM/RPM affiliates were more likely to have emerged from RPS affiliates, which is at least suggestive that the evolutionary process from TMRs may have involved first a wider market focus followed by the addition of innovative scope. Not surprisingly, the importance of own R&D was the highest for innovative (WPM/RPM) subsidiaries, indicating that a formal research capacity is likely to play a pivotal role in the establishment of a distinctive affiliate-level competence.

Overall, the research on innovative affiliates suggests that even as they gain in independence, the affiliates continue to be dependent on collaboration and resource transfers within the MNE. Consequently, Pearce (1999) has argued that the role of the MNE parent is to develop a ‘group-level technological trajectory’, in order to effectively manage the variety of innovative initiatives taking place in the affiliates. Such initiatives, however innovative, are of uncertain value to the parent, and they can become peripheral, unless the results can be integrated into the overall technological trajectory of the MNE (Birkinshaw, 1996).

It is also the case that knowledge-intensive affiliates may gain considerable bargaining power vis-à-vis their parent, and use this power to engage in rent-seeking activities. In a study involving 275 MNE affiliates in high-technology sectors in the UK, Mudambi and Navarra (2004) discovered that highly profitable affiliates with bargaining power were likely to remit smaller (net) financial outflows to their parents. By contrast, highly profitable affiliates with low bargaining power were more likely to be used to cross-subsidise less profitable units within the MNE.

8.6 CONCLUSIONS

The organisational structure of the cross-border activities of MNEs reflects not only the configuration of their O-specific advantages but also that of the L characteristics of the countries in which they operate. However, it is also contingent on the degree and character of the firm’s multinationality. The past half-century has witnessed an increasing complexity both of the structure of multi-unit enterprises and of the global environment in which they operate. As a consequence, the organisational structure of MNEs has undergone considerable change and increasing differentiation. From a comparatively simple
vertical and unidimensional set of control procedures designed to promote the ethnocentric or polycentric orientation of market- or resource-seeking foreign investors, the MNE has evolved into a complex hierarchy (or, in some cases, a heterarchy) comprising a network of vertical and lateral intra- and inter-firm relationships, geared to advance its geocentric or regiocentric objectives. Additionally, the growing importance of flows of all kinds of knowledge within the multinational network has placed more emphasis on the learning and innovatory capabilities in MNE affiliates.

We have suggested that a novel structural solution to the coordination problems of the heterarchical MNE is the so-called ‘front-end–back-end model’, which entails a separation between the customer-facing part of the organisation, and the organisation of production. In such firms, the front-end organisation is charged with providing complete solutions to global customers, while the back-end organisation needs to adjust flexibly to the changing demands flowing from the front. Other emerging forms of MNE organisation are the ‘born global’, metanational and ‘dragon multinational’ firms. Although such firms differ considerably in terms of their size and degree of internationalisation, they make use of the increasing possibilities for outsourcing production and engaging in ‘open innovation’ with their network partners. The increasing involvement of private equity investors in cross-border activities is also reshaping the context of managerial decision making in the target firms in ways that are only beginning to be explored by scholars.

Finally, does it matter who takes the decisions in an MNE? Centralised decisions made by geocentric or regiocentric MNEs are likely to be taken more with the global interests of the MNE, and occasionally those of the home country, in mind. By contrast, decentralised decisions by polycentric or multidomestic MNEs are likely to be taken more with the interests of the host country in mind. Particularly, this would seem to have been the case in respect of decisions relating to product development, production methods, local sourcing policy, wages policy, personnel management and marketing. Nonetheless, the emergence of global customers has reduced the autonomy of some MNE affiliates with respect to product-related decisions. On the other hand, this is counterbalanced by the contribution affiliates make to the knowledge capabilities of the MNE, and the degree of autonomy this may imply.

Clearly, in their policies towards outward and inward MNE activity, host governments do pay considerable attention to the locus of decision making. Indeed, it may be argued that performance requirements imposed by governments would be unnecessary, redundant, or at least less necessary, if more affiliates acted as free-standing economic units and decisions were taken by local managers rather than by those in parent companies. The other aspect of the locus of decision-making concerns the power of the host government to modify the strategies and behaviour of MNE affiliates. This is critical when considering the relationships between organised labour and the MNE, since the local union negotiators may know very little about the economic viability of the affiliate, or of the MNE of which it is part. Other areas in which governments have been shown to influence the behaviour of affiliates include transfer pricing, dividend and capital repatriation and the location of technological capacity. We shall address our attention to these, and other matters such as the transparency of corporate decision making, forms of governance and corporate accountability in Parts III and IV.
9. The organisation of MNE activity: the external network

9.1 INTRODUCTION

We now turn to examine the ways in which MNEs may exert influence over the form and outcome of the transactions concluded between themselves and other firms in their global network. Indeed, it would appear that with the advent of globalisation, the costs of using the market have declined relative to the costs of organisation within corporate hierarchies. As a result there has been a major expansion in the number and types of external relationships, such as strategic alliances or outsourcing agreements, into which an MNE is likely to enter.

As in the previous chapter, we shall consider this aspect of the organisation of resources, capabilities and markets from the perspective of the competitive advantages of firms and countries, as well as the ways in which these may interact with each other. In particular, we shall argue not only that the determinants of external relationships can be analysed by use of the eclectic paradigm of international production, but also that the strategic choice as to the structure and pattern of these transactions is likely to be an important influence on the future OLI configuration of MNEs.

The chapter proceeds in the following way. First, it describes the kinds of relationships an MNE may forge with other firms located outside its national boundaries. In doing so, it considers all kinds of external relationships other than those which are purely arm’s length. Second, it pays especial attention to two kinds of cross-border cooperative relationships: joint ventures and strategic alliances.

9.2 THE SPECTRUM OF ORGANISATIONAL MODES: COOPERATION AND COMPETITION

In principle, any set or network of value-added activities may be organised in a variety of ways. Indeed, one can imagine a spectrum of organisational modes. At the one end of the spectrum, each activity along the chain may be undertaken by a separate (that is, a single-product) firm, which will buy and sell its intermediate products from, and to, the open market. At the other end, all the activities may be undertaken by the same firm, which means that each of the intermediate product markets is internalised. In the former case, ownership, and hence the right to control the use of the products being bought or sold, is transferred at the point at which the transaction is made. In the latter, there is no change in ownership; hence control over the products transacted remains within the jurisdiction of one and same firm.

In between these two extreme forms of organisation, a firm may engage in a variety of...
organisational relationships, each of which involves a different combination of resources, capabilities and institutional commitment; and that of risk bearing and control sharing. In a command, or mixed economy, government fiat, and even the influence of special-interest groups (for example, NGOs), may also be considered as part of the transactional mechanism. Most large and diversified MNEs – particularly those whose organisational structure is heterarchical rather than hierarchical – are likely to be simultaneously involved in a matrix of interdependent bilateral or multilateral activities and strategies, the character of which is likely to affect, and/or be affected by, the complex of internal and external relationships of which it is part.

Table 9.1 presents a typology of the different modalities MNE activity might take, which range from wholly owned affiliates to licensing and outsourcing. While this chapter is mainly concerned with relationships that are external to the ownership boundaries of firms, it will also consider the choice between greenfield investment and M&As, even though the latter does not involve an external relationship as such. However, acquisitions share many similarities with cross-border joint ventures (JVs), which need to bridge different national and organisational cultures. At the other end of the spectrum, it could also be argued that since licensing agreements represent market transactions, they do not form a part of the network of external relationships

Table 9.1 A typology of cross-border cooperation modes

<table>
<thead>
<tr>
<th>Form of cooperation</th>
<th>Equity or non-equity</th>
<th>Duration</th>
<th>Geographical scope</th>
<th>Transfer of resources and rights</th>
<th>Mode of transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholly owned foreign affiliates</td>
<td>Equity</td>
<td>Unlimited</td>
<td>At discretion of MNE</td>
<td>Whole range?</td>
<td>Internal</td>
</tr>
<tr>
<td>Joint ventures</td>
<td>Equity</td>
<td>Unlimited</td>
<td>Agreed Limited</td>
<td>Whole range?</td>
<td>Internal</td>
</tr>
<tr>
<td>Foreign minority holdings</td>
<td>Equity</td>
<td>Unlimited</td>
<td>Limited</td>
<td>Whole range?</td>
<td>Internal</td>
</tr>
<tr>
<td>‘Fade-out’ agreements</td>
<td>Equity</td>
<td>Limited</td>
<td>Nature of agreement</td>
<td>Whole range?</td>
<td>Internal/market</td>
</tr>
<tr>
<td>Licensing</td>
<td>Non-equity</td>
<td>Limited</td>
<td>May include limitations</td>
<td>Limited range</td>
<td>Market</td>
</tr>
<tr>
<td>Franchising</td>
<td>Non-equity</td>
<td>Limited</td>
<td>Limited</td>
<td>Limited + support</td>
<td>Market</td>
</tr>
<tr>
<td>Management contracts</td>
<td>Non-equity</td>
<td>Limited</td>
<td>May be specified</td>
<td>Limited</td>
<td>Market</td>
</tr>
<tr>
<td>Turnkey ventures</td>
<td>Non-equity</td>
<td>Limited</td>
<td>Not usually</td>
<td>Limited in time</td>
<td>Market</td>
</tr>
<tr>
<td>Contractual alliances</td>
<td>Non-equity</td>
<td>Limited</td>
<td>May be agreed</td>
<td>Specified by contract</td>
<td>Mixed</td>
</tr>
<tr>
<td>Cross-border outsourcing</td>
<td>Non-equity</td>
<td>Limited</td>
<td>May include limitations</td>
<td>Small</td>
<td>Market</td>
</tr>
</tbody>
</table>

Source: Based on Buckley and Casson (1985).
coordinated by the MNE. However, we shall see that while this is likely to be true of some licensing arrangements, in many others, the MNE selling the licence, in fact, enters into a long-term relationship with the licensee, which may also involve some equity investment.326

A rather different (but complementary) approach to analysing the organisation of business transactions is based on the extent to which economic agents perceive that it is better to compete or cooperate with each other to achieve their objectives. Most neoclassical economists view firms as vying with each other for resources, capabilities and markets. They also treat buyers and sellers as adversarial parties in any transaction. Moreover, while the invisible hand of the market is assumed to organise transactions in such a way as to benefit all parties, it is also presumed that, except at the point of the exchange, the parties have no direct contact with each other.

In reality, there is a great deal of collaboration between enterprises, both as producers and as transactors, and there is every reason to suppose that, in the contemporary global economy, this collaboration is increasing (Contractor and Lorange, 2002). Indeed, apart from the two organisational extremes, all other relationships implicitly or explicitly assume that some degree of sustained contact is beneficial for the participants. It is the perceived net advantages of the different kinds of cooperation, as compared with those of external markets or self-contained hierarchies or heterarchies, that will decide the mode employed. This will naturally vary according to the types of transactions undertaken, the organisational options open to the transactors, and the characteristics of the firms, industries and countries participating in the transactions. In some cases, firms may work together to achieve specific and well-articulated goals, and for a limited period of time. In others, they may form JVs or non-equity alliances to promote and organise a large number of diverse activities over a much longer period of time. Some firms, when faced with a particular market failure, may react by adopting an ‘exit’ strategy and internalise that market. Others might respond by adopting a ‘voice’ strategy and work to lower the transaction costs of using it (Hirschman, 1970).

Until comparatively recently, most of the literature on MNE activity and international production concentrated on the nature of the ownership rather than the transactional relationships between firms. Even today, most IB textbooks separate the issue of whether a firm contemplating an investment in a foreign country should do so by acquiring or setting up a JV or a wholly owned affiliate, from that of the operational relationships it has, or is likely to have, both within its ambit of governance (for example, selling management services from the parent firm to one of its foreign affiliates) and between itself and independent firms. Network analysis, however, suggests that the form of these latter relationships may be no less important to the global competitiveness of the firm than the former, and that their determinants have much in common with ownership-related issues. Increasingly, scholars are also becoming aware of the need to incorporate change and flexibility into the MNE’s configuration of choices, including that of the entry mode.

Today, a broad definition of alliances, such as that employed by Contractor and Lorange (2002) includes every mode of entry except for wholly owned greenfield investments and acquisitions. Thus on a continuum of markets and hierarchies, these span from contractual forms such as licensing and franchising, to non-equity alliances, many of which are also contractual, and JVs with different proportions of ownership. Each of these cooperative forms of economic activity typically contain some kind of contractual
component. Many, in reality, are also a mix of more than one form, so that a JV may simultaneously involve licensing, for example.

There is an extensive body of literature within the IB field on the choice of entry mode, that is, how the MNE chooses between these different types. Among the earlier studies, Anderson and Gatignon (1986) distinguished between four governance structures: a wholly owned affiliate, a majority-owned equity holding, a balanced partnership and a minority partnership. By contrast Kogut (1989) focused his attention on three entry modes, namely, acquisition, a JV and a greenfield investment. Contractor (1990) and Hill et al. (1990) preferred to identify a different trio of factors: a wholly owned affiliate, a JV and a licensing agreement. Other studies employed bilateral comparisons between either licensing or foreign investment decisions (Contractor, 1981, 1984; Davidson and McFetridge, 1985), or the decision to move from exports to foreign investment (Buckley and Pearce, 1979; Dunning, 1980; Kravis and Lipsey, 1982; Sleuwaegen, 1985).

The literature on inter-firm licensing has tended to look at factors such as the indigenous knowledge-related capability of a host country, government policies on technology transfer, and the R&D intensity of the activities in which the firms are engaged as determinants of licensing choice. It has also examined more firm-specific factors such as the number of previous transfers; and those unique to the assets (or their rights) being licensed, such as the number of prior transfers of the same technology. The studies on exports have tested the influence of variables such as firm size, R&D intensity and skilled employment ratio, on the choice to export or manufacture abroad. Among foreign market characteristics, variables such as GDP and GDP per capita, the relative size of the host market, growth, wage costs, transport costs and tariffs and non-tariff barriers have also been considered. Since these pioneering studies, a full range of entry modes have been subjected to closer study, with most attention being paid to international JVs and strategic alliances, particularly in high-technology fields. We shall review some the most important findings later in this chapter.

On the basis of these variables, scholars have set forth a number of propositions which predict the type of entry modes likely to be adopted by MNEs. Inter alia these suggest that firms pursuing a geocentric strategy, and those that perceive the need for a close coordination of cross-border activities, would prefer high control modes of entry. When cultural distance, resource commitments and volatility of competition are all high, a low control route is likely to be chosen. When demand conditions are unstable or uncertain, and MNEs are inexperienced in foreign markets, firms are likely to opt for a route involving relatively few resource commitments and low risk. When firms find it easy to enforce contract provisions, when the technology transferred is codifiable, and when there are high organisational costs, the licensing route is the one most likely to be favoured. According to Brouthers and Brouthers (2003), the choice of entry mode is also likely to differ between the broad categories of manufacturing and service firms. The authors suggest that differences in the modes of entry preferred by the two groups of firms reflect the technical and capital investment risks faced by those firms engaged in manufacturing, as opposed to more people-related and behavioural risks faced by service firms.

Over the past decade, there have been numerous studies to empirically test these propositions. An early effort to explicitly apply the OLI framework to entry mode choice was made by Agarwal and Ramaswami (1992). Since then, scholars have studied the role played by national culture (in either the home or host country) in affecting the choice
between direct investment and licensing (Shane, 1994), that between direct investment and franchising (Contractor and Kundu, 1998), that between greenfield investment and acquisitions (Hennart and Park, 1993; Hennart and Reddy, 1997; Harzing, 2002) and that between wholly or partially owned affiliates (Erramilli, 1996; Hennart et al., 1998; Makino and Neupert, 2000). Recently, scholars have also begun to pay more attention to the institutional differences between host countries, and the effect this might have on the choice of entry mode (Meyer, 2001a; Yiu and Makino, 2002).

Still other scholars have sought to look for firm- or industry-specific resources and capabilities (our O factor) that would predispose a firm towards a particular modal choice (Madhok, 1997; Erramilli, et al., 2002). Increasingly, such investigations are also embracing institutional influences which may affect firm behaviour, including the effects of imitation on the mode of entry (Davis et al., 2000; Chang and Rosenzweig, 2001; Lu, 2002; Guillén, 2003). Over time, the focus of scholarly research has also expanded from identifying the factors that might predispose firms towards a specific modal choice, towards assessing whether particular modal choices are likely to result in improved performance, either for the JV, or for the participating firms (Woodcock et al., 1994; Li, 1995; Mata and Portugal, 2000; Brouthers, 2002). We shall return to these studies later in this chapter, but before doing so, the following section will examine some theoretical and methodological issues related to the research on cooperative agreements.

9.3 COOPERATIVE AGREEMENTS: SOME THEORETICAL AND METHODOLOGICAL CONSIDERATIONS

The benefit of considering the network of activities that an MNE accesses and coordinates, rather than owns, as our unit of analysis is that it allows us to assess the full range of effects of MNE activity on both home and host countries. At the same time, this moves us further away from our initial theoretical underpinnings, which were based on explaining FDI, using it as a proxy for the foreign value-added activities of firms. While there has always been a difference between these two concepts, as for example, foreign-owned production might be partly financed by local capital, the advent of alliance capitalism has brought about a dramatic increase in the magnitude of activity that is controlled but not owned by MNEs. Since the goal of this book is to present a consistent and comprehensive framework to analyse the impact of MNEs on the global economy, we have found it necessary to update our explanatory framework in this and previous chapters to suit this purpose.

9.3.1 Transaction Costs and Resource Attributes

In Chapter 5, we suggested that the degree to which firms internalise their cross-border intermediate product markets (I) is determined by the interaction of its ownership-specific advantages, including asset (Oa), transaction (Ot) and institutional (Oi) advantages, with the location advantages (L) of the host and home countries. Consequently, the degree to which a firm’s network of global activities is dominated by long-term contractual relationships, JVs or strategic alliances, is partly influenced by the industries and countries in which it operates, but also by its own institutional and other competences in managing different kinds of cooperative relationships.
The degree of ownership a firm is likely to desire in pursuing its multiple cross-border value-added activities will be decided partly on economic and strategic grounds, and partly on social, environmental and cultural grounds. The former decision essentially represents a trade-off between its desire to control and manage these activities, and that of minimising resource commitments to achieve its objectives. The latter depends on the extent to which there is a synergy of goals, belief systems, incentive structures and enforcement mechanisms between the MNE and other organisations (including governments) in the countries in which it operates. Chapter 4 also demonstrated that, if and when markets worked perfectly, there is no incentive for a firm to own or control other than a single value-added activity. In imperfect markets, a firm may seek the ownership or control over multiple activities for three reasons. The first is that it believes that such governance is more likely to advance its goals than if the activities were under separate ownership. The second is to reduce the perceived transaction costs (including risk) of organising the activities in a way that best advances its objectives. The third is to increase the economic rent earned on the activities and/or to control the use made of the final output.

The main costs of internalising intermediate product markets are, first, the additional communications, organisational and institutional costs involved; second (in some instances), the additional production costs; and third, financial and other uncertainties surrounding the commitment of additional resources and capabilities required to undertake the value-adding activities.

Let us give a few examples of the kinds of trade-offs involved in a control versus a no-control situation:

1. A Canadian aluminium fabricating company buys out a bauxite mine from a Jamaican mining company previously supplying it with bauxite. In doing so, it will incur capital costs in acquiring the mine and, almost certainly, additional intra-firm communication and organisational costs in operating and managing the company. De facto, it is also likely to reduce its options for buying bauxite from alternative sources. On the other hand, it may reduce the transaction costs of procuring the product from an external supplier. These include the possibility of supply disruptions, the costs of not being able or willing to supply raw material of the right quality, the chance of price hikes and the possibility of a supplier concluding a relationship with a competitor to the firm’s disadvantage.

2. A Swiss pharmaceutical company decides to set up a foreign affiliate in the US to develop and market new drugs. Again, it will incur capital costs in setting up a foreign affiliate and coordinating its operations with those of other parts of its network of activities. At the same time, by internalising the market for the drug formula, not only may the Swiss firm be able to control its use better than if it licensed the production rights to a foreign firm, but it also lessens the likelihood of any infringement or dissipation of its property rights. Furthermore, by locating an affiliate in the US, the Swiss company hopes that it will be able to access the local networks of innovation connecting pharmaceutical firms to research institutes and smaller biotechnology firms.

3. A US auto firm which, up to now, has licensed five manufacturing companies in Europe to produce a range of auto components to its specifications, decides to acquire the full ownership of each of these affiliates. It does so in order to promote
better rationalisation of its motor vehicle production, thereby lowering its production and transaction costs. Without such control, there might be resistance from the individual licensees as their goals may not coincide with that of the licensor. The capital costs and extra common governance costs incurred are among the additional resource costs which may require to be committed.

4. A Singaporean-owned hotel chain wishes to extend its sphere of operations into the Japanese market. It has a choice of entering this market by setting up a joint equity venture or concluding a franchising agreement with a Japanese hotelier. In the former case, it may ‘buy the right’ to exert a critical influence over the design and building of the hotel and over its day-to-day management. In the latter case, though committing fewer resources, it is reliant on the terms of the franchise agreement to gain the maximum economic rent on its O advantages.

The above examples illustrate some of the advantages and disadvantages of using both the market and the hierarchical organisational mode. According to Richardson (1972), firms do not abrogate their organisational territory at their boundaries of ownership. Indeed, their interests may embrace the whole of the value-added chain that affects their own wealth-creating capabilities. However, Richardson also argued that firms are most likely to conclude alliances when they engage in complementary but dissimilar activities. He defined dissimilar activities as those requiring different technological capabilities and organisational skills, and complementary activities as those requiring different capabilities which need to be coordinated if a successful end product is to be produced. In such instances, coordination by cooperation may well be preferred to that by a single hierarchy, as the transactional costs of the latter in organising dissimilar activities may be unacceptable. It may also be thought better than the market, as it is the plans of separate enterprises that need to be coordinated rather than the matching of aggregate supply to aggregate demand. Indeed, Richardson went on to suggest that any spectrum of inter-firm relationships ought to be based on the matching of activities to capabilities rather than on whether the constituent firms are producing complementary or substitutable products or processes. This statement has a great deal of resonance with the current resource-based literature in strategic management as well as much of the alliance literature that we shall discuss later on in this chapter.

In Chapter 5 we highlighted the difference between the hierarchical costs of production, and the market costs of exchange, and the interdependence of production and exchange relations (Dunning, 2003b). Our understanding of the question of mode of entry, and the form that international involvement will take, is based on transaction cost reasoning. However, if entry mode was solely determined by reference to transaction costs, one would expect to see a great deal of homogeneity in the form of entry of firms engaging in similar kinds of transactions. Thus, for example, while there are well-known examples of industries, for example, hard minerals, in which the transaction cost logic is so compelling that most firms choose the same form, such as in our example of bauxite, in many other industries, such as in many service sectors, firms differ considerably in their choice of entry mode (and degree of internalisation). The extent to which the composition and structure of the value chains within a particular industry are indeed dissimilar would suggest that firm-specific factors come into play, or that at least some of the transaction costs are firm specific.
Along similar lines, Madhok (2002) has presented a compelling argument for considering three kinds of factors, namely, the governance structure of firms, their competence in minimising transaction costs and their resource attributes, to explain the behaviour of firms. Thus while the gains from internalising cross-border intermediate product markets are a critical, and sometimes sufficient, element in explaining entry mode choice, in most instances the content and quality of the firm’s existing resources and capabilities (and those it can access), and its systems of governance are likely to play a role as well. In Chapter 5 we discussed the knowledge-based view of the MNE at some length, and adopted the view that this theory and that of transaction cost reasoning were complementary.\textsuperscript{332} While we believe that opportunism plays a role in the organisation of economic activity, both within and between firms, we also accept that knowledge generation and transfer within the MNE network is organised by ‘higher-order organising principles’, which are most likely to arise within a hierarchical organisation. Thus boundary decisions are not made solely by reference to cost minimisation, but rather with an eye towards value maximisation based on the firm’s total stock of O-specific assets (and of those it can access).\textsuperscript{333}

Indeed, a holistic appreciation of each of the three factors of governance structure, transaction costs and resource attributes is essential to understanding the model we presented in Chapter 5. The value of resources that the firm does not own, but has access to, differs between firms depending on their existing resources and their path-dependent development. Governance structure reflects not only the firm’s management systems, IT processes and market knowledge (Oa), but also its institutional assets (Oi), which may be embedded in its management team and its own culture; and also that of the countries in which it operates (Li). In our opinion, it is the content and quality of a firm’s Oi that will determine the effectiveness by which it organises inter-firm transactions while minimising its resource commitments.

9.3.2 Some Methodological Issues

There are two cooperative modes of entry that have received a great deal of attention in the literature – namely, joint equity ventures and strategic alliances – and they are the focus of this chapter as well. Before moving on, however, we wish to highlight four methodological concerns that have become apparent as research in this area has expanded.

The first issue concerns a possible overemphasis on cultural influences. By definition, international collaborative activity takes place between two firms of different nationalities. However, this in and of itself does not necessarily make (national) culture a material issue in the management of such relationships. Following a review of the research in this area, Harzing (2004) concludes that there have been a number of studies where other country-, industry- and firm-specific explanatory factors have not been carefully controlled for, and consequently there is likely to have been an overattribution (either positive or negative) to cultural factors in cross-sectional international samples. This concern is confirmed by a meta-analysis on 67 articles by Tihanyi et al. (2005), which found no significant direct relationship between cultural distance and entry mode choice.

The second issue is related to the evaluation of performance and the definition of success, both of which are likely to be very different for agreements prompted by the
expectation of efficiency gains than they are for agreements motivated by knowledge sharing. For the latter, the first measure of success is related to whether there is direct evidence of an inter-firm transfer of knowledge. This can be measured by studying the changes in the patenting behaviour of firms before and after the agreement, or by using survey- or case-based methods to obtain subjective performance assessments from managers. The second way to evaluate success is an indirect one. It assumes that if cost efficiencies have been achieved, or if learning has taken place, then in due course, this should be reflected in improved financial performance. The problems with this method are common to all studies that aim to link strategic choices to performance. These include the fact that financial measures are almost never available at the level of the alliance, and rarely easily available at the level of the business unit. Furthermore, event studies, which measure performance by assessing the stock market reaction to alliance announcements, not only have to make strong assumptions about the quality and completeness of the information available to the markets, but typically confine their attention to the period immediately before and after the announcement to avoid contamination by other events.

A third way to assess performance is to equate success with the longevity of an alliance. Here a distinction is usually made between the dissolution of an alliance, and a change in its governance form. As we discussed earlier, the latter is the case when, for example, a JV changes from being jointly to being wholly owned, or when a non-equity alliance is transformed into a merger or a shared equity venture. Since cooperative relationships are often geared towards reaching a particular objective, the termination of an alliance or JV does not necessarily reflect failure, and the problem is that ‘studying failure by looking at terminations fails to distinguish between natural and untimely deaths’ (Gulati, 1998:307).

The third, and rather fundamental, methodological caveat arises from the fact that the choice of entry mode is endogenous to the individual firm, and a failure to account for firm self-selection is likely to lead to misleading conclusions. We have argued that firms choose their entry mode on the basis of many difficult-to-observe characteristics, such as the kinds of unique resources, capabilities and institutional advantages they possess. Any two firms are unlikely to view the choice between different entry modes in the same way, and consequently, the performance implications of such choices are likely to differ between them. To the extent that these differences can be proxied by factors such as firm size (for example, large firms are more likely to benefit from greenfield investment than small ones), such factors have been controlled for in previous studies. However, to the extent that the differences are firm specific and difficult to observe, this is unlikely to be sufficient.

This problem is demonstrated empirically by Shaver (1998), who presents a model of firm performance (defined as the odds of the survival of an FDI) conditional on the entry mode the firm has chosen. The solution to the endogeneity problem proposed by Shaver is to first obtain estimates for the strategy choice, and then use these results to estimate the performance model. His results, which also involve the use of a counterfactual scenario of the firm having made a different entry mode choice, indicate that when initial self-selection is accounted for, entry mode seems to have no effect on performance, while the negative consequences of adopting the counterfactual alternative (for example, greenfield, if the firm chose acquisition) are clearly observable.

Finally, a fourth issue we might mention is that, due to a desire to identify and evaluate the managerial implications of the research results, studies on the choice of entry
mode have tended to emphasise the element of choice over the restrictions imposed by a limited range of alternatives. While in a large sample of firms there is likely to be considerable variety in the possible modes of entry, at the level of a particular firm, the choice may be constrained for various reasons. For example, we have argued that the different combinations of Oa and Ot (resources) and Oi (governance) affect the firm-specific transaction costs of different modes, and are likely to result in a limited range of feasible alternatives. A firm with extensive expertise of JVs may be more likely to engage in a further joint venture than one whose experience consists solely of greenfield entry. Similarly, a firm that has internationalised its technology transfer through licensing arrangements, may find it difficult to consider a greenfield entry. A firm that is successful in its franchising or subcontracting operations may find it unnecessary to commit itself to an equity investment.

Firms may also restrict their scope of activity in response to appropriability challenges, particularly in respect to IPR (Oxley, 1999; Oxley and Sampson, 2004). JVs may also be preferred to acquisitions when the target is ‘indigestible’, that is, where the desirable assets are bundled together with undesirable and inseparable parts (Hennart, 1988). Finally, choice is also likely to be constrained by the real or perceived political costs of acquisition (Kay et al., 1996). For example, at different times, only JV modes of entry have been allowed in India, China and Japan.

It is also clear that a firm’s initial forage abroad may be very different from its subsequent entries. As discussed in Chapter 7, the former may occur at different stages from simple exports to a greenfield affiliate. However, as previous research has shown, it is reasonable to assume that the firm learns both from its own experiences, as well as from those of other firms in its industry. Such learning is likely to be particularly fruitful if the MNE and its affiliates are part of an extended network of related activities, and where the social and cultural environment is unfamiliar to it.

Consequently, any large cross-sectional sample of MNEs will consist of cases where, for example, a joint equity venture is the first-best solution, those where the idiosyncratic skills of the firm predispose it towards one type rather than other, and those where the regulatory or mimetic pressures are such as to compel firms to choose from a limited range of alternatives. This makes research on entry modes very challenging. In most instances these is no one best form of entry, although the performance implications of different modes of entry can be usefully studied within one firm over time, or across firms that have made the same choice (in the same markets).

### 9.4 JOINT EQUITY VENTURES

#### 9.4.1 Why Do Firms Enter into Joint Ventures?

We shall define a joint equity venture as any long-term alliance which falls short of a merger, and in which two or more economic entities own a sufficiently large proportion of the equity capital to give each of them some degree of control or influence over key areas of decision making. The participating owners in a JV may be business enterprises, public bodies, international agencies, NGOs or individuals. A cross-border JV is one in which economic entities from at least two countries are involved. When any one economic
entity owns the majority (that is, 51% or above) of the equity stake in a JV, it is *de jure* able to control the decision making in the venture. *De facto*, however, the extent to which control is exerted by a majority shareholder depends on two main factors. The first is the contribution – both financial and non-financial – that each of the shareholders can, and does, make to the venture. The second is the transaction costs which may have to be incurred before a mutually acceptable decision is reached, for example, in respect of the location of a new investment or an R&D facility, the degree of outsourcing, the allocation of export markets, and the repatriation of profits.

In other cases, although an MNE may own a majority equity stake in a foreign-based venture, it may choose to devolve decision making to that venture. It will do this whenever it is perceived that the local partner, for whatever reason, is likely to take the optimal organisational and operational decisions, and where there is a complete congruence of goals, institutional and managerial philosophy between the foreign and domestic shareholders. By the same reasoning, a firm with a minority interest (that is, less than 50%) may not have *de jure* control, but because of its size, experience and the nature of its contributions to the JV, it may still exercise a good deal of influence (Prahalad and Hamel, 1990). Moreover, such influence may vary according to the structure of the equity stake. A JV in which there are just two active equity shareholders – one holding a 51% and the other a 49% stake – is likely to be organised and managed very differently from one in which there is no majority shareholder but several substantial minority shareholders, or, indeed, from one in which two firms each own one-half of the equity capital.

Much will also rest on the identity of the other partners and what each brings to, and expects from, the coalition. For example, it is quite possible for the majority shares of a foreign affiliate to be owned by the host government, yet for it to have no active role in its management. Often, the function of such passive partners is to ensure that, as far as possible, the local shareholders or other stakeholders get a fair share of the value added by the affiliate, and that the decisions taken by the board of directors are not against the interests of the majority stakeholder. In other instances, a JV may involve both a financial and an active participatory input from each of the partners.

A joint equity venture may be initiated by two or more parties to the venture setting up a new enterprise to supply a particular range of goods and services. Or it might come about by one, or more, of the participants partially acquiring the assets of the other. A cross-border JV may be owned by shareholders from one or more countries. It may be the only foreign investment in which one or more of the parties to the venture may be involved. Alternatively – and this is increasingly the case – it may be part of an integrated network of international value-added activities.

Like fully owned affiliates, JVs may be established to service, or better service, markets, to acquire or augment resources or capabilities, to gain access to new markets or institutions, or to promote a more efficient deployment of existing foreign-based assets. To this extent, the motives underlying JVs are exactly the same as those for MNE activity set out in Chapter 3. Conglomerate companies might also engage in JV activities as part of their portfolio restructuring strategies. In some cases, the initiative for setting up a cross-border collaborative venture may come from sources in the host country. Examples would include a Chinese firm seeking a UK partner to help it develop a new range of pharmaceutical products for sale to the Chinese market, a Thai clothing firm wishing to arrange a JV with a Japanese trading company to help it market its products in Japan or a South African
accounting firm wishing to attract part of the value-added chain of a leading global MNE. Increasingly, two or more established MNEs may also set up a JV to fulfil a specific objective, for example, tapping into a global network of institutions, which neither can (or is prepared to) achieve on its own.

Other JVs may arise as the result of partial acquisitions or by merger. This may also be encouraged, and sometimes partially financed by the domestic banks of the acquiring firm, and by international financial agencies, such as the International Finance Corporation, the World Bank, the European Investment Bank and the Asian Development Bank. A recent example is the acquisition by Nanjing Automobile of the assets of the UK Rover company after its bankruptcy in 2005. For an injection of cash and access to their Asian markets, the Chinese partners are gaining access to the British firm’s technology – and perhaps more important in their bid to become a global producer, the Rover brand name.

In organising its foreign production, a firm may choose to share its ownership with another firm for a variety of economic or strategic reasons. In some cases, as we have indicated, a host government may not allow a foreign entity complete ownership of a local firm. Should this happen, a JV may be the second-best option open to it. Until the late 1990s, Chinese authorities made joint ownership a requirement for foreign equity investment in China, and restrictions in sectors such as banking and retailing have only recently been lifted following the entry commitments made by China upon joining the WTO. As Buckley et al. (2003) have suggested, in such cases, the firm’s strategy is strongly influenced by its ownership structure, rather than vice versa. In other instances, however, JVs may be perceived as a first-best cross-border ownership and organisational strategy. This is particularly likely to be so where each partner brings to the venture a different, but complementary, set of resources, capabilities, institutions and markets, where the financial and other resource commitments involved are substantial, and where the outcome of the venture is highly uncertain. In such a situation, the transaction costs of partly owning and managing a JV are likely to be less than those of fully owning and controlling it. This, in turn, would suggest that the expected returns (discounted for risk) perceived to arise from the additional capital necessary to acquire a full ownership are less than the marginal opportunity costs of that capital.

The literature identifies a bevy of other characteristics of, and the reasons why, firms conclude equity JVs. Sometimes such ventures are used as the initial mode of entry into a foreign market, or as a way of acquiring intangible assets or knowledge about local supply capabilities and labour conditions. Sometimes a foreign affiliate may find it easier to deal with a host government, or gain contracts from public authorities if it is locally financed and/or managed. Sometimes a foreign company may not have the capital (or the credit rating) to form an affiliate by itself. Learning from the JV partner, whether in terms of market knowledge, production technology or the local institutional environment, may also be an important motivation.

Joint equity ventures will be preferred to non-equity contractual arrangements for exactly the same reasons as will fully owned affiliates, namely, to reduce production or transaction costs, to better access resources, capabilities, markets and institutions, and to advance the strategic objectives of the participating firms. The exact nature of the market failure is likely to be context specific. It will depend inter alia on the nature of the products being supplied and/or exchanged, and the quality of the relational capital of the
trading parties. Thus, some JVs are vertical and essentially replace offshore subcontracting and/or licensing relationships along the value-added chain of a particular product. Others are horizontal, and are concluded primarily to exploit the economies of scope and scale of at least one of the investing parties across value-added chains. Both may be undertaken to protect or advance the competitive positions of the participating firms and to assist them in the restructuring of their portfolio of assets. Joint equity ventures may be used both as an entry into unfamiliar markets and as a way of acquiring or monitoring new technological and organisational developments.

The joint equity venture, then, is an enterprise that attempts to capture the general benefits of internalising the market for the intermediate products of the participants and any specific benefits associated with shared joint ownership. At the same time, it makes it possible to spread some of the transaction costs associated with the indivisibility of scale and scope economies. Hennart (1988) has termed JVs motivated by this objective as ‘scale’ ventures, and has distinguished them from ‘link’ JVs, which are prompted by the simultaneous failure of at least two intermediate product markets. In both cases, as long as the expected economic and strategic gains are sufficient to offset the organisational costs involved and the economic rent forgone, joint ownership will be the preferred modality of foreign participation.

9.4.2 When are Joint Ventures Likely to Succeed?

The simple answer to this question is when the parties are in complete accord about:

1. the objectives of the JV;
2. the amount and type of resources, capabilities and market access which each partner should commit to the venture;
3. the incentive structures and enforcement mechanisms underpinning the creation and deployment of such resources and capabilities;
4. the way in which the venture is organised and managerial responsibility is divided;
5. the distribution of benefits of the venture; and
6. the form and direction of the venture’s growth and/or its pattern of diversification.

There are many reasons why such an accord may be difficult to achieve or maintain among the JV partners. Also the transaction costs associated with reconciling or settling such differences as and when they occur may sometimes cause a JV to flounder or fail.

Some potentially contentious issues surrounding the formation and operation of an international JV may be explicitly addressed in a contract. Others require a more informal institutional arrangement, including a tacit understanding between the partners, backed by a reasonable level of trust. As a general rule, free-standing or self-contained cooperative ventures are less likely to give rise to conflict situations than those which are intended to advance the global strategy of the foreign investor. The expectation of gains to the rest of the MNE, of which a JV is part, may considerably influence operational decisions with respect to such functions as the offshore sourcing of part of the supply chain, the location of R&D, marketing and distribution strategies, the movement of personnel and transfer pricing. These may not accord with the interests of the local partner. The composition costs and benefits of JVs to the enterprise as a whole may be differently
interpreted by the parties, according, for example, to their institutional assets (Oi). Indeed, a benefit to one party may be a cost to another, and as a consequence, consensus will be more difficult to reach. Finally, there is likely to be some conflict of interest where the parties come from different corporate or national cultures, where they practise radically different organisational and managerial styles, and where the division of executive responsibility is unclear. Successful JVs require a congruence of goals and institutional mores among partners, and for them to possess empathetic corporate personalities.

The more idiosyncratic and less saleable the assets provided by each partner, the greater the problem of costing these contributions. Particularly in cases in which national governments may have a substantial equity stake, disagreements may arise on operational issues, such as production methods, the sourcing of inputs, employment and training of nationals, and export strategies. What the local partner perceives to be in its best interests will not necessarily be that which the foreign firm aims to achieve. An extreme example is the closure of a plant which, although viable, is not perceived to advance the global strategies of the foreign MNE. However, there are many day-to-day decisions which may constrain the freedom of the partners to a JV.

By contrast, it is possible to identify situations in which the economic or strategic interests of firms are closely aligned to each other. These include those identified by Richardson (1972), and especially where there are pronounced organisational, market and technological synergies, and where the combined strengths of the partners help each to compete more effectively against larger more aggressive competitors (Contractor and Lorange, 1988, 2002), and to negotiate more effectively with suppliers, customers, labour unions and governments. In each case, however, it is possible that one or other of these objectives could also be successfully accomplished through a non-equity alliance. The subject of strategic alliances will be discussed later in this chapter.

One of the factors influencing the viability and success of cross-border JVs concerns the choice of partner. Several writers from Tomlinson (1970) onwards have sought to identify the criteria by which a partner may be selected. These include those identified by Richardson (1972), and especially where there are pronounced organisational, market and technological synergies, and where the combined strengths of the partners help each to compete more effectively against larger more aggressive competitors (Contractor and Lorange, 1988, 2002), and to negotiate more effectively with suppliers, customers, labour unions and governments. In each case, however, it is possible that one or other of these objectives could also be successfully accomplished through a non-equity alliance. The subject of strategic alliances will be discussed later in this chapter.

One of the factors influencing the viability and success of cross-border JVs concerns the choice of partner. Several writers from Tomlinson (1970) onwards have sought to identify the criteria by which a partner may be selected. These include the opportunity for reciprocal benefits, a tight appropriability regime to minimise opportunism and undesirable spillover effects of shared assets and competences, a favourable past association, an ability to negotiate with foreign governments and local labour unions, compatible goals and institutional frameworks, and perhaps most important of all, a common commercial ethic and sense of corporate responsibility. Geringer (1991:45) has made the distinction between task-related criteria, which he defines as ‘operational skills and resources which a venture requires for its competitive success’, and partner-related criteria, which he defines as ‘the efficiency and effectiveness of partners’ cooperation’. Both criteria are normally related to the extent to which each partner can contribute to the core assets and incentive structure of the JV. Although the question of partner selection is clearly important, and research has examined learning within cooperative agreements, as well as accumulated learning across a portfolio of such relationships, only a few studies have examined the cumulative learning effects related to the issue of partner selection. (We shall return to this point in Section 9.5.2.)

Finally, it should be observed that the costs and benefits of joint equity ventures (compared with those of contractual arrangements) may differ according to a variety of economic or strategic characteristics which may themselves be industry, country and firm specific. Not all problems with a JV can always be anticipated or evaluated prior to the
formation of the partnership. Some are ‘experience’ rather than ‘inspection’ disbenefits. Any cooperative venture may fail due to the failure of the value creation logic, or due to failures in the management of the alliance, which, as we have indicated, may arise, for example from differences in national or corporate objectives, lack of experience with partnering, or choice of wrong partner.

9.4.3 Cultural and Institutional Influences in Joint Ventures

One of the topics that has commanded a great deal of attention by scholars is the degree to which JVs are a means for firms to overcome some of the difficulties associated with operating in culturally and institutionally distant markets. Many studies in this tradition have employed the well-known dimensions of national culture developed by Hofstede (1980), namely, collectivism–individualism, masculinity–femininity, uncertainty avoidance and power distance, or the index of psychic distance developed by Kogut and Singh (1988), based on these dimensions.

Scholars employing the latter measure include Hennart and Larimo (1998), who, using a sample of 401 Japanese and Finnish investments in the US, examined whether the extent and character of the cultural distance between the home country and the target country had an impact on the degree of ownership of affiliates. Employing a number of control variables, they found that Japanese investors, who are more culturally distant from the US than their Finnish counterparts, tended to display a greater propensity to form JVs. Employing another measure of cultural distance developed by Erramilli (1996), Makino and Neupert (2000) recorded similar results for a sample of US manufacturing firms investing in Japan. In another interesting study examining the longevity of JVs, in which they compared two kinds of Japanese ventures in the US, Hennart and Zeng (2002) found that, while the Japanese–American ventures were more likely to be sold off, liquidation was equally likely for the Japanese–Japanese and the Japanese–American types.

While the local knowledge held by the venture partner may alleviate some of the ‘liability of foreignness’ of the MNE, it introduces its own complications that arise from the need to reconcile the different corporate cultures, and possibly conflicting objectives, of the investing firms. Such problems are similar to those that arise in M&As, although in the latter case, the acquirer has, in theory at least, an opportunity to directly impose a new culture on both parties to the venture. Survey evidence of the relative contribution of national and corporate cultures on subjective measures of international JV performance was discovered by Pothukuchi et al. (2002), using a sample of 127 ventures with Indian partners. They found that the negative effect of culture distance on JV performance was more likely to arise from differences in corporate culture, than from those in national culture.

In Chapter 5, when discussing the institutionally related ownership advantages of MNEs (Oi), we distinguished between cultural factors, such as those captured by the Hofstede dimensions, and institutional factors, which referred to the range of both formal and informal institutions (incentive systems and enforcement mechanisms) which affect the motivation of employees. While cultural values and norms are a major component of informal institutions, equally important in shaping the behaviour of MNEs are the formal institutions that encourage or constrain business activity. Thus in our framework, the Oi
of a particular firm reflects both the Li of the countries in which it operates, as well as its own accumulated global learning and experience.

Compared to the large number of studies that have explored how cultural factors may affect cross-border business activity, the study of institutional factors is still in its infancy. We shall highlight a few interesting findings here. Building on the pioneering work of DiMaggio and Powell (1983), which identified the coercive, mimetic and normative processes whereby firms within a sector become more similar (isomorphic) over time, some scholars have begun to examine imitation by foreign affiliates as a means of gaining legitimacy (Guler et al., 2002; Kostova and Roth, 2002). In a longitudinal study on the evolution of entry modes of South Korean manufacturing firms in China from 1987 to 1995, Guillén (2003) used a sophisticated Uppsala-type model to suggest that a firm’s resource commitment would increase with learning, including imitation. He distinguished between JVs and wholly owned affiliates, and although the results of the study were somewhat mixed, its meticulous design, which sought to identify the extent to which firms learnt from their own experience, as well as from that of other firms, set the stage for further research.

Another model combining predictions from transaction cost theory with institutional factors was presented by Lu (2002) in an empirical study of the entry mode choice (wholly owned or JV) for 1,194 Japanese foreign affiliates. She found that later entrants tended to imitate the entry modes of their earlier counterparts, while firms also exhibited consistency in their entry mode choices over time. Furthermore, she discovered that a firm’s experience as a foreign investor made it less likely to imitate the entry mode of other MNEs.349

Turning to the influence of formal institutions on the choice of entry mode, and using a sample of 660 Japanese MNEs and their 2,827 affiliates in 18 emerging markets, Delios and Henisz (2000) examined the effects of firm-specific organisational capabilities and public and private expropriation hazards.350 They found that the higher the hazard, the lower the equity share, while experience from prior entry, as well as that of industry, host country or other markets, influenced the firms’ ability to mitigate these hazards. Additionally, home country institutions, such as the keiretsu and sogo shohsa, also helped to mitigate risk.351 Another interesting empirical study, which drew explicitly on North’s (1991) analysis of institutions, and how these affected transaction costs in the transition economies of Central and Eastern Europe, was that presented by Meyer (2001a). He found that wholly owned affiliates were preferred in countries that had advanced furthest in institution building, and in countries with lower geographical distance.352

9.4.4 Concluding Remarks

Over the past decade, numerous scholars have studied international JVs in the context of the choice of entry mode. In doing so, most attention has so far been focused on the choice between equity and non-equity modes (JVs and licensing), or between majority- and minority-owned ventures. At the same time, other scholars have studied the managerial challenges of collaborative relationships and the building of trust between partners. Numerous studies have also been carried out on the cultural influence, on both the formation of JVs and their subsequent performance. Yet, due largely to the wide variety of different possible settings for the JV, few consistent findings have emerged from the
literature. For example, an MNE that owns an integrated network of activities is likely to view its participation in JVs very differently from a multidomestic MNE that operates a group of ‘stand-alone’ affiliates. Similarly, a local partner of a JV will tend to evaluate the costs and benefits of the venture according to its own organisational strategy and positioning in other networks of value-added activities. It is these issues, which require a multidimensional approach and methodology, which make this a challenging area of research. Yet as we suggested earlier, it would appear that only some of these challenges have so far been successfully addressed by IB researchers.

In the beginning of this chapter, we argued that over the last three decades the range of ownership options open to MNEs has widened, and now includes a wide variety of non-equity strategic alliances. Indeed, a review of the literature quite clearly suggests that both the propensity of firms to conclude JVs and the motives for such ventures have fluctuated over the past 40 years. In a study of the ownership patterns of FDIs of large MNEs between 1961 and 1975, Gomes-Casseres (1988, 1989) identified an ownership cycle by which the proportion of JVs to all new investments by large US MNEs rose from 28% in 1955 to 55% in 1961, then fell back to only 31% in 1969. This cycle was repeated over the following two decades. The fact that the proportion of jointly owned US affiliates in developing countries remained between 34 and 38% between 1966 and 1985 (Kobrin, 1988) is entirely consistent with the findings of Gomes-Casseres. The empirical evidence also points to a distinct decline in the popularity of JVs when compared to other forms of partnering in high-technology sectors (Hagedoorn, 1996). The endemic problems of these kinds of JVs, as discussed earlier, include the risk of sharing proprietary knowledge, the ‘appetite for control’ by one partner and a divergence of strategic objectives. At the same time, non-equity, contractual forms of R&D partnerships, such as joint R&D pacts and joint development agreements, have become important modes of inter-firm collaboration.

Taking a wider and longer perspective, it may be appropriate to relate these changing ownership patterns to the advent of alliance capitalism (Dunning, 1995, 1997a, 2002b), the gradual globalisation of business activity, and to changes in the world economic and political environment. In the first three decades of the post-war period, most MNE activity took the form of market-seeking or resource-based FDI. Frequently the strategies of MNEs were ethno- or polycentric, while in the main, host governments favoured the shared ownership of inbound direct investment. In the last three decades, for both internal and external reasons, the factors making for JVs have undergone quite dramatic changes. With the growth of efficiency- and strategic asset-seeking investment, the organisation of MNEs has become more geocentric in character. At the same time, the more liberal stance adopted by many host governments towards inbound FDI since the late 1970s might have been expected to lead to a decline in the role of JVs.

However, counteracting this tendency have been the escalating costs of innovatory and marketing activities, the shortening of product cycles, the increase in speed of technical obsolescence, the technological convergence of the leading industrialised countries, the opening up of territories, such as China, previously closed to all forms of FDI, and the increasing importance of cross-border institutional learning. These factors, together with the need for firms to concentrate their areas of control over their core assets and the reduction in some kinds of cross-border market failure, have led to firms concluding a wide range of asset-augmenting coalitions. Indeed, it would be fair to say that many
contemporary MNEs, rather than regarding markets, JVs and hierarchies as antithetic organisational forms, view them as complementary transactional relationships within a network of heterarchically governed activities.

Some of the observed changes may also relate to the maturation of investment from important investor nations, such as Japan. In a perceptive paper, Jacques (1985) showed that over time, Japan has moved from a relatively closed economy which favoured inbound market-seeking JVs, aimed primarily at overcoming indigenous marketing and distribution obstacles, towards a more open economy in which the Japanese aspire to become world-class industrial leaders. To do so, however, he argued that Japanese firms needed to supplement their own assets with those of foreign firms, and to move higher up their value-added chains. Sometimes, they preferred to do this by cross-border M&As and by setting up wholly owned affiliates. However, more often than not they did so by fostering a new breed of partnership in high-value activities. Jacques showed that between 1973 and 1984, the percentage of Japanese JV entries into the US in marketing fell from 55 to 25%, while those in R&D rose from 8 to 38%. More recent evidence from Belderbos (2003) on the activities of 420 Japanese foreign manufacturing affiliates in the US in 1993, indicated that the R&D intensity of acquired affiliates substantially exceeded that of wholly owned greenfield affiliates, while the R&D intensity of minority-owned JVs tended to be higher, when the Japanese parent firm lacked a strong domestic R&D capability. This is consistent with the view of Japanese investors as ‘latecomers’, who have actively used the acquisition and JV route to gain access to foreign technology, markets and institutions.

9.5 NON-EQUITY COOPERATIVE AGREEMENTS

For the purposes of the following discussion, we shall distinguish between two main types of cooperative business relationships: vertical relationships involving buyers and sellers, and horizontal relationships involving strategic business alliances. While non-equity cooperative activity in general has increased, strategic alliances in particular have continued to gain in importance and prominence over the past two decades (Contractor and Lorange, 2002). It should be noted, however, that while we try to maintain the distinction between joint equity ventures, non-equity alliances and other contractual relationships as set out in Table 9.1, the literature on alliances does not always make the same distinction, and thus some of the discussion in this section will concern equity ventures as well.353

Before turning to examine the growth in strategic alliances, we shall briefly discuss the range of vertical inter-firm agreements and cooperative relationships that do not involve equity capital. There are a large number of these, and each reflects the outcome of a bargaining process. Each also may involve a varying degree of resource commitment and risk sharing between the parties to the relationship. They may range from one-off, time-limited agreements (for example, turnkey ventures) to continuing, geographically limited contracts (for example, franchising agreements).

9.5.1 Buyer/Seller Agreements

These mainly involve relationships along a value-added chain between a firm in one country and that in another. They include cross-border procurement (outsourcing) ventures as an
alternative to backward vertical integration or buying in the open market, and licensing agreements, franchising and management contracts as an alternative to forward vertical integration or selling in the open market. Each of these arrangements may involve varying degrees of cooperation between the parties to the agreement, together with a range of formulae by which rights and duties are assigned, and risks, responsibilities and returns are shared. Let us give some examples.

First, consider some kinds of backward cooperative or forms of buying relationships. These may consist of a one-off transaction in which the contractor simply specifies what he/she needs from the supplier, and accepts or rejects the product according to whether or not it meets that specification. Alternatively, they may involve a detailed, multifaceted and sustained relationship between customer and supplier. Such interaction may include the provision of information or financial assistance by the contractor, and/or advice on product composition, production, processing, pricing, component sourcing, testing procedures, costing human resource management and so on.

Lower costs of communications and transport, coupled with an increasing number of alternative production locations, have created unprecedented opportunities for firms to focus on their ‘core competences’ (Prahalad and Hamel, 1990), provided that they can effectively manage the hazards of an outsourcing relationship, particularly in relation to quality and reliability. The broadening of supply options by MNEs has also enabled them to learn from their more entrepreneurial suppliers, as, for example, has been done by Toyota (Dyer and Hatch, 2004). It has also allowed a group of Asian OEM producers to grow into MNEs in their own right (Leung and Yip, 2003).

A different sort of agreement is the risk service contract in which a foreign firm is subcontracted to carry out exploration, development and operations for which the contractor provides the risk capital. In this case, the capital plus interest is usually reimbursed once production begins. In addition, the foreign enterprise may be entitled to purchase part of the product at an agreed discounted price, and, in some cases, share in the profits of the enterprise. A production-sharing agreement is another variant of subcontracting. In this case, the foreign enterprise bears the production expenses in return for which it receives a stipulated percentage of the gross output plus a share of the remaining output and/or profits, as agreed by the two parties. In this case, the risk is almost entirely borne by the foreign investor without any formal equity participation.

Forward cooperative or selling agreements are even more numerous and complex. The literature usually makes a distinction between four main kinds of arrangements: ‘licensing’, ‘franchising’, ‘management’ and ‘turnkey contract’ agreements. In each case some kind of proprietary advantage is leased by the contractor to the contractee for an agreed and specified period of time. It is then the contractee (rather than the contractor) that owns the value added to this advantage. The agreements, however, may differ according to the kinds of assets or rights transferred, the allocation of rights and responsibilities between the contractor and contractee, the timing of the contract, and the nature and distribution of the benefits conferred by it.

Licensing agreements, for example, typically involve the transfer of a right to use a specific piece of proprietary technology (for example, the exploitation of a patent) relevant to the production of a physical product. Although the licensee is usually responsible for that production, the agreement may allow the contractor some control over the use made of the rights to ensure that his/her own competitive position is protected. In some
cases, such control may embrace a wide range of decisions, for example, sourcing of inputs, production methods, employment of foreign nationals and export markets served. Such control has frequently been a cause for conflict between MNEs and host governments. The usual payment for a licence is a fee or royalty based on the value or quantity of the output which embodies the information and knowledge provided by the licensor. Occasionally it may also be related to the profits earned by the licensee.

As IPR protection has improved, as R&D expenditures have increased, and as royalty rates have gone up, the management of intellectual property has become more important than ever as a strategic tool of MNEs (Grindley and Teece, 1997). The evidence presented in Chapter 11 indicates that a large proportion of licensing is conducted within firms, as a means for the MNE to appropriate the value of the intellectual property used by its affiliates. At the same time, the market for licensing between enterprises has also expanded from the licensing of manufacturing process or product technologies, to other forms of intellectual property. One example is the licensing of the format for a television show, as was done by the Dutch production company Endemol with several globally successful programmes such as ‘Big Brother’ and ‘Deal or no Deal’. Furthermore, in order to avoid paying an undue amount to other firms in royalties for the technology embedded in the products it makes, firms are increasingly engaging in cross-licensing to obtain the necessary technology, and to avoid being sued for infringements.

Franchising agreements, which are most common in the service sectors, may contain extremely detailed requirements and conditions. Examples include quality control procedures, which the franchisor may expect the franchisee to observe. Such procedures are common in the case of fast food outlets, car rental companies or fashion retailers. In other instances, however, the only service provided may be the marketing, distribution or selling of a product, for example, hotel reservation systems. As in licensing, the terms of the agreement will normally allow the contractor some governance over the deployment of the transferred rights. They are also likely to permit the contractor to make regular inspections of the franchisee’s facilities, and sometimes to have a voice over critical areas of decision making, for example, outsourcing of inputs and the recruitment of key personnel. Consideration typically takes the form of a lump-sum payment from the franchisee to the franchiser for the franchising right, plus a fee based upon unit sales.

In the case of management contracts, the ‘know-how’ of the management of the contractor is transferred to the contractee, who then has the responsibility for undertaking the management services according to the terms of the contract. However, de facto, management contracts are rarely concerned with transferring only management skills. In the international hotel industry, for example, it is common for the contractor – normally a hotel chain – to inject a particular corporate culture, vision and strategy, provide managerial and personnel skills, offer access to funds, train local personnel, provide worldwide procurement capabilities, and – through a global reservation system – tap the local hotel into an international marketing network.

For example, based on a sample of 1,131 hotels, covering over 60% of all the hotel rooms in foreign ownership, Contractor and Kundu (1998) found that management contracts, which allowed the firm to separate the real estate risk from hotel management, were the most common mode of entry (37%), followed by partly or wholly owned affiliates (35%) and franchising (28%). They also discovered that shared modes were preferred in high political and economic risk environments, while ownership was more prevalent in
low-risk environments and in low-income developing countries. The authors also revealed that, in developing countries, the risk of owning real estate was mitigated by the fact that competition tends to be less intense and the market is growing fast. Cultural distance was found to be an insignificant explanatory variable in the study, while international experience favoured equity-based entry modes. Additionally, the reservation system and the ownership of brand names are strong assets that were used to curb opportunism even in non-equity relationships.

Management contracts usually allow for a considerable amount of direction by the contractor over the contractee’s operations, including, in some cases, the appointment of senior staff. At the same time, the contractor is relieved of any capital responsibility, which may be substantial (for example, in the construction and airline industries). Successful management contracts do, however, require a close institutional understanding between contractor and contractee, as well as clearly defined lines of resource provision and organisational responsibility. Payment usually consists of a lump-sum managerial fee plus a variable royalty based on turnover and/or profits. For example, over the past decade, management contracts and concessions have been the most common entry modes in water services, where the internationalisation of firms such as Veolia Environnement, Ondeo (part of SUEZ Environment), RWE and Thames Water has brought fresh water and sewage systems under foreign management in a growing number of countries (UNCTAD, 2004:121).356

The turnkey contract is a one-off agreement by which a foreign enterprise agrees to design, build and equip a complete unit of production, such as a petrochemical plant or a motor car factory, and then turns it over to a local enterprise after a ‘running in’ period during which the staff of the foreign enterprise manages the establishment while training local personnel. This type of contract normally involves a comprehensive and integrated package of foreign assistance, covering feasibility studies, basic design, engineering, procurement, construction, technical assistance, training, finance and management, all of which are laid down in the initial agreement. The payment to the enterprise is usually based on a formula which might include a lump-sum fee plus a royalty on the output produced. In old East–West cooperative agreements, it was common for such agreements to be associated with a counter-trade arrangement.

In some respects, the turnkey agreement is like a subcontracting arrangement, but with most of the product specification being determined by the contractee rather than the contractor. In others, it is an amalgam of a one-off licensing and management contract, in so far as it is really these services that are being provided by the foreign firm. The risk for the venture is borne by the foreign firm; and the amount of ongoing cooperation between buyer and seller is usually quite limited.

Each of the above arrangements represent the main forms of vertical cooperative agreements between buyer and seller in which there is usually a one-way flow of knowledge between the partner, who otherwise would be the foreign direct investor, to the one who would otherwise be the affiliate of the investor. The extent, form and content of cooperation – or as Buckley and Casson (1988) prefer to put it, ‘coordination through mutual forbearance’ – will depend on the options open to, the negotiating strengths of, and the relational symmetry between, the two parties; and also how important each is to the other as a value-adding trading partner. To the seller, a non-equity arrangement alleviates the risks of ownership, but increases the transaction costs associated with the misuse or
dissipation of property rights, whenever these cannot be fully protected through the contract, and/or where the litigation procedure is costly or ineffective. The need to seek out ‘agents’ who are efficient, whose assets, interests and reputation complement those of their principals, and who can be trusted not to cheat (that is, be opportunistic in their behaviour) becomes more pronounced the less formal the control mechanism of the contractor and the greater the options open to the contractee. Different cultures and economic and legal systems offer different institutional incentives and/or enforcement mechanisms to encourage cooperation and reduce opportunism. There is, for example, a marked contrast between a business relationship built on forbearance, reputation, commitment and trust, as is common in many East Asian countries, and that of the US which substantially relies on the formal contract and the threat of litigation if such a contract is broken. Moreover, buyers will be more readily induced to cooperate with sellers where there are good opportunities for the latter to switch to other buyers, and/or where the former are particularly dependent on the latter for their economic prosperity.

To the buyer, subcontracting poses some similar and some different risks. Availability, price, quality and timing of delivery of the products being purchased are some of the areas in which a buying firm may fear that the kind of cooperation they require is not easily guaranteed by a contractual relationship. Again, as has just been described, the transaction costs of cooperation are likely to be least where there is a clear understanding between the parties as to exactly what each is expected to contribute to the relationship, where the benefits of non-cooperation are small, and/or where the penalties for non-cooperation are great. The fact that related services can often make up an important part of the profit for companies that in principle sell tangible goods is an indication that many market transactions are not finite in this sense.

Table 9.1 highlights the characteristics of the industrial cooperation modes just described. For the most part, non-equity cooperative agreements are neither economic nor strategic alternatives to each other, but to some kind of equity-based relationships or spot-market transactions. Such collaborative arrangements range from the general to the particular. They might involve one-off or regular transactions, and be of varying time durations. Many non-equity agreements, however, are pluralistic in that they embrace some of the attributes of other agreements, and indeed of FDI. For example, management contracts might lead both to a technology service agreement and to the transfer of marketing expertise, which has all the features of a franchise arrangement. Likewise, licensing or subcontracting agreements might contain restrictions on the use made of the knowledge or technology transferred and/or the kind of markets served by the goods or services embodying it. De facto, this gives the licensor as much control over management and marketing decisions as if it owned the licensee. Finally, turnkey agreements may incorporate a series of engineering, licensing and technical services agreements under which the local firm can obtain specific pieces of knowledge.

9.5.2 Strategic Alliances

Just as FDI may take the form of international vertical or horizontal integration, so non-equity agreements may be concluded between firms at different stages of the same value-added chain, or between firms producing on different value-added chains. The previous subsection dealt mostly with vertical non-equity relationships. This one extends that
analysis to cooperative agreements between firms supplying different products but engaging in broadly similar activities (horizontal non-equity relationships).

In two influential edited volumes entitled *Cooperative Strategies in International Business* and *Cooperative Strategies and Alliances*, Contractor and Lorange (1988, 2002) identified a host of reasons why firms might wish to cooperate with each other to promote their strategic objectives. Drawing upon their work and that of other scholars, we may identify three main reasons for the growth of strategic alliances. The first is the increasing cost of R&D in technologically advanced industries, and the global competitive pressures that have forced even the largest MNEs to collaborate in innovatory activities. Strategic technology alliances will be explored further in Chapter 11, along with other forms of technology- and knowledge-seeking investment.

Second, firms may collaborate to better exploit OI advantages arising from the economies of large-scale production, scope, specialisation and rationalisation. These benefits are particularly likely to occur in sectors where the optimum scale of plant or firm is very large, as well as in cross-border alliances where differences in the resources and capabilities of the partners may be fruitfully coordinated. Additional economies of scale may arise from the sourcing of components or intermediate services and the marketing of the end products. Such prospective gains have led to both cross-border M&As and production-sharing contractual arrangements in sectors such as autos, rubber tyres, pharmaceuticals, and in the ‘offshoring’ of some services (for example, call and design centres).

Third, firms may form alliances to co-opt or counteract the O advantages of competitors deemed to work against their interests. Such alliances may be both reactive and proactive. Typical of the former were, for example, the deals struck between several US and Japanese auto producers in the 1980s to gain better access to the Japanese market following the entry of Japanese MNEs into the US market. Alliances may also be formed as a competition-reducing measure, or to serve markets that local affiliates find it difficult to serve due to regulatory restrictions. The latter motive is, for example, common among accounting firms that typically serve foreign markets via a network of partnerships that are locally owned and managed (UNCTAD, 2004:110). Box 9.1 summarises the various motivations for concluding alliances.

Comprehensive and reliable data on alliances are hard to obtain. The information on alliance motivation, content and governance has to be culled from reports in magazines, professional trade journals and newspapers, as well as from that provided by accountants, specialised consultants and governments. There are currently two large databases on alliances that are frequently used in empirical research: the CATI (Cooperative Agreements and Technology Indicators) database maintained by the Maastricht Economic Research Institute on Innovation and Technology (MERIT), which concentrates on technology alliances, and the database of the Securities Data Corporation (SDC), which includes data on alliances as well as M&As. Both these sources provide data on unational and cross-border alliances, as well as contractual and equity-based ventures.

**Characteristics of alliance networks**

As alliance relationships have proliferated, particularly in the dynamic high-technology sectors, scholars have begun to examine the different types of positions firms occupy in such networks, and how changes in the micro-level relationships between firms might
account for the structural features of the network at the macro level. Since any social network is likely to be more cohesive within a local group than between groups, there are likely to be ‘structural holes’, or areas that are relatively unconnected, in the wider network. Two contrasting views on the importance of such gaps have informed the analysis of the dyadic relationships between firms. The first is that expounded by Burt (1992), who has emphasised the importance of non-redundant ties and the entrepreneurial actors that bridge structural holes in the network.358 The second is that of Coleman (1988, 1990), who has emphasised the tendency of social actors to replicate and reinforce their existing networks.359

**BOX 9.1 SOME REASONS FOR CONCLUDING CROSS-BORDER STRATEGIC BUSINESS ALLIANCES**

NB. These may be aggressive or defensive; they may be market facilitating or collusory; they may involve firms within the same value chain or between value chains.

- To capture economies of synergy (e.g., by pooling resources and capabilities, and by rationalising production).
- To lower capital investment; to disperse or reduce fixed costs; to better exploit scale and/or scope economies; to lower unit costs by using the comparative production advantages of each partner.
- As a consequence of the convergence of technologies and interdependencies among innovation processes, and as a response by firms to growing competition, a shorter product cycle and a faster rate of technological obsolescence:
  - (a) to spread R&D costs; to gain speedy access to new technologies; and
  - (b) as a means of promoting joint R&D and design efforts with suppliers and/or customers.
- To obtain reciprocal benefits from the combined use of complementary assets; to exchange patents and territories.
- To overcome government-mandated trade or investment barriers.
- To assist the entry process of small firms into high-risk, entrepreneurial ventures, especially in emerging technology sectors.
- To gain new knowledge about, or achieve quicker access to, markets and/or to spread marketing and distribution costs; to widen market sources.
- To pre-empt or neutralise the strategy of competitors or to advance monopoly power; as a defensive strategy to reduce competition.
- To better secure contracts from foreign governments who favour local firms; to better deal with local suppliers and/or labour unions.
- As an initial entry strategy to unfamiliar markets.
- To reduce cross-border political risks.
In the empirical literature, this has led to a distinction between local ties and bridging ties, where the former have the benefit of familiarity but entail the costs of lock-in and redundant information, while the latter engender the costs of creating a distant connection, but offer the possibility of gaining access to new information. As a result of bridging ties, even firms that are connected only within the local network, can obtain the benefits of tapping into a much wider network by linking with a well-connected firm. To characterise the position of a particular actor, formal network analyses typically use the number of linkages, network distance (the shortest path connecting two firms), centrality (the degree of connectedness of a firm), as well as the extent of redundancy (repeated linkages). By virtue of their size and range of existing linkages, MNEs often act as ‘brokers’ by linking smaller firms to their global network of activities.

How do firms decide whom they choose as partners? In the case of a smaller firm looking to gain access to the marketing and distribution network of an MNE, this is likely to be more of a ‘buyer’s market’ where the smaller firm, with little or no record of prior alliances, is likely to bear more of the risk in any contractual relationship. However, among firms with an existing track record, repeated ties with the same alliance partner may be seen as an indication of trust, and consequently increased possibilities for future partnering (Gulati, 1995). New alliance opportunities are also likely to be presented by a firm’s existing alliance partners, from whom they also solicit referrals when seeking new partners (Gulati, 1998). There is also some indication that technological overlap might be used to predict partner choice, as venture partners have been found to have significantly higher overlap than non-partners (Mowery et al., 1998).

The networks of firms that are formed by alliance partners can be beneficial in two ways. First, there are direct benefits derived from relational embeddedness (or proximate ties) in the network, notably the access to better information. Second, there are indirect or structural benefits which accrue from belonging to a network which facilitates the overall flow of information. Moreover, the social capital (track record) which firms are able to accumulate in the network allows them to further utilise the productive ties within the network. Thus firms with social capital not only have better information; they also make for better partners, and are better able to choose their partners, or at the very least, draw from a larger pool of candidates. More broadly, alliance capabilities, which we would see as components of institutionally based ownership advantages (Oi), include identifying alliance opportunities, choosing partners, finding the right governance mechanisms, developing inter-firm knowledge-sharing routines, making relationship-specific investments and adjusting to new conditions in the alliance (Doz, 1996; Gulati and Singh, 1998).

Learning from alliance partners
Among the earlier studies on alliances, Ghemawat et al. (1986), using INSEAD (European Institute of Business Administration) data, showed that, during the 1970–82 period, the majority of 1,546 alliances were concentrated in the high-technology manufacturing and information-intensive service sectors. Firms in other sectors, though sometimes no less globally orientated, appeared to favour the M&A or joint equity routes in pursuit of their strategic goals. Ghemawat et al. also found that three-quarters of strategic alliances were motivated by three factors – the promotion of technological cooperation, the integration of production and access to better distribution and marketing networks.
Over the past two decades, the need for firms to learn from their alliance partners has become even more prominent, and learning is not confined to alliances where technology development is identified as the primary goal. The intensification of competition and faster technology development cycles have resulted in firms adopting an open innovation model, in which they access knowledge along and across value chains (Chesbrough, 2003). These alliance relationships not only share many features with the joint equity ventures discussed earlier, they offer more possibilities for experimentation, since the costs of setting up or dissolving an alliance are lower than those involved in shared ownership ventures. By the same token, the flexibility offered by alliance relationships comes at a cost, which arises from a relatively low level of commitment, and the tying up of scarce managerial resources (Gomes-Casseres, 1996; Doz and Hamel, 1998; de Man, 2004).

Many of the factors that were earlier identified as important determinants of learning in JVs are likely to apply to alliances as well. According to Inkpen (2000), these include the complementarity of the partners (exchange of non-competing information), trust, tacitness of the knowledge, the availability of mechanisms for transfer, and the relatedness of the knowledge to be transferred. Mowery et al. (2002) also point out that it is important to distinguish between ability and willingness to transfer knowledge in a situation where the firms most able to benefit from each other’s knowledge also have the most to lose from any unwanted leakage since they are often direct competitors.

Following Grant and Baden-Fuller (2002), a useful distinction can be made between alliances designed to advance learning or to acquire knowledge, and those intended to access knowledge. In the former case, alliances are likely to be long term, with an increasing overlap between the partners’ areas of specialisation, while in the latter, they are likely to be of shorter duration, with little change in the areas of specialisation. The presence of these two motivations was apparent in the findings of Mowery et al. (1996), who measured inter-firm knowledge transfer within an alliance by the ‘before and after’ cross-citation rates (that is, one company citing another one’s patent as evidence of their mutual knowledge) using CATI data for 1985–86. They found that while the patent portfolios of the firms tended to converge over time in a proportion of the cases, in many others the firms displayed a declining knowledge overlap, which suggested that knowledge-accessing alliances were predominant in the sample.

A study by Hagedoorn and Duysters (2002b) made use of network analysis to study 88 firms in the worldwide computer industry in 1986–92 using CATI and US patent office data. They found that repeated ties had a positive impact on technological performance (patent intensity), and concluded that some degree of redundancy was a cost of learning in a very dynamic environment. However, bridging ties or centrality of the partners did not seem to matter in an industry with rapidly changing technology, where the structural holes, if there were any, would presumably also be of short duration.

Concerning the governance of contractual alliance relationships, Gulati and Singh (1998) hypothesised that the degree of hierarchical control would be influenced by the anticipated coordination and appropriation costs, the latter being the costs related to defending patents and trademarks, and protecting any first-mover advantages against imitation. Using CATI data on the biopharmaceutical, new materials and automotive industries, Gulati and Singh found that trust between the partners diminished the use of hierarchical control, and that, while both appropriation and coordination concerns were important in selecting the governance form, appropriation concerns (unintended
knowledge spillovers) were not paramount at the time of the inception of the alliance. A study by Oxley and Sampson (2004) using SDC data also confirmed that, while some degree of overlap in the knowledge portfolios of the partners was desirable to enable knowledge transfer, competitors were particularly reluctant to extend R&D collaboration in directions that might lead to the dissipation of marketing-related knowledge.

9.6 THE CHOICE BETWEEN ACQUISITIONS, ALLIANCES AND GREENFIELD INVESTMENT

In Chapter 2, we presented evidence of the growing share of M&As in the flows of FDI. Even while acknowledging that the intensity of M&A activity is variable, peaking during waves of heightened activity, and that FDI is often only one component in the financing of cross-border acquisitions, M&As accounted for much of the growth in FDI over the 1990s, and have become important once again since 2002 (UNCTAD, 2000b, 2006). According to UNCTAD estimates, less than 3% of M&As are actually mergers, and full acquisitions account for two-thirds of the total, while minority acquisitions are particularly common in the developing countries. Additionally, most cross-border M&As take place between firms in the same industry.

While a proportion of the M&As are clearly intended to gain market share, there is growing evidence to suggest that many – including some involving developing country purchasers – are undertaken to augment the O-specific advantages of the acquiring firm (UNCTAD, 2006). Firms may also favour the speed of M&As over greenfield investment because they want to pre-empt their competitors, to prevent them from entering a particular market, or to avoid the (perceived) unfavourable consequences of not being active in that market, or not having access to specific resources. (The competitive effects of entry by M&As are explored in Section 15.5.1.) In general, the MNE has two choices; that between greenfield investment and acquisition, or that between strategic alliance and acquisition.

The determinants of choosing between a greenfield investment and an acquisition have been analysed by Hennart and Park (1993), using a sample of 558 Japanese affiliates in manufacturing that entered the US in 1978–80 and 1984–87. They found that R&D-intensive Japanese firms preferred a greenfield investment, while those producing a product that they did not produce at home increased the likelihood of an acquisition. Acquisitions were also favoured at times when the industry was experiencing either very low or very high rates of growth (due to the speed of entry and no addition to industry capacity). Experience, as measured by the number of years since the first entry in the US, did not seem to influence the mode of entry, although using cumulative entries might have yielded a different result. In another paper, Hennart and Park (1994) extended this analysis to investigate under what conditions would a Japanese firm want to manufacture in the US. They found that it was particularly the R&D-intensive Japanese firms with a medium market share in Japan that were the most active outward investors. There was also some evidence of follow-the-leader behaviour by Japanese business groups, but none of an exchange-of-threats type investment by particular Japanese firms, although this is probably explained by the very low levels of FDI into Japan.

Another reason why a firm might choose an acquisition over a greenfield investment is to overcome organisational inertia following a period of organic growth. Specifically,
Vermeulen and Barkema (2001) hypothesised that if effective learning consists of a balance between exploration and exploitation, acquisitions would be the preferred mode to revitalise or augment knowledge, while greenfield investment would be used to exploit the existing capabilities of the firm (including past experience), and that firms would alternate between the two forms over time. They tested this hypothesis on a sample of 25 Dutch firms between 1966 and 1994 with 1,349 new affiliates, of which nearly two-thirds were located abroad. They found that the majority of the firms had no dominant form of entry over time, and that, as predicted, they alternated between the two modes.

Another factor that is likely to influence the choice between M&As and greenfield investment is the balance between global integration and local responsiveness adopted by the MNE. According to Prahalad and Doz (1987), MNEs following a global strategy exhibit high levels of integration and low levels of local responsiveness, while the opposite is true for those pursuing a multidomestic strategy. Harzing (2002) also hypothesised that the type of strategy pursued by MNEs was likely to influence the initial entry mode choice. Using the results of a large mail survey of MNEs and their affiliates, she found that MNEs pursuing a global strategy had a higher proportion of greenfield affiliates, while those following a multidomestic strategy engaged in a higher proportion of acquisitions.

When knowledge acquisition is the primary motivation, the choice facing the MNE is often that between M&As and alliances rather than greenfield entry. In addition to the difference in the financial implications between the two modalities, Vanhaverbeke et al. (2002) have hypothesised that alliances pose more hazards in terms of opportunism, while M&As might be burdened by ‘indigestibility’. They used a sample of 140 mergers and 145 alliances from the CATI and SDC databases in the application-specific integrated circuit sector (a type of microchip), and found that, while prior direct ties increased the chance that one firm may acquire the other, the extent of indirect ties (high network distance) increased the likelihood of further alliances. This is in contrast to the results of a study by Hagedoorn and Sadowski (1999), which discovered very few conversions from alliances to mergers. However, this study considered only the first alliance between firms, and thus omitted the impact of repeated ties.

9.7 A NOTE ON CROSS-BORDER CARTELS AND COLLUSION

Our analysis of cooperative agreements would be incomplete without at least a brief consideration of cross-border cartels. Unlike most of the collaborative agreements considered in this chapter, cartels usually comprise a collaboration of several firms producing similar products, which are intended to fulfil a particular purpose. Sometimes this purpose is a benign one, such as an exchange of patents, technical know-how and information. In others it is more restrictive or exploitative, as is the case with agreements on output or export quotas, consultation on bidding for contracts, price maintenance and stabilisation schemes and so on.

According to the Random House Dictionary of the English Language one definition of a cross-border cartel is ‘an international syndicate, combine or trust formed especially to regulate prices and output in some field of business’. Most cartels are formed by producers; usually they are industry specific. They are particularly common among oligopolists
in the primary product sectors, such as oil, copper, aluminium, lead, zinc and iron ore, as well as among those supplying fairly standard manufacturing products, such as steel and basic chemicals. In recent years, they have been supported by some governments in an attempt to stabilise raw material prices, or to tilt the terms of trade in favour of exporting countries, or to control the rates of exploitation of non-renewable resources. Examples include cartels formed in oil, copper, bauxite and phosphate.

International cartels have almost as long a history as that of MNEs. Indeed, the two are often alternative ways of overcoming cross-border market failure. However, cartels tend to flourish where products are homogeneous and subject to cyclical patterns of demand, where there are few economies of scope, where technology is static, and where international markets are structurally distorted. In contrast, MNE activity is most pronounced in free and growing markets, in dynamic innovatory sectors and in those producing high-income branded products, and where there are marked economies of common governance.

The propensity of firms to conclude cartels also varies according to their country of origin. Because of cultural, geographical and institutional differences, a somewhat more relaxed attitude by the European authorities towards monopolies, mergers and restrictive practices, and their acceptance of a ‘negotiated environment’, cross-border cartelisation involving European firms has been more common than that involving US firms. Indeed, at one time or another, national governments have actively supported cross-border cartelisation. This is one reason why, during the inter-war years, the number of foreign affiliates established by European MNEs fell more than did those set up by US MNEs (Vaupel and Curhan, 1974; Franko, 1976). Not infrequently, the cartels established in these years controlled both the amount and geographical distribution of FDI of their members.

The history of cartels suggests that there are certain common features between them and other forms of cooperative arrangements, and also regional integration. To be successful, the participants must be in agreement about the aims and strategies of the association, and the distribution of the benefits. They tend to be more successful where there are many buyers and few sellers; where there would otherwise be intensive price competition among the member firms; and where the products involved have few substitutes or potential substitutes. They are less likely to flourish where there are distinct and substantial differences between the O-specific advantages of the participating firms and where, in order to exploit these advantages, firms need to internalise the markets for them. In particular, there is sometimes a trade-off between the gains of the common governance of intra-firm integration and those arising from inter-firm cooperation. As with any grouping of institutions or countries, much depends on the gains anticipated from cooperative action, and the ways in which these gains are distributed among the members, compared with some other modality of achieving the same result.

Cartels are sometimes preferred to FDI where it is felt that action may need to be taken at an industry level, where collective action will help improve a particular aspect of a firm’s performance, or where it does not wish to make a substantial resource commitment. In the world economic climate of the 1990s and the early 2000s, cartels are tending to be replaced by cross-border strategic alliances, consortia of MNEs and less formal market-sharing and price agreements. Nonetheless, it remains the case that any cooperative relationship between firms has the potential to involve some collusory elements as well.
It is thus not really a question of whether close relationships might be collusionary, but whether the efficiency gains derived from better information and access to complementary resources outweigh any collusionary aspects such a relationship might engender. Historical research on inter-firm networks would seem to suggest that the cooperative aspects of close relationships tend to be prominent at times of rapid economic growth, while the collusionary aspects become more pronounced during periods of economic decline (Wilson and Popp, 2003; Toms and Filatotchev, 2004).

9.8 CONCLUSIONS

International cooperative agreements make up the organisational space between multinational hierarchies on the one hand, and arm’s-length markets on the other. While some forms of collaborative arrangements veer towards hierarchies, except that they involve the sharing of risks and resource commitments, others veer towards market transactions, except that they involve a continuing relationship between the contracting parties, which usually involves an exchange or sharing of assets and responsibilities.

In the last decade or so, inter-firm agreements have become an increasingly important form of cross-border economic involvement. Indeed it is probably true to say that they account for a proportionately higher number of transactions along and between value chains of MNE hierarchies than ever before. The rising costs of R&D, along with the increasing speed of technological obsolescence and the need for firms to respond ever more quickly to changing demand conditions and the actions of competitors, have forced the former to collaborate to maintain or advance their competitive positions.

These events, together with a more relaxed stance taken by governments on the kinds of inter-firm collaboration thought likely to advance national competitiveness, have brought about frequent changes in the strategies of firms towards such ventures. In the 1950s and 1960s, cross-border JVs and non-equity agreements were viewed primarily as a way of promoting either the market- or resource-seeking goals of ethnocentric or geocentric MNEs. Alternatively they were considered as a second-best organisational strategy to satisfy the demands of governments who were not in favour of 100% equity investment. Contemporaneously, cooperative ventures are increasingly seen as a first-best organisational form designed to spread financial risks, promote the efficient use of resources and to acquire new assets and capabilities. The emergence of the globally integrated or transnational heterarchy (see Chapter 7) has both blurred the boundaries of the firm, and de facto has rendered meaningless several of the distinctions between internal and external transactional relationships. Network analysis has shown that many relationships between firms in the network are both heterarchical and multidimensional. That is to say, Firm A may have a reciprocal (rather than a subservient) relationship with Firm B, which has another set of relationships with Firm C, which, in turn, has dealings with Firm A.

In an age of alliance capitalism (Dunning, 1995, 1997a, 2002b), this chapter has sought to identify some of the reasons why modern MNEs participate in a wide variety of interorganisational relationships; and how they affect their learning- and asset-augmenting goals. Much of our focus has been on inter-firm relationships and alliances directed at knowledge acquisition. In this, and in previous chapters, we have argued for the acknowledgement of
firm-specific capabilities (Oi), which are directly derived from the institutions in the countries in which they operate, and from the norms and values that prevail within the firm. Such capabilities form a part of the mix of firm-specific assets which help explain why firms which seek to minimise transaction costs and maximise long-term value choose different forms of governance to achieve that aim. We have also reviewed the evidence that links the firm’s choice of governance to the likelihood that it will be successful in accessing and appropriating new knowledge.

However, networks as organisational forms may serve multiple purposes, and the kind of knowledge that is transmitted through them can take many forms (Lundan, 2002). More unconventional forms of alliance partnering include relationships between firms and NGOs, such as the partnership Starbucks began in 2000 with TransFair USA, a non-profit organisation that provides independent certification for Fair Trade coffee and other products. This particular alliance is intended to help farmers organise themselves into cooperatives, and to link them to coffee exporters who provide affordable credit and a guaranteed price premium over the prevailing international market price. Another such partnership is between Chiquita – a banana producing firm – and the Rainforest Alliance, a non-profit organisation dedicated to protecting endangered ecosystems and biodiversity. In this coalition, the Rainforest Alliance brings its skills and experiences in managing integrated conservation projects as well as credibility to the project, while Chiquita is betting that the Rainforest Alliance’s stamp of approval on its bananas will add value and increase demand for the certified product. We shall return to these types of relationships in Chapter 18.
PART III

The impact of MNE activity

Part III is the longest part of this volume. Its task is to present the main findings of academic scholars and business analysts of the ways in which MNEs have impacted on both the global economy and the individual countries in which they operate. Chapter 10 begins by presenting the essential elements of a new paradigm of development. In the literature review that follows, much attention is paid to the human economic and social environment of nation states, and the effect this has on their ability not just to attract or foster, but to derive sustainable benefits from both inward and outward FDI. We take a broad view on development, recognising that development and economic restructuring may be geared to other goals than simply raising material welfare; and argue that the content and quality of the institutional infrastructure possessed by countries, which may be influenced by outbound and inbound MNE activity, needs to be incorporated into mainstream impact studies.

Drawing on our discussion in Chapter 5, where we integrated institutional considerations into the OLI paradigm, we then set the analytical framework for Chapters 11 to 18. Basically, we aver that the likely effects of MNE activity will depend on the nature and form of the unique assets of the investing companies (vis-à-vis those of their competitors) and the L-bound resources, capabilities and institutions of the countries, which generate or receive the investment, and on the organisational mechanism by which each interacts with the other, both at a given moment of time and over time. Recognising that the effect of formal institutions in reducing uncertainty and fostering economic activity is dependent on the informal institutions, we pay particular attention to the role played by belief systems and mindsets (for example, towards entrepreneurship), which may also need to be changed if FDI is to provide the benefits expected from it.

Most of the following chapters are issue orientated. Chapters 11 to 13 seek to evaluate the role played by MNEs as generators, transfrers, disseminators and upgraders of natural resources and created capabilities. The emphasis of Chapters 11 and 12 is on the competence of a country to upgrade its physical and technological assets, and, by so doing, to innovate new goods and services and produce existing goods and services more effectively. Chapter 13, on the other hand, is concerned with the impact of MNE activity on the use and upgrading of human resources and competences, without which very little economic progress can be achieved. Both chapters review and analyse a very extensive literature on the ways in which MNE activity may advance or retard a nation's wealth-creating ability – be that nation a capital-exporting (home) country or a capital-importing (host) country.
Chapters 14 to 17 then turn to examine some of the consequences of MNE activity which follow from the findings of the previous chapters. Chapter 14 looks at the impact of FDI on the allocation of a particular country’s resources and capabilities in relation to that of other countries with which the country trades. The chapter acknowledges that, in some cases at least – and especially in developing countries – the extent to which a country can balance its external payments may be a critical factor influencing the rate and trajectory of its economic and social development. By contrast, Chapter 15 deals with the consequences of inbound and outbound direct investment on the structure and efficiency of resource allocation within home and host countries. In doing so, it considers the impact of MNEs and/or their affiliates on the efficiency of producing a particular product or range of products (technical efficiency); on the efficiency of allocating resources and capabilities between different value-added activities (allocative efficiency); on the efficiency with which firms in particular sectors can fully exploit the economies of size (scale and scope efficiencies); and on the efficiency with which resources and capabilities are reallocated between uses to meet changing supply and demand needs (structural adjustment efficiency). Inter alia, this chapter touches upon some of the most sensitive issues about the operations of MNEs, for example, their effect on market structures and industrial concentration, and on the extent to which, in their pursuance of global strategies, they may engage in business practices unacceptable to home or host governments or civil society groups.

Chapter 16 then proceeds to examine some of the consequences of MNE investment on economic activities other than those which they own or control. These, essentially, are of two kinds. First, there are the linkage effects of other firms which produce further up or down on the value chain on which the MNE or its affiliates also produce (for example, its suppliers or industrial customers). Second, there are those undertaken on different value chains, which might be either competitive or complementary to those pursued by MNEs. These include the activities of competitors to MNEs in product or factor markets, and those which are supportive to MNEs, or their affiliates, as members of a cluster or network of interdependent activities. The literature suggests that these spillover effects may sometimes be more important than the direct effects. They are also often those to which governments pay special attention when designing their incentive structures and economic strategies.

After considering how MNEs affect the level and composition of international production, Chapter 17 turns to analyse some of its distributional consequences. In doing so, it pays special attention to the ways in which the share of value added created by MNEs or their affiliates may be retained by the countries host to this activity. This subject is worthy of a monograph in itself. However, in this volume, we shall limit our attention to two main issues affecting the distribution of value added by MNEs: taxation and transfer pricing. Chapter 18 concludes Part III by examining the ways in which MNE activity is affected by, and at times itself affects, a range of political, social and cultural issues that may concern both home and host countries.

Throughout these chapters, our aim is to review the important scholarly contributions that help us to assess the state of our knowledge concerning the observable and measurable range of effects of MNE activity. Additionally, we have integrated into our discussion existing evidence on the broader social and economic impact of MNE activity that is inevitably more difficult to quantitatively assess. Such issues fall under the broad
umbrella of institutional design and content. They include, for example, at a micro level such topics as corporate social responsibility and multi-stakeholder involvement in the decision-making process; and at a macro level the impact of MNE activity on the social, environmental and cultural goals and the incentive structure of national and local communities in advancing these. By integrating issues such as these into our discussion of the impact of MNEs on the well-being of the citizens of the countries in which they operate, we wish to emphasise that such consequences are part and parcel of the bundle of resources, capabilities and institutions transferred by MNEs, and that they should be evaluated alongside the more traditional measures favoured by economists.
10. FDI, growth and development

10.1 INTRODUCTION

Perhaps the most frequent and persistent question asked about MNE activity, both by citizens and policy makers of the nation states in which they operate, is ‘Is its impact on the economic and social welfare of its citizens a good or a bad thing?’. This question is usually followed by a second: ‘If it is good, how can it be made even better?’; and sometimes a third: ‘To what extent do we wish our country to be tied in to an international division of labour or to product, process and human resource strategy fashioned or influenced by large foreign-based MNEs?’.

Yet if there is one lesson to be drawn from a plethora of empirical studies on the economic consequences of FDI and the behaviour of MNEs, it is that there is no satisfactory general answer to these questions. In the formation of government policy towards MNEs, or as a result of their activities, so much depends on country-, industry- and firm-specific characteristics and the kind(s) of FDI being undertaken. It also rests on the particular effects of MNE activity with which one is concerned; the time period in which one is interested; and from whose, or which, perspective one is trying to assess the impact. For example, the long-term consequences of US direct investment in a Chilean copper mine are likely to be quite different from the short-term impact of a French takeover of a Canadian-owned hotel. The consequences for domestic employment of a UK investment in an Indian call centre operation are likely to be different from those of a Japanese investment in a German electronics firm, or that of an Indonesian investment in a US fish canning factory. The purchase of an R&D facility in the US by a Korean firm is likely to have very different consequences on the home country’s technological capacity from that of the restructuring of a Swedish MNE’s value-added activities between its parent plant and its foreign subsidiaries in South-East Asia. Questions relating to the effects of outbound or inbound investment on such non-economic variables as political autonomy, the legal framework, cultural identity, food, safety and environmental regulations are no less pertinent.

These questions have become all the more prominent over the past decade, as political opinion concerning FDI has shifted from it being perceived as a source of possible economic exploitation and social disruption, to it being sought after as a desirable means to enhance competitiveness or to jumpstart economic growth. In developed countries, the observed concentration of FDI in various clusters of high value-added economic activity has led to renewed efforts to use FDI as a tool of regional development. In some cases, such as automotive investment in the US, a race to attract FDI has taken place, where regions have bid against each other using a combination of overt taxes and subsidies, and (alleged) covert promises of regulatory leniency (Donahue, 1997). At the same time, the growing trend of FDI in services is giving rise to fears about job losses among both professionals and semi-skilled workers in developed countries (UNCTAD, 2004).
In developing countries, the import-substitution policies of the 1970s have largely given way to policies to encourage both inbound and outbound FDI as a means to achieve structural upgrading and sustainable growth. However, as Chapter 2 has shown, the stock of inward and outward FDI is highly concentrated in a small number of recipient countries, consisting of the Triad of the US, the EU and Japan, other OECD countries, and a group of rapidly growing or newly industrialising economies, such as China, India, South Korea and Brazil. It is true to say that relative to their GDP (the size of the potential market for an investor), many more developing countries – including some in sub-Saharan Africa – have attracted an above-average proportional share of FDI (UNCTAD, 2006). However, in most cases, this share is made up of a small number of very large resource-seeking investments, particularly in the mining and petroleum sectors. In general, however, such investments have yielded few spillovers, and have failed to transform the economic structure of the recipient countries. Furthermore, the benefits of FDI vary a great deal depending on the host country, and as a consequence, scholars have become increasingly interested in the institutional and policy-related factors that both enable and constrain developing host countries in their efforts to appropriate beneficial spillovers from FDI.

One of the dilemmas of the early 21st century is that those countries which have the most need for the bundle of resources, capabilities and entrepreneurship brought about by FDI, are those which are the least likely to appear attractive to foreign investors. Why is this? Received wisdom suggests that this reflects the paucity of complementary assets (especially the right kind of human resources) and markets sought by MNEs. But underpinning these weaknesses often lies a failure of countries to provide the legal framework and incentive structures for economic development. Most of the studies we shall review in the subsequent chapters have tended to focus on a relatively narrow range of economic effects attributable to MNE activity. However, it is becoming increasingly clear that the ‘soft’ issues of development, which include institutional restructuring and upgrading at a formal and an informal level, underpin any process of development and growth. While economic growth is an essential part of development, it is not development as such. Similarly, while in many cases FDI may be a necessary condition for growth in some countries, it is rarely, by itself, a sufficient condition.

In Part II, we also suggested that no general conclusions could be drawn about the causes or determinants of FDI and MNE activity. Different kinds of international production demanded different kinds of explanations as, indeed, did the same value-added activity undertaken by MNEs of different nationalities. In particular, we found it useful to make a distinction between the ‘why’, ‘where’ and ‘how’ of international production. At the same time, we argued that while no one set of explanatory variables could explain all kinds of foreign production, the economic theorist or business analyst was able to offer a useful conceptual framework for understanding the reasons for MNE activity in toto. In particular, this framework was based on a number of economic and organisational propositions. The key analytical tools were a macroeconomic theory of factor endowments (including such ‘soft’ endowments as culture and belief systems), and a micro-organisational theory of market failure and strategic management. In particular, the purpose of the eclectic, or OLI, paradigm was (and is) to offer an analytical structure within which specific explanations of MNEs, or MNE activities, could be accommodated. In this and in Part IV, we switch our attention from the firm, or group of firms, as the unit
of analysis, to the country, or group of countries. Specifically, we shall consider some of the consequences of the strategies and actions of MNEs for the economic and social well-being of the countries in which they operate, as well as the institutional and other responses by the individuals and organisations most affected by their presence, for example, national governments, labour organisations, consumers, regional authorities and civil society.

In the following chapters, we shall discuss the effects of MNE activity on a number of policy-orientated areas. Building on the theoretical framework presented in Chapter 5, this chapter will argue that the content and quality of the micro- and macro-incentive structures and enforcement mechanisms of a country, is a significant determinant of its ability to both attract and to benefit from inbound FDI, and to generate its ‘home-grown’ MNEs. To be able to assess the contribution of MNE activity to a country’s development objectives, we begin by mapping out our understanding of the critical factors that contribute to economic restructuring and growth. We then explore how FDI interacts with these determinants, and what allows host countries to appropriate the gains from it.

10.2 A NEW PARADIGM OF DEVELOPMENT

One of the (largely) unexpected consequences of the contemporary phase of globalisation is that it is compelling academic scholars, national governments and supranational entities to reappraise the nature and purposes of development and structural change, and the ways in which the activities of MNEs are both responding to, and helping to shape, it. The new paradigm of development is concerned with broader goals of development than espoused by neoclassical economists, and it seeks to explore in a deliberate and specific manner the role of institutions in the development process.

In the 1970s and early 1980s, the key propositions of the dominant (neoclassical) development paradigm were based on the underlying premise that, as a group, the goals and characteristics of the developing countries were fundamentally similar to those of developed countries except that the former were in an earlier stage of their development process. Furthermore, it was considered that the best way to advance the living standards of the poorer countries was for them to replicate the institutions and economic policies of the wealthier nations which (it was assumed) had helped the latter to grow and prosper in the first place.375

With some notable exceptions (for example, those of the dependencia and Marxist schools of thought376) and unlike the pioneers of development economics (such as Albert Hirschman, Ragnar Nurkse and Paul Rosenstein-Rodan377) the ideas and writing of economists on development in the 1970s and early 1980s paid relatively little heed to social goals, or to the output of goods and services which could not be readily supplied by the market. In the developed world at least, most of the literature was an extension of the (dominant) neoclassical paradigm in which the role of government was limited to facilitating market transactions, and to supplying goods and services that markets could not, or would not, supply. Essentially, Western economists interested in development sought to apply the toolkits of received trade, productivity and growth theory to explain why some developing countries grew and others did not (Reynolds, 1970). For the most part, little attention was given to such goods as the environment, participation, safety, equity
and sovereignty, identified, for example, by Jack Behrman in his writings (Behrman, 1971), and two decades later by Joseph Stiglitz.\textsuperscript{378}

Although critical – to a greater or lesser extent – of the neoclassical approach, the influential work of scholars such as W.A. Lewis (1965), Paul Streeten (1974), Hollis Chenery (1979) and Bela Balassa (1981, 1989) – some of which are summarised in Lall (1993) – essentially viewed the plight of developing countries as stemming from a deficiency of indigenous resources and capabilities to meet a mosaic of economic objectives. For example, in his careful and succinct appraisal, Streeten identified eight ‘gaps’ which developing countries needed to fill if their policy objectives were to be met.\textsuperscript{379} But neither he, nor other scholars at the time, paid much regard to the process by which the gaps might be reduced. The neoclassical approach was, by and large, a comparative static and frictionless one.\textsuperscript{380} It also tended to be monocausal and unidimensional. In the main, it deployed single equilibrium models. The means and ends of development were largely treated independently of each other. Scant consideration was given to international public goods, such as the environment and pollution. The role of civil society and supranational agencies was largely discounted, and the broader issues of ownership, cultural identity and participatory capitalism were, for the most part, ignored.

Outside the mainstream scholarly community, however, a broader perspective on development issues was emerging. Nowhere was this more demonstrated than at the United Nations in New York, where the whole issue of the sovereignty and participation of the developing countries in the emerging world economy was being actively aired and discussed. In the 1970s, pronouncements such as the Charter on Human Rights, the New International Economic Order and the Permanent Sovereignty over National Resources, together with the report of a Group of Eminent Persons on the Impact of Multinational Corporations on Development and International Relations (UN, 1974) became the basis for identifying the major goals and tasks of development.\textsuperscript{381} However, the case for a more holistic and integrated strategy towards development, which also recognised the legitimate desire for political sovereignty and autonomy in economic decision making by national governments, was not shared, or shared to the same extent, by all developing countries. It was, for example, most vociferously voiced by Latin American countries and least by the emerging and rapidly growing East Asian economies.\textsuperscript{382}

For the most part, these opinions and actions had little impact on mainstream scholarly thinking. Nor did they greatly influence the views of business, which, at that time (with a few exceptions), thought it was the responsibility of national governments to deal with the extra-economic issues of development – including those related to social justice and the environment. Moreover, the strategies of such enterprises were perceived to be very much driven by the need to meet their shareholders’ interests, which, in the main, were of a profit-maximising, and/or capital appreciation kind. The voice of civil society – in the guise of special-interest groups – including consumer and ethical shareholder activism, was generally muted and ineffective, except when directed to particular issues such as apartheid, natural disasters and the more blatant unacceptable practices of MNEs, such as the ITT affair in Chile and the Nestlé milk powder scandal.

One reason for this was that the awareness factor and the radius of concern – especially among the stakeholders in developed countries – was, itself, not well developed. Neither international travel nor modes of communication approached 21st-century levels or
degree of complexity. However, some established and well-meaning philanthropic organisations and religious groups continued to emphasise the needs of the poorest inhabitants of developing countries, as indeed did trade unions in respect of the rights of workers.

In short, mainstream scholarly thinking in the 1970s and early 1980s tended to embrace a narrow, somewhat ethnocentric, unifaceted linear and static economic approach. In particular, it paid relatively little attention to the extent and quality of institutional infrastructure and social capital, which today is widely accepted as one of the main determinants of the success by which developing countries can create and effectively deploy the resources and capabilities, and access the markets, necessary for their development.

In the early 1980s, however, two factors contributed to the emergence of a new paradigm for development. These were the liberalisation of markets and technological advances in cross-border transport and communication. Both factors were at least partly the result of the changes in political and economic ideologies following the fall of the Berlin Wall, and the emergence of the Reagan and Thatcher regimes. Between them they led to an enlargement of the economic opportunities of firms, a widening and deepening of social intercourse between people of different cultures, and a huge reduction in cross-border transaction costs.

Perhaps the most significant consequence of globalisation, which directly stems from the features just identified, is its implications for the institutions of countries and for the ideas, mindsets and conduct of individuals and organisations. Our assertions here are twofold. The first is that one of the unique features of contemporary capitalism is that, in a variety of ways, it links – it interconnects – different behavioural mores and belief systems, which, though, \textit{prima facie}, are not easily reconcilable with each other, at least need to be respected if international commerce is to be conducted in a peaceful and productive way. Globalisation has, in fact, dramatically widened and changed the physical landscape and human environment for doing business. The number of new players on the world economic stage – each with its own distinctive ideologies and values – is increasing all the time. Technological advances have made the global physical and human environment more volatile, complex and challenging. TV, travel and the internet have increased the awareness and understanding (not to mention the expectations) of the peoples of the world about both the commonality and diversity of their belief systems, institutions and aspirations. They have facilitated the cross-border exchange of knowledge, ideas and information. Dwindling transport and communication costs have widened the radius of interpersonal transactions, and have facilitated new forms of inter- and intra-corporate cooperation. All these events are compelling a reconfiguration of the means and ends of development; and are leading to a questioning of the means by which poverty and the other problems associated with our contemporary global economy might be resolved.

The second of our two assertions is that changes in incentive structures, enforcement mechanisms and the belief systems underpinning them, rarely move in tandem with technical, economic or political change. Indeed as Michael Novak (1982:56) has sagely observed ‘each age of capitalism depends on a moral culture which nurtures the virtues and values on which its existence depends’. In this volume, we argue that not only is globalisation requiring a new understanding of the purposes, nature and determinants of development, but also, if it is to be economically sustainable, democratically inclusive and
socially acceptable, its institutions and institutional infrastructure need to be remodelled and upgraded.

10.3 INSTITUTIONS AND ECONOMIC GROWTH

The new paradigm of development avers that institutions form the essential incentive structure for both market- and extra-market-based development. Our aim in this section is to examine in more detail how the content and quality of institutions, both formal and informal, influence economic activity. Although the role of institutions has been most prominently featured in the context of economic development, we do not confine our attention solely to developing countries. Indeed, issues such as the ability of a country to upgrade its informal institutions are likely to be critical to sustaining economic competitiveness in both developed and developing countries. In the three sections that follow, much of our focus will be on the effects of inbound FDI. However, the role of outbound FDI and the restructuring of economic activity in the home country will be addressed in our concluding section on the investment development path (IDP), and several subsequent chapters in this part of the volume.

In his influential book entitled Development as Freedom, Nobel laureate Amartya Sen (1999), presents a compelling argument whereby development consists of the achievement of individual freedoms, encompassing five distinct types of freedom: political freedoms, economic facilities, social opportunities, transparency guarantees and protective security. This is both a moral argument, inasmuch as it argues that development as freedom is the only kind of development that is worth pursuing, and a pragmatic argument, inasmuch as it avers that individual freedom is essential in enabling people to establish and maintain good institutions.\(^\text{384}\) Freedom allows for an active civil society, and governments that are responsive to the needs and concerns of the electorate are likely to engage in at least some redistribution of wealth in society. Indeed, empirical evidence using larger samples and improved measurements across a wider range of countries is beginning to demonstrate that achieving the kinds of freedoms Sen talks about might in fact contribute to economic growth, or at the very least, do nothing to impede it.

Another Nobel laureate, and one of the fiercest critics of the so-called ‘Washington Consensus’, with its emphasis on macroeconomic stability, prices, privatisation and hard budget constraints, has been Joseph Stiglitz (1998). A former Chief Economist of the World Bank, Stiglitz has accused the Bank of confusing means with ends. In his perception, while the financial reformers had concrete goals, which could be reached by advocating strict policies and by presenting blueprints for the design of formal institutions, these were insufficient to ensure development. Instead, Stiglitz emphasises the need to see development as a process of transformation of society, where economic growth plays an important role, but where societal transformation in other areas including health, equality and education is likely to be even more fundamental. Further criticism of the exclusive focus of the World Bank and the IMF on the market and governance institutions (as important as they are) has come from Jeffrey Sachs (2001), who argues that in the poorest countries, the effects of geography cannot be ignored, and that development cannot be achieved unless more aid is directed to improving methods of tropical agriculture, environmental management and public health.\(^\text{386}\)
However, even if one acknowledges the importance of institutions and their underlying norms and values, as North (1990, 2005) points out, there is nothing inevitable about a trajectory of progress towards better institutions, and there is nothing inevitable about economic growth. Quite the contrary; steady economic growth in a relatively large number of countries over the past half-century is the historical exception rather than the rule. The following subsections will examine in detail the role of both formal institutions, and informal institutions and social capital, as preconditions for economic growth.387

10.3.1 Formal Institutions

What, then, is the role of formal institutions in influencing economic growth? In an ambitious exercise, Rodrik et al. (2002) set out to compare three rival sets of determinants of economic growth. The first set centres on geographical measures, including climate, natural resources, disease burden and transportation costs, which feature prominently in the recent work of Sachs (2000, 2001). The second set is related to the integration view of Frankel and Romer (1999), which asserts that economic openness and international trade is sufficient to induce convergence between poor and rich regions.388 The final set is based on an argument about the role of institutions, specifically focused on property rights, the rule of law and social infrastructure, particularly drawing on North (1990, 1999), and which is very similar to the argument advanced here.

To quantify institutional content and quality, Rodrik et al. employed a wide range of available measures, such as the rule of law index from the governance indices of Kaufmann et al. (1999)389 of the World Bank, a similar index from the International Country Risk Guide, a political rights index from Freedom House, as well as a measure of the constraints on the executive from the Polity IV dataset. Using a larger sample of 140 countries and a smaller one with 80 countries, and GDP per capita in 1995, the authors came to the conclusion that institutions ‘trump’ everything else; in other words, once institutional quality is controlled for, economic integration through trade has no direct effect on income, and geography has, at best, weak effects.

They also concluded, however, that their results offer limited guidance for policy makers, because while they show, for example, that the protection of property rights matters for economic performance, it is by no means clear as to what kind of regime of property rights should be put in place. In China, for example, the recent influx of FDI would seem to indicate reasonable levels of confidence in the protection of property rights, although the formal system is quite different from that of the Western model; while in Russia the property rights regime is much like that in other European countries, but investment is plagued by investor uncertainty.

We argued in Chapter 5 that if institutional evolution is seen as a process that is path dependent, but uncertain, one would expect experimentation to play an important role in improving institutions. As a consequence of such experimentation, one would also expect that institutions that are differently designed, but functionally equivalent, would persist across countries and over time.390 Seen in this light, cases such as the Chinese dual-track approach to liberalisation, or the inefficiency of the retail sector and lifetime employment practices in Japan, offer robust examples of successful experimentation rather than signs of failure (Rodrik, 2000b). On the other hand, network ties can all too easily turn into crony capitalism, and the earlier Japanese model, which helped to fuel growth between the
mid-1980s and the mid-1990s, saw some of the same features turn into liabilities in the subsequent decade (Florida and Kenney, 1994b; Ozawa, 2003).

However, this does not mean that all incentive structures and enforcement mechanisms perform their job equally well, and much can still be learned by studying the best practices of well-functioning institutions across the globe. The design of institutions such as a competition authority, supervisory agency for the financial markets, or the central bank can be imitated up to a point, but these will never exhibit a one-to-one correspondence with the supporting institutions, or indeed, the belief systems, of the recipient country. Subsequent to applying the new blueprints, change in the formal institutions of a country can occur quite rapidly, as was the case with the shock therapy applied in Russia. However, this is likely to be successful only if the underlying informal institutions – including the mindsets of individuals and organisations – have had time to change (Stiglitz, 2002; Dunning, 2003c). Indeed, one might speak of a kind of absorptive and adaptive capacity on the national level that allows for the introduction of new forms of governance to a host country, with minimal social disruption.

Insights drawn from both the transition economies in Central and Eastern Europe, and from the experiences of the East Asian NICs, have resulted in a fairly convergent set of strategies that a successful government should adopt to enable economic growth. These are sound macroeconomic policies, institutions to secure property and contract rights, policies to enhance competition, oversight of financial institutions, policies to increase social cohesion, policies to increase social participation in the political system and transparency and accountability in government (Rondinelli and Behrman, 2000; Kogut and Spicer, 2002; Rondinelli and Cheema, 2003; Dunning, 2005a). Which particular institutional form such policies take will depend on the context, but the overall importance of institutions in determining economic growth has become increasingly clear in the light of growing empirical evidence. In the rest of this subsection, we shall examine some of this evidence in more detail.

The ability of an economy to recover from external shocks by incrementally reconfiguring and improving its institutional structure, or indeed to recover from devastating external shocks such as the Great Depression with a comprehensive set of institutional reforms, may rest on relatively simple foundations, as suggested by Rodrik (1998a, 1998b). He investigated why growth collapsed in so many developing countries after the 1960–75 period, and why, in particular, governments of countries such as South Korea were able to undertake the right adjustment policies and growth continued, while others in countries such as Turkey and Brazil failed to adjust, and faced a long period of stagnation. Rodrik’s (1998a) simple contention is that changes in economic growth in response to external shocks are the product of the negative influence of the shock itself, multiplied by the ratio of social conflict to the institutions of conflict management. More division in a society results in a bigger shock, while for a given level of social division, better institutions of conflict management mitigate the extent of the shock.

The study covered a sample of 92 countries, comparing their rates of growth between 1960–75 and 1975–89, 1975 being a year following the oil shocks when linear growth in many countries had been disrupted. Latent social conflict was proxied by measures of inequality, ethnic and linguistic fragmentation and social distrust, while institutions of conflict management were proxied by measures of democracy, quality of government and public spending on social insurance. The conclusion was that countries with divided
societies and weak institutions for conflict management, fared significantly worse after 1975. Rather than blame the problems of many Latin American economies on import-substitution policies – not to mention supranational agencies – he suggests that many governments were either unable or unwilling to engage in the right macroeconomic policies to overcome the consequences of rapid changes in relative prices as a result of a terms of trade shock.  

These results led Rodrik (2000b) to argue that democracy is a meta-institution, and that the ability of countries to withstand the external economic shocks that inevitably accompany liberalisation and integration into the global economy is dependent on their level of democracy. Using a sample of 90 countries from 1970 to 1989, he found that democracy was linked to higher levels of human capital, as measured by school enrolment, and to two measures of a more even distribution of income. The first measure is the distribution of the manufacturing surplus, of which a higher share is paid as wages to workers in democratic countries, when controlling for productivity and other possible determinants. The other measure is the Gini coefficient for income inequality in the economy as a whole. In addition to being more robust in the face of external shocks, he shows that for a given level of mean income, a democratic country would experience less variability in income over time. Rodrik argues that countries such as Singapore, Taiwan, and South Korea, where a strong hand of the government successfully guided the development process, are in fact the exceptions rather than the rule when looking at the full sample. Adjustment to shocks requires managing social conflict, and democratic institutions are likely to make this task easier. There is thus no necessary trade-off between democracy and growth.

Other scholars such as Keefer (2004) point out that democratic regimes represent the clear majority, and that the concept of democracy is a broad umbrella, which generally incorporates the existence of political checks and balances to curb the ability of political actors to act opportunistically, together with universal franchise and competitive elections. Consequently, the question is not so much what type of system is in place, but whether it achieves the aim of improving the conditions of the majority, while avoiding the appropriation of rents and catering to special interests. Although the initial conditions leading to economic growth may favour the concentration of interests in the hands of a few influential groups, such as in the petroleum industry or in mining, the question germane for long-term development is how countries escape these constraints, and develop more open and inclusive forms of governance.

An important element of good governance is related to the ability of governments to make credible commitments to the electorate. Keefer argues that young democracies might suffer from the lack of established reputations of the political parties and of the candidates themselves. Hence there might be more incentives for politicians to seek favour either by having a clientelistic relationship with some key parts of the electorate, or by appealing to strong performance on aspects that have little to do with development, such as military might or religious purity. Additionally, concerns about credibility might bias public officials towards projects where performance is more visible, such as infrastructure projects as opposed to education.

In addition to studies in which the connection between democracy and growth itself is the object of interest, there have been a large number of empirical studies on the determinants of growth that include democracy among the independent variables. We
shall focus on just one well-known study, on the connection between human capital and growth.

In a study of 98 developed and developing countries in the 1960–85 period, Barro (1991) found that growth in real per capita GDP was positively related to initial human capital (using school enrolment rates as proxies for human capital), and negatively related to initial level of real per capita GDP. Growth was also found to be positively related to measures of political stability, and in cases where poor countries grew faster than rich countries, this reflected the former’s attention to institutions favouring the upgrading of human capital. In other words, Barro contended that a poor country is likely to grow only if its stock of human capital exceeds that of other countries at the same level of GDP per capita.398

We thus conclude that formal institutions matter for economic growth.399 We have a reasonably good understanding of what the institutions ought to achieve, although their specific design and content will vary from country to country. Institutions to secure property and contract rights,400 policies to enhance competition, oversight of financial institutions, policies to increase social cohesion, and policies to secure participation in the political system, have been recognised as being critically important to industrial restructuring and economic growth. Advanced democratic countries seem to enjoy better formal institutions, which is argued to be because open political participation allows for more information to be considered in the decision-making process,401 while also fostering social cohesion. In some developing countries – notably with Confucian and Islamic heritages – informal institutions continue to influence the determinants of development. It is the ability and willingness to adapt these institutions to the demands of globalisation that is one of the critical determinants of the extent and content of MNE activity in these countries. Across the developing world, levels of education are strongly correlated with levels of democracy, and are a significant determinant of growth.

10.3.2 Informal Institutions and Social Capital

In addition to recognising that a functioning economy needs well-defined property rights and a system of law with credible enforcement, the informal norms and values in society not only affect which functional form different institutions will take, but also condition the extent of experimentation and institutional evolution that will take place. A topic that has captured the interest of many scholars in recent years concerns what is broadly known as ‘social capital’.402 The concept of social capital is a measure of the quality of the informal institutions in a society, and can be defined as ‘the web of cooperative relationships between citizens that facilitates resolution of collective action403 problems’ (Brehm and Rahn, 1997:999). Problem solving is facilitated by civic norms, which may be enforced either internally (for example, via guilt) or externally (for example, via shame or ostracism), and encourage people to cooperate in situations that approximate the well-known prisoner’s dilemma.404

We believe that cooperation and collective problem solving are of paramount importance, since it is likely that 21st-century globalisation will continue to present national governments with increasing levels of volatility and complexity, as well as presenting firms with increased market uncertainty (and opportunities). Such uncertainty is a reflection of the ongoing global division of labour that is resulting in a widening gap between the gains
accruing to the skilled and unskilled; but it is also related to a number of significant problems involving global externalities, such as those to do with climate change and water scarcity.

How, then, is the stock of social capital formed on a societal level? Previous chapters have already discussed the importance of trust in enabling firms to engage in economic relationships that fall somewhere between markets and hierarchies. The two issues that are of particular interest to us here concern the importance of associational life and the role of trust. While the evidence on the importance and impact of associational life in contributing to social capital is somewhat contradictory, the role of trust seems to be of central importance. We shall now examine these two factors in more detail.

The role of civil society

The focus on associational life in contributing to social capital has a long history, stretching back to Alexis de Tocqueville’s classic study, Democracy in America (1835). More recently, in his influential book Bowling Alone, Putnam (2000) has argued that the decline of social capital in the US, as manifested for example in a growing mistrust of the government, is due to a decline in associational life. The associations Putnam is interested in include the public interest groups that conventionally comprise civil society, but they also include those whose primary purpose is to advance the interests and well-being of their members, such as bowling leagues. Putnam’s argument is that civic groups are important, because they are a kind of a training ground for society at large, and the social capital developed in a smaller group induces people to participate more broadly in public life.

None the less, documenting that associational life in the US may have changed its form, with more of it possibly being conducted through workplaces and over the internet, does not mean that social capital has necessarily declined. Furthermore, in any discussion about the role of social capital, in order to avoid circularity, care must be taken not to simply equate the presence of social capital with good outcomes (Sobel, 2002). This means that when observing a country with good governance and steady economic growth, one must not be tempted to conclude that this only, or even mainly, reflects the quality of its underlying social capital, or conversely, to conclude that any failing country must be suffering from a lack of the appropriate social capital.

We have argued that social capital is essential in ensuring that people engaged in a search for solutions to collective action problems seek solutions that benefit as wide a public as possible. However, associations can also include self-serving clubs that simply seek a redistribution of resources to advance their own aims. Civic engagement alone, as critics of Putnam have argued, does not need to improve one’s confidence in government. Like any club, a civic group is only worth joining if the benefits to being a member are different from and better than the benefits one would achieve by not being a member. Depending on the purpose and aims of the group, one can build a strong sense of trust and loyalty for persons within it, without this translating automatically into generalised trust in society at large.

Indeed, excessive levels of social capital can also breed inertia and intolerance. In his book The Rise of the Creative Class, Richard Florida (2002) observes that more and more of the economic wealth of advanced countries is related to the activities of the creative class, which he defines as the people engaged in such traditionally creative fields as research, design and the arts, as well as many professionals in the area of business, law
and healthcare. As an economic geographer, Florida is well aware of the effects of agglomeration economies on the locational attractiveness of large cities as the kinds of locations the creative class is attracted to. However, beyond this, he has found that the locations favoured by the new creative class are those metropolitan areas that exhibit diversity and tolerance of many forms of individual behaviour, but that are not particularly rich in associational life. Indeed, he has argued vigorously against the damaging effects of insularity and intolerance, since this can stifle creativity and innovation (Florida et al., 2002; Florida and Gates, 2002).

The role of trust
If social capital is essential in creating the institutions that facilitate economic exchange, and associational life can be either a help or a hindrance, from where does social capital fundamentally originate? One answer that appears with regularity in the literature is the influence of belief systems – and particularly attitudes towards trust – in facilitating economic exchange. We briefly discussed the role of trust in Chapters 4 and 5 in influencing the costs of transacting between firms. In Chapter 9, we presented evidence that the presence of trust lowers the costs of transacting in MNE networks. But beyond acknowledging that ‘trust matters’, how do we measure its influence?

The particular difficulty one encounters in trying to assess the role of trust in facilitating economic exchange is that it is difficult to separate the effects of trust from those arising from learning and experience. For example, regular positive encounters with others, such as through participation in civic groups, are likely to make a person more positively predisposed towards others, and to encourage beliefs about the trustworthiness and fairness of others. In Chapter 9 we saw that repeated ties between alliance partners have been used as a measure of trust, since forming a new alliance involves a considerable element of trust, while the information gained from past experience also plays a role in the decision. The paradox of trust is that having more information gathered from experience makes it easier to trust, while also making it less necessary to rely on trust alone. Since we believe that the issue of trust is a critical component of social capital, we shall proceed to explore some of the important findings from recent research.

Using measures of trust and civic norms from the World Values Surveys to measure social capital in a sample of 29 developed economies, Knack and Keefer (1997) found that higher levels of trust and civic norms tended to be associated with a higher GDP per capita growth rate, while associational activity of the kind described by Putnam was not correlated with economic performance. They also found that trust and norms of cooperation were stronger in countries with effective formal institutions – notably with respect to the protection of private property and the enforcement of contracts – and in countries that are less polarised on the basis of class, race and gender. While they could not establish a relationship between trust and civic norms or membership in civic groups, they did find that trust and civic norms were likely to be stronger in countries with higher incomes and more egalitarian distributions of income.

A positive relationship between social capital and economic growth was also more likely in countries in which institutions were able to constrain the power of the executive, and with higher levels of education. Indeed, Knack and Keefer argue that trusting societies have stronger incentives to innovate and to accumulate physical capital, and are likely to enjoy higher returns to the accumulation of human capital. They found that
a 10 percentage point rise in trust corresponds to an increase in growth of almost 1 percentage point, an effect which is almost equivalent to the effects of a similar increase in education.

What then of the cultural origins of trust? Fukuyama (1995) has argued that advanced economies are no longer differentiated by their design of formal institutions, as these can be copied by other countries, but rather by differences in the content and influence of civil society, and the norms and values that underlie institutions. He is particularly interested in the forms of governance found in Chinese-influenced countries in East Asia, namely China, Hong Kong and Taiwan. Their relatively large business organisations are still organised based on kinship ties, typical of low-trust countries such as Italy or France. This is in contrast to high-trust countries such as Germany, Japan, South Korea and the US, whose economies tend to be dominated by large hierarchies staffed by professional managers. Indeed, dating back to Weber’s (1920) seminal analysis linking Protestantism with economic growth, scholars have suggested that hierarchical religions such as Catholicism, Orthodox Christianity and Islam might be inimical to the formation of horizontal ties and trust.

Conceptually, categorising countries into low- and high-trust cultures implies that levels of trust are something that are passed along as part of a national package of social norms and values. While this may be at least partially true, due for example to shared belief systems, an alternative explanation might be that one’s propensity to trust reflects a combination of personality traits and exogenous influences, such as experiences of poverty, social exclusion and discrimination. Indeed, the extent to which people might be taught to trust each other seems quite limited; certainly most of the evidence of trustful relationships in the literature seems to reflect an element of repeated and beneficial interaction. As an empirical matter, this would suggest that before attributing levels of trust simply to culture, tradition or religion, one should rule out the influence of other known antecedents such as education, shared experiences and presence or absence of social justice.

An interesting study by Brehm and Rahn (1997) on the antecedents of general trust, defined in their study as confidence in government, did just that. Specifically, they hypothesised that general trust was influenced both by the levels of interpersonal trust and the levels of civic engagement. Interpersonal trust is grounded in a person’s psychological characteristics, such as a predisposition towards happiness or satisfaction, as well as life experiences that build or erode trust, such as incidences of poverty or discrimination. Additionally, the quality and quantity of education was argued to be an important external determinant that is likely to improve an individual’s level of trust, and to make him or her more tolerant of individual differences.

Using data from the pooled General Social Surveys between 1972 and 1994 in the US, Brehm and Rahn fit a structural equation model to study the two-way effects between confidence in government, civic engagement and interpersonal trust. They found the strongest positive relationships between interpersonal trust and general trust, as well as between civic engagement and interpersonal trust. While civic engagement on its own exerted a small negative influence on general trust, the indirect effect of civic engagement on encouraging interpersonal trust contributed to the strong positive relationship between interpersonal and general trust (confidence in government). They also found that confidence in government exerted a smaller, but still significantly positive, influence on
interpersonal trust. As expected, education and income were found to be important determinants of both trust and civic participation.

This implies that social capital is also likely to be subject to vicious and virtuous cycles. In a virtuous cycle, higher levels of interpersonal trust translate to more trust and confidence in the government, which, in turn, improves interpersonal trust. In the opposite scenario, a lack of interpersonal trust results in a lack of confidence in the government, and perceived poor performance by the government could then result in even further erosion of trust in the institutions of government. Rose-Ackerman (2001) provides vivid examples from the transition economies of Central and Eastern Europe of such vicious and virtuous circles. If officials are corrupt, citizens have no recourse to the state in mediating their disputes; consequently such a situation requires very high levels of interpersonal trust. However, in such a situation, interpersonal trust is likely to be scarce as well, and one solution is to rely on other networks within which trust can be more easily established; inter alia, such networks may include organised criminal groups, as has been the experience in Russia and Ukraine, for example. The converse situation is where corruption is at a minimum, and there is transparency and accountability in government. When there is a public expectation of honest dealing, people are confident that any breach of trust is likely to be punished, and they are likely to report any wrongdoing. For the same reasons that trust in inter-firm dealings lowers the costs of monitoring, trust that is extended from trust between people to trusting the impartiality and fairness of public institutions reduces the burden on the state to maintain very cumbersome methods of enforcement.

Indeed, it does not appear to be a pure coincidence that according to both the World Competitiveness Yearbook published by the Institute for Management Development (IMD), as well as the Global Competitiveness Report of the World Economic Forum, the most competitive economies in the world for several years running have included countries such as Finland and Sweden. According to Transparency International, these countries are among the least corrupt in the world, while in the World Values Survey, they are among the leaders on measures of interpersonal trust. They are also countries which enjoy high levels of educational attainment, substantial social equality and low levels of sexual and racial discrimination, the latter helped by populations that are quite homogenous.

We conclude, then, that confidence in the ‘top-down’ institutions requires confidence in the ‘bottom-up’ informal institutions when interacting with one’s fellow citizens; and that differences in personality aside, experiences of discrimination, poverty and lack of educational opportunity are likely to erode this confidence. An active civil society may encourage the emergence of generalised trust, but excessive social capital may stifle innovation. Efficient educational systems have an important twofold role to play. While they may directly increase the human capital available for economically productive activities, they may also help upgrade the social capital of society, and the relational capital of both firms and industries (Dunning, 2004c).

10.4 INSTITUTIONAL QUALITY AND THE ABILITY TO ATTRACT FDI

How does the quality and content of institutions affect the ability of countries to attract FDI, and to derive long-term benefits from such investment? Previous chapters have
provided examples of how the content and quality of the institutions in the host country may affect the mode of entry of the MNE (Meyer, 2001a, 2001b; Meyer and Nguyen, 2005). They have also been shown to be important determinants of location in studies focusing on specific host countries or regions, particularly in emerging economies and economies in transition (Holland et al., 2000; Bevan et al., 2003; Dunning, 2005a). The studies reviewed in this section complement this evidence by assessing how country-specific incentive structures and enforcement mechanisms have affected the flows of FDI across a large number of host countries.

10.4.1 Good Governance

What kinds of (developing) countries are likely to receive flows of FDI? Globerman and Shapiro (2002) examined the effects of governance infrastructure on both FDI inflows and outflows for a cross-section of 144 countries in 1995–97, with the group of developing and transition economies treated separately. They used the Governance Matters indices (Kaufmann et al., 1999), which themselves are aggregated from several different sources, to measure differences in governance. To measure human capital they used the Human Development Index (HDI) of the United Nations, which includes GDP per capita, educational achievement, literacy standards and life expectancy at birth. To measure environmental quality they deployed the Environmental Sustainability Index (ESI) developed by the World Economic Forum, together with Columbia and Yale universities. The governance measure provided the strongest evidence for a positive relationship between good governance and inflows of FDI (inflows and outflows were estimated in separate models). The HDI was also found to be significant for attracting inflows of FDI, as was environmental sustainability.

Does democracy itself encourage flows of FDI? Li and Resnick (2003) classified democratic institutions into three main categories: how citizens choose alternative policies and political leaders, the existence of institutional constraints on the decision-making power of the elected leaders, and the guarantee of civil liberties including rights of political participation. They argued that as far as an MNE investor is concerned, democracies offer fewer opportunities to appropriate rents, and are, therefore, less attractive. Democratic regimes also make it more likely that the state would be more likely to protect the interests of domestic firms than that of the MNE affiliates. On the other hand, in contrast to autocratic regimes, their democratic counterparts are also more likely to uphold property rights, and not to act in a predatory way towards foreign investors.

Li and Resnick investigated these propositions in an empirical study covering 53 countries from 1982 to 1995, using a wide range of country-level measures, drawn mostly from the Polity IV database, including multiple measures of property rights and democracy to check for robustness. They found that while democracy had a positive effect on flows of FDI, this effect was almost entirely accounted for by the indirect effect that democracy had on strengthening property rights protection. Another comprehensive study by Jensen (2006), combining a sample of up to 114 countries between 1970 and 1998 with an extensive series of interviews, confirmed that the presence of democratic institutions, along with federal political systems, favoured inward FDI. He also discovered that a move from an authoritarian to a democratic regime could increase FDI flows by as much as 50% (Jensen, 2006:85).
The importance of formal institutions designed to protect property rights for attracting FDI is increasingly recognised by scholars, particularly in respect of safeguarding and policing intellectual property rights (IPR). The importance of IPR protection is likely to vary strongly between industries, with high-technology sectors being much more sensitive to differences across borders.

This is confirmed in a study by Smarzynska Javorcik (2004a) who used survey evidence from the European Bank for Reconstruction and Development on the location of FDI in Central and Eastern Europe and the former Soviet Union in 1995. This evidence was complemented by additional firm-level data and two indices of IPR protection: the extent of existing legal protection, and the quality of enforcement mechanisms. She found that, while weak IPR protection was likely to lower the probability of FDI in high-technology industries, weak protection seemed to induce foreign affiliates in all sectors to focus their activities more on distribution rather than on production. Broadly similar results were reported by Nunnenkamp and Spatz (2004b), who used a sectorally disaggregated dataset, which included a large number of host countries and multiple measures of IPR protection. They found not only that the effects are both sector and host country specific, but that stronger IPR protection might result in a higher quality, as well as an increased quantity of FDI.

10.4.2 Bad Governance

As the final part of our review, we wish to explore the proposition that if good-quality institutions are required for a host country to attract FDI (and to benefit from it), it should also be the case that bad institutions would repel it. We shall look briefly at the effects of two kinds of bad governance: the impact of corruption on flows of FDI, and the attractiveness of pollution havens as hosts for FDI.

Corruption

The existence of corruption, commonly defined as the use of a public position for private gain, is understood to be a combination of motivations, such as low civil sector wages, and opportunity, which is influenced partly by the type of economic activity, and partly by the level of discretion given to public officials. While some reduction in corruption may be achievable by changing the incentives on these two dimensions, this is not likely to be enough. Corruption is one aspect of bad governance, and it is unlikely to be eradicated unless accompanied by fundamental institutional reform and a change in mindsets and belief systems (Tanzi, 1998).

From the perspective of the investing firm, corruption acts as an arbitrary form of taxation (Shleifer and Vishny, 1993), where the payer can never be certain whether the expected benefits will materialise. There has been increasing interest among IB scholars on the issue of whether corruption impedes flows of FDI. Such studies typically regress measures of corruption using for instance, the International Country Risk Group corruption measures or the Corruption Perceptions Index (CPI) from Transparency International, against flows of FDI. The empirical problem here is twofold; first corruption is highly correlated with other measures of (bad) governance, and second that FDI flows are highly concentrated in countries that are mostly not very corrupt. The first factor makes it difficult to isolate the influence of corruption from other aspects of governance.
The second means that one is unlikely to find differences in flows of FDI between countries that are attributable to differences in levels of corruption, except in the case of resource-based investments. Among OECD countries, variations in levels of corruption and other forms of inappropriate governance are seldom large enough to result in a lack of investment, while resource-seeking investment is relatively impervious to bad governance owing to its limited choices of location. The remaining FDI flows are directed at a small number of countries, and it is, therefore, difficult to establish a robust relationship between corruption and the ability of a country to attract inbound MNE activity.

However, with these caveats in mind, the available evidence generally confirms the negative relationship between corruption and FDI. Building on the arguments of Shleifer and Vishny (1993) on corruption as an arbitrary form of taxation, Wei (2000) looked at the distribution of bilateral stocks of FDI between 12 source countries and 45 host countries in 1993 using three measures of corruption and two measures of affiliate taxation. Both corruption and taxation were seen to have negative effects on FDI; for example, raising the corruption index of Singapore to that of Mexico would, depending on model specification, have the same effect as raising the tax rate by between 18 and 50 points.

Using three years of bilateral data from seven home and 89 host countries, Habib and Zurawicki (2002) found a negative relationship between the CPI measure of corruption and flows of FDI. Using a pooled cross-country time series of 40 countries and seven years, Zhao et al. (2003) found a negative relationship between flows of FDI and both the CPI well as with an index of transparency from the IMD's World Competitiveness Yearbook. Finally Campos et al. (1999) found some evidence that in addition to levels of corruption, the unpredictability of corruption matters for investors based on survey responses, although the study suffers from a small sample size.

Switching attention to the home country, Cuervo-Cazurra (2006) investigated how domestic levels of corruption affected the choice of location by MNEs. He hypothesised that firms from countries that had signed the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions (1997) would be less willing to invest in more corrupt countries, and that high domestic levels of corruption might make corruption in the host countries less of a deterrent. Using a large number of home and host countries, he found support for both propositions. He also discovered that corruption not only reduced the level of FDI a country might receive, but also changed its composition, with a greater proportion being accounted for by investors from the relatively more corrupt countries.

In addition to affecting the volume and composition of FDI, the pervasiveness and degree of arbitrariness of corruption have also been linked to the choice of entry mode of the MNE (Smarzynska and Wei, 2001a; Rodriguez et al., 2005). For example, in an empirical study involving 220 telecommunications projects in 64 developing countries, Uhlenbruck et al. (2006) found that MNEs used short-term contracting and joint ventures to mitigate the impact of corruption. To the extent that MNEs may forgo full internalisation because of corruption, this could have adverse effects on the transfer of knowledge and technology to the host country. A recent study by Weitzel and Berns (2006) also found that acquisition targets in countries that are more corrupt commanded lower premiums, further reducing the benefits to the host country.

Finally, an interesting study by Kwok and Tadesse (2006) provides additional insights on the effects MNE activity on host country corruption. They hypothesised that inbound
FDI would act as a catalyst in encouraging better business practices in the host countries. Such a positive outcome, they argued, might arise from a combination of a ‘regulatory pressure’ effect, whereby a powerful MNE’s refusal to pay bribes might induce institutional change, a ‘demonstration’ effect as local firms observed different business practices, and a ‘professionalisation’ effect due to a greater demand for professional education.422

Using a sample of 140 countries, and FDI data going back to 1970, Kwok and Tadesse found support for the contention that over time, FDI reduces corruption in the host countries. However, since the causality might run the other way, that is, that countries that became less corrupt consequently attracted more FDI, they performed several checks of robustness, using instrumental variables,423 and examining the interaction effects424 of FDI with other variables affecting corruption, such as education and culture (specifically, power distance and collectivism). The latter tests confirmed that the beneficial effects of education on reducing corruption were enhanced in the presence of FDI, while the negative effects of culture were reduced.

**Pollution havens**

While researchers have generally shown that the level of corruption is negatively associated with inbound FDI, the pollution haven hypothesis initially reflected the opposite expectation, namely, that a lack of environmental standards would draw FDI to developing countries. The ‘capital flight’ part of the argument postulated that higher costs of environmental protection in the home country would push firms to relocate, while the ‘pollution havens’ would be found in developing countries whose institutions were less geared to promoting such protection.

A proper test of this hypothesis would require two stages. In the first stage, one would need to demonstrate that in response to formal regulations and enforcement mechanisms, production in pollution-intensive sectors has, in fact, been transferred abroad, and that it has been directed to countries with lower levels of protection. In the second stage, one would need to show that subsequent to the inbound investment, exports of pollution-intensive products from the pollution haven countries have increased, and that, correspondingly, the home countries of the investing firms have increased their imports of the same goods. However, much of the available evidence deals with only one of the two stages, either with the relocation of production, or changes in the patterns of trade.

Some of the most comprehensive results to date have come from studies by Leonard and Duerksen (1980) and Leonard (1988), which revealed that US outward FDI in pollution-intensive industries grew no more rapidly than in other manufacturing sectors, and that the share of US FDI in pollution-intensive industries to the developing countries was no higher than to the developed ones. Furthermore, the share of US imports in pollution-intensive industries grew at the same rate as that of other imports.425

More recently, Eskeland and Harrison (2003) have examined flows of FDI to Côte d’Ivoire, Venezuela, Morocco and Mexico, between the early 1980s and 1990. Using four separate panels as well as a pooled sample, they found some weak evidence that foreign investors located disproportionately in sectors with high levels of air pollution. However, they also discovered that foreign plants were significantly more energy efficient, and used cleaner types of energy than domestic firms. They found no reason to suppose that investment in these developing countries was related to the cost of abatement in the home country.426
It is possible, though, that country- or industry-level data might mask the effect of pollution haven investment at the firm level. Using firm-level evidence for 24 transition economies, and measuring both the level of environmental standards and the effectiveness of their enforcement mechanisms, Smarzynska and Wei (2001b) found that although there was some suggestion that FDI was attracted by lower levels of regulation, these results did not survive the checks of robustness – including those to do with alternative measures of environmental regulation – or those on the influence of the investor’s pollution intensity. In their opinion, other factors, such as the presence of corruption, which is strongly correlated with low environmental standards, are more likely to have deterred FDI.

Other recent evidence at the firm level has been provided by Dean et al. (2005) who studied 2,886 manufacturing joint ventures in China between 1993 and 1996. While environmental stringency was shown to have no effect on the location choice of investors from OECD countries, it did influence the locational decisions of Chinese investors from Hong Kong, Macao and Taiwan. There is also some evidence that, within the US, differences in environmental regulation may influence plant location choice (Bartik, 1988). Employing a state-level panel for 1977–94, Keller and Levinson (2002) found that abatement costs might have had a small deterrent effect on inbound investment, once differences in state industrial structure were accounted for, while List and Co (2000) found evidence that more stringent state regulation was likely to deter the entry of foreign investors, in both pollution- and non-pollution-intensive sectors.

Why is there so little evidence in favour of the pollution haven hypothesis? Some of the earliest explanations were provided by Gladwin and Welles (1976) and Gladwin (1977), who concluded that ‘pollution haven’ investment by MNEs was unlikely. This, they argued, was because of the higher political risks in the ‘pollution haven’ destinations, and/or the inadequacy of indigenous resources and infrastructure; and partly because of managerial reservations and expectations of the possible future convergence of differentials in environmental regulation. Additionally, it has been argued that the costs of environmental compliance have not been high enough to significantly influence either the decision to engage in FDI, or the relocation of an existing facility. Even in the most polluting industries, that is, chemicals, paper, petroleum refining and mineral processing, the annual costs of environmental compliance have not typically exceeded 5% of total cost, which is not sufficient to induce ‘capital flight’ (Leonard, 1988:88). In a broad review of the literature, Jaffe et al. (1995) found little evidence that environmental regulations in the US had a significant negative impact on the global competitiveness of US firms.

We conclude, then, that while there has been very little empirical evidence to support the pollution haven hypothesis, it has none the less persisted as an ‘urban myth’. Our concern is that the hypothesis is not only incorrect, but that it is diverting attention away from the real issue. Inbound FDI cannot be tempted by lowering environmental standards, or at least not of the kind that would contribute to development. Quite the contrary, not only are the enforcement mechanisms of environmental standards like other dimensions of governance, but good environmental performance is likely to be correlated with the quality of other institutions of governance.427

While increasing industrial production might be expected to result in higher absolute levels of pollution, the pollution intensity of production per unit of output may very well decline as economic development proceeds. Partly this is likely to reflect cleaner
technologies, and partly the restructuring of economic activity towards the services sector. The combined effect for most countries is likely to be an increase in pollution as they approach the middle-income range, and thereafter remain relatively steady as incomes increase. Evidence of this pattern in the case of water pollution was found by Hettige et al. (2000), using plant-level data for 13 countries at different stages of development in 1989–95. Further confirmation was provided by Antweiler et al. (2001), who examined the effects of increasing trade openness on concentrations of air pollution (SO₂) in 43 countries in the 1971–96 period. They found that, while trade induced small increases in pollution by changing the composition of output, the trade-induced technology and scale effects outweighed these effects, and resulted in a net reduction in pollution. In the light of the existing evidence then, there is no reason to expect a trade-off between environmental quality and FDI-assisted development.

10.4.3 Conclusion

The empirical evidence on the relationship between inbound MNE activity and the formal institutions of national governance is clear. Good governance helps to attract FDI, and bad governance repels it. Democracy tends to promote better governance, and to encourage inward FDI. Of the various institutional instruments available to governments, the evidence suggests that the protection and enforcement of property rights is particularly important to prospective investors. Corruption acts as an arbitrary form of taxation, and has the predicted dampening effect on investment. Effective environmental standards tend to be associated with other forms of good governance, and consequently encourage inbound FDI, while low standards are associated with other forms of bad governance that are likely to reduce investment.

10.5 ECONOMIC GROWTH AND INBOUND FDI

In the beginning of this chapter, we described the change in thinking that has occurred over the past decades regarding the purposes and content of development. Economic studies have mainly focused on the growth of GDP, which is both a precondition as well as a consequence of development. The new paradigm of development takes a much broader view, where goals such as security, income distribution and cultural identity are set alongside a country’s desire to attract FDI and to enhance its comparative dynamic advantage. The concept of ‘glocalisation’, or the need for MNEs to be global in orientation but to act according to local preferences, also applies to the economic and social goals of countries, where alongside economic openness and integration into the global economy, there is a desire to preserve a local cultural identity and some autonomy in decision making.

However, due to the importance of economic growth in enabling the pursuance of the broader goals of development, and the fact that FDI is increasingly seen as one of the chief modalities of promoting such growth, we shall now briefly turn to the empirical evidence on the relationship between these two variables. Chapters 11–18 will review in some detail the evidence concerning the direct and indirect effects FDI may have on the home and host countries in terms of technology transfer, employment, the balance of
payments, market structure and business practices. We shall briefly outline the argument underpinning these chapters here, in order to establish why one would expect there to be a positive relationship between FDI and overall economic growth.

10.5.1 How Does FDI Affect Growth?

The direct effects of FDI arise from the provision of a combination of financial capital, transfer of production technology, R&D capabilities, management and marketing methods, skills, institutions and entrepreneurship which might not be available or be available as cheaply in the host country. In such cases, FDI represents an activity that, in all likelihood, would not otherwise have occurred, and as a consequence, is likely to open up new markets. It may also make available new institutions, encourage entrepreneurship, increase output, restructure economic activity and raise domestic productivity. The presence of FDI may also lead to subsequent investment by local firms (a crowding-in effect). The opposite case is where, as a result of superior technology or market power, FDI crowds out indigenous firms, and results in less competition. In such cases, any increase in average productivity is likely to be due partly to the superior efficiency of the MNE, and partly to the exit of inefficient domestic firms from the industry. Additionally, an MNE may provide training to locally hired employees, or it may invest in the upgrading of the technology and skills of (a partially owned) supplier firm. As Chapter 13 will show in more detail, MNEs also typically pay higher wages than local firms. This effect is due to a combination of the kinds of higher value-added sectors in which MNEs are likely to engage, and the higher than average skill levels required for the jobs.

In addition to these direct effects, there are a number of indirect or spillover effects likely to result from FDI and MNE activity. These are those experienced by firms other than the investing MNE, which do not result from a deliberate transfer of resources from the MNE to a local partner. Such spillovers can take place through the mobility of employees, such as when the employees from an MNE (with improved skills) are hired to local firms over the course of time. The presence of MNEs may also introduce higher value-added imports to the economy, and lead to higher value-added exports, both of which may give opportunities for competitors or suppliers to learn about new technologies and management systems through observation and reverse engineering. Both employee mobility and demonstration effects are examples of horizontal spillovers to local firms in the industry of the MNE. Vertical spillovers result from backward linkages with local firms that become suppliers to the MNE. As Chapter 16 will show, backward linkages with suppliers are frequently associated with productivity improvements in the domestic firms, even if these are only in a contractual relationship with the MNE. By contrast, other firms in the industry of the MNE do not seem to benefit noticeably from the presence of the foreign firm. The benefits to the supplier firms, however, can be substantial, and these include not only the upgrading of skills and technology related to production, but also an upgrading of the systems of management and control, although at least some of the benefits are due to deliberate transfers rather than actual spillovers.

The benefits derived from FDI will also depend in part on the motivation for the investment, as well as the form in which the MNE chooses to exploit its O-specific assets (see Part II). Entry by M&A into a competitive industry in another developed economy is likely to have a very different impact from that of a greenfield investment into a
developing economy with few indigenous firms. Similarly, entry through a collaborative venture might have different consequences for local learning and indigenous R&D capacity from entry via a wholly owned subsidiary. In addition, there are benefits from MNE activity that are not experienced through FDI, such as those which result from technology licensing, franchising, long-term supplier relationships or strategic alliances.

Globalisation has made it easier for countries above a certain threshold level of development to grow, while it has made it arguably even more difficult for the poorest countries. There are few benefits from opening markets for countries at the lowest stage of development, and the benefits to lower-middle-income countries are likely to be available only if institutional improvement proceeds to allow for the attraction of more FDI and the absorption of spillover benefits. However, this has to be balanced against possible crowding-out of exports, greater possibility of capital flight related to portfolio investment, and increasing competition for inward FDI. A crisis in the global economy would be particularly severe on the middle-income developing countries, whose industrial structure is strongly dependent on sophisticated exports to the Triad (Gray, 2000).

10.5.2 Empirical Evidence

Assuming that a country has been able to attract FDI, the next question concerns its contribution towards the objectives of development. To what extent does FDI promote growth and development, and to what extent does successful development promote FDI and growth? How far and in what ways does it help the upgrading or restructuring of economic activity? How do the effects of FDI compare to those of domestic investment, and what is the role of the domestic human environment in appropriating the benefits from FDI?

Balasubramanyam et al. (1996) examined whether or not countries following an export-promotion rather than an import-substitution economic strategy experienced more beneficial effects from FDI. Their results on a cross-sectional sample of 46 developing countries, using annual average data from 1970 to 1985, found not only that higher rates of growth were concentrated in countries engaging in export promotion and trade openness, but that in these countries, it was FDI and not domestic investment that contributed most to the growth.

In recent years, growth models have increasingly moved from cross-sectional and time-series analyses to using panel data, which allows the researcher to control for unobserved heterogeneity between countries. In a study based on panel data for 32 developed and developing countries in 1970–90, de Mello (1999) found that FDI increased output growth in all countries, but in developed countries it increased total factor productivity (TFP) growth while in developing countries it increased capital accumulation but not TFP growth.

In a widely cited study, Borensztein et al. (1998) found that, in developing countries, FDI had contributed to economic growth more than domestic investment, but that the effect of the former was conditional on the level of human capital in the recipient countries. Their results also indicated that FDI would be more likely to crowd in rather than crowd out domestic investment, although these results were not very robust. The regressions were based on panel data of 69 developing countries between 1970 and 1989. Their measure of human capital stock was the initial-year level of average years of male
secondary schooling, used earlier by Barro and Lee (1993). Additional controls were regional dummies, measures of political instability, financial development, and of the quality of domestic institutions based on International Country Risk Guide indices. The inclusion of these additional variables did not change the essential relationship of the positive interaction between FDI and the quality of human capital. Their results also confirmed that most of the effect of FDI on growth arose from the efficiency gains from investment rather than from simply an increased level of investment.

The transition countries are unique among developing economies in the sense that while the technology gap with the OECD countries was large, significant investments in human resources had been made. Employing a panel of 25 Central and Eastern European transition countries from 1990 to 1998, Campos and Kinoshita (2002) found that FDI had a strong positive impact on growth, and was complementary to domestic investment. However, in contrast to the evidence from developing countries, the interaction effect of FDI with human capital (from Barro and Lee, 1993) was insignificant or even negative, which according to the authors reflected the relatively high levels of human capital in the transition countries.

Arguing that conventional causality tests were not sufficient to distinguish between the influence of FDI on GDP growth and vice versa, Li and Liu (2005) employed simultaneous equation modelling. In their endogenous growth model, they hypothesised that human capital, using the Barro and Lee (1993) measure, and a technology gap, measured as GDP per capita of particular countries in relation to US GDP per capita, were two important determinants of growth, along with the interaction of FDI with both variables to capture the role of host country institutional and absorptive capacity. They estimated separate equations for GDP per capita growth and growth in FDI for 84 countries between 1970 and 1999, including 21 developed and 63 developing countries. They found that FDI had a positive and significant impact on economic growth. They further discovered that, in developing countries, the interaction term of FDI and secondary school attainment also had a significant and positive impact on economic growth.

The technology gap had a negative direct effect, but this was more strongly negative for developed countries. The interaction between FDI and the technology gap was negative for developing countries, but positive, although insignificant, for developed countries. This could be interpreted as indicating that in a developed country context, a wider technology gap might offer more opportunities for growth, but insufficient absorptive capacity would prevent the achievement of the benefits from FDI. Finally, GDP growth was found to be an important determinant of FDI inflows of both developed and developing countries, along with market size and trade openness.

10.5.3 Conclusions

In the light of the empirical evidence, what can we conclude about the relationship between FDI and economic growth? The primary effect is that FDI increases productivity, and provided that appropriate macro-organisational policies are in place, and the institutional structure is conducive to attracting FDI, this will result in higher economic growth. Productivity increases, themselves, can be the result of either intra- or extra-MNE transfers of knowledge, organisational structures and practices, entrepreneurship or access to new markets. The gains may also be indirect, and occur in the form of spillovers.
to other local firms through learning and demonstration effects, reverse engineering, or movement of personnel, such as the hiring of people from the MNE affiliate to local firms.

Furthermore, FDI may contribute to economic growth by affecting the structural characteristics of the host economy by increasing or decreasing concentration ratios, and by crowding in or crowding out domestic investment. Increased openness is likely to facilitate learning through increasingly sophisticated imports, while local firms becoming suppliers to MNEs would induce learning through increasingly sophisticated exports. While there are good reasons to presume that FDI might be more productive than domestic investment in a developing country context, focusing solely on FDI would tend to underestimate the true extent of the impact of MNE-related activity.

However, in order to experience FDI-induced growth, a country must be able to succeed in both attracting flows of FDI, and capturing the spillovers from it. We have shown that in our contemporary global economy, the attractiveness of a country to foreign investors is being increasingly influenced by its institutional infrastructure. This comprises the formal institutions to enforce property rights, promote competition, encourage innovation and entrepreneurship, and facilitate efficient capital markets, as well as the traditions, norms and values that make up the social capital of society, and encourage trust and cooperative behaviour.

A form of government that allows for open political participation and a widespread ownership of productive assets, includes means to reduce the impact of ethnic or religious divisions, and provides a reasonable level of income equality and universal access to education, is likely to reinforce all the above components. Without such institutions, and the belief systems supporting them, growth by upgrading the productivity of indigenous resources and capabilities becomes difficult, and it is unlikely to be boosted by the beneficial effects of FDI. There is also evidence to suggest that countries which practise more democratic forms of governance are likely to be more robust in their quality of formal institutions, and in sustaining the inevitable shocks that can occur in an open economy. Finally, it is worth re-emphasising that the respective roles of formal and informal institutions and enforcement mechanisms are likely to be highly country specific, varying inter alia according to economic structure, cultural and social norms, and stage of development.

Among the factors critical to enabling host countries to derive benefits from inbound investment is its absorptive capacity. Just as a firm’s stock of knowledge may be enhanced by internal investment in R&D, or external contractual or cooperative relationships, a country’s stock of human capital can also be enhanced by its own investment in education and training, or through external sources. Among the latter sources is the knowledge embodied in the movement of people, including that of students, who return to their home country after graduation, and in the migration of skilled professionals (Mody, 2004).

10.6 THE OLI PARADIGM REVISITED

In what ways has the reconfiguration of the objectives of development discussed in this chapter, and the means by which these objectives might be achieved, affected our understanding of the determinants of the competitive or ownership (O) advantages of firms? How far has it caused a reappraisal of the value-adding attractions of alternative loca-
tions for accessing or adding value to these income-generating assets (that is, the L advantages of countries or regions)? And to what extent has it required us to reconsider the mode of choice of firms in exploiting or adding to their O advantages, most notably between internalising the cross-border markets for them (I advantages), or by selling the rights to their use to foreign firms?

The focus in this part of the volume is on the effects of MNE activity, or in other words, how the deployment of the O advantages of MNEs influences the host (and home) country of the MNE, recognising that such effects are likely to be largely sector and country specific, and dependent on the motivations for the investment. To conclude this chapter, we revisit the eclectic or OLI paradigm, first presented in Chapter 4 and updated in Chapter 5, and consider explicitly the dynamic interplay between the O advantages of firms and the ways in which these are deployed, and the L advantages of countries and regions. This relationship is depicted in Figure 10.1, which illustrates how the OLI configuration facing a particular MNE is likely to change over time, both on account of the changes fostered by the MNE in its home and host countries, as well as due to technological and market developments and government policies outside of its control.

In Chapters 4 and 7 we observed that traditionally firms had a choice in the exploitation of their O advantages among:

1. exporting (or importing) products;
2. contracting foreign firms to produce the products which might be exported or imported; and
3. engaging in foreign production to replace exports or imports.

In addition to these basic choices, Chapter 9 demonstrated the increasing propensity of MNEs to engage in cooperative or alliance-based relationships with foreign firms. In particular, our discussion focused on two popular forms of inter-firm cooperation: equity joint

![Diagram of the OLI paradigm](image-url)

**Figure 10.1  Some dynamics of the OLI paradigm from the perspective of an MNE**
ventures and strategic alliances. We argued that while equity-based cooperation can easily be absorbed within the internalisation component of the OLI paradigm, incorporating the wide variety of alliance-based forms of MNE activity into our analysis required widening our conception of the MNE as a coordinator of a network system of relationships.

Following along the lines of our earlier argument, it might also be hypothesised that the consequences of MNE activity will vary according to country-, industry- and firm-specific circumstances. The consequences of an investment by a US electronics company on a small industrialising country in which there is little local competition or supply capability, or underdeveloped or deficient set of institutions and where the host government engages in an import-substituting policy and makes stringent demands on the behaviour of foreign affiliates, is likely to be very different from that of the same investment in a large advanced industrial country where there is a thriving indigenous sector, good supply capabilities, enterprising and supportive incentive structures, and the government allows foreign investors complete operational freedom. It is also worth recalling that these examples of country-specific characteristics will also influence the incentive of firms to engage in FDI, for example, compared with non-equity ventures or exports, in the first place.

Another aspect of L-specific factors relates to the target of the impact. For example, in considering the investment by a US computer software company in India or an Italian footwear company in the Philippines, is one primarily concerned about its consequences for the economic welfare of the host countries or a particular aspect of that welfare, such as the global competitiveness of its indigenous resources and capabilities? Or is one concerned with its impact on the wider social, political and cultural goals of these countries, such as those set out earlier in this chapter? Is one interested in the impact of the investment on all its citizens or on particular sectoral interests? The impact of inbound MNE activity on organised labour, for example, may be quite different from that on domestic consumers, competitors or suppliers.

The attitude of regions with high unemployment to the presence of foreign-owned firms may be quite different from that of those with acute labour shortages. The effectiveness of MNEs in injecting more highly skilled value-added activities into a host country depends largely on the content and quality of that country’s institutions and policy towards human resource development. The impact of MNEs on the market structure and technological prowess of a particular industry may be strongly dependent on the degree of rivalry and efficiency of that industry prior to the investment being made. The consequences of the transfer of new technological assets, entrepreneurial vision and managerial skills to an economy lacking a supportive innovation system are likely to be less beneficial than where there is a well-developed system. The implications of FDI in culturally sensitive service sectors (for example, the media and tourism) are likely to vary according to the belief systems of the recipient economy. We shall now consider each part of the OLI paradigm in turn, before turning to the investment development path which maps out the changing composition of the advantages of firms and countries during the process of development.

10.6.1 O-specific Advantages

In so far as the assets owned and organised by MNEs are different from those of their uninational competitors, it may reasonably be hypothesised that the distinctive impact of
FDI, growth and development

inward direct investment will reflect the content and form of these assets. However, depending upon the stage of development of a country, there are some advantages likely to be enjoyed by foreign-based MNEs which, to a greater or lesser extent, may also be possessed by the host country’s own MNEs. These include the advantages that arise from multinationality per se. In such cases, the distinctive advantages of foreign-based MNEs may rest more in the kind of proprietary assets they possess, or any favoured access they might have to input or output markets. However, as stated in Chapter 4, the ownership of or access to these advantages does not necessarily imply that a firm will actually engage in FDI. To some extent, at least, the impact of the exploitation of these advantages may be similar to those which arise from exports or cross-border cooperative ventures.

The nature and extent of a firm’s O-specific advantages will also affect its impact on the economic welfare of the home country. For example, an MNE with an important cutting-edge technology or R&D capability which it transfers to a foreign country via its affiliates is likely to have different economic implications for the home country’s human resources development and technological competitiveness from one whose advantages largely rest in the possession of a particular trademark or marketing technique. The foreign investment by a firm whose main capabilities lie in its ability to create or utilise more efficient, but capital-intensive, production techniques is likely to affect the employment structure of its home country differently from one that is able to raise the quality of existing, or provide new, markets for labour-intensive goods and services. The impact of a firm whose foreign activities are geared to exploiting a particular natural resource is likely to have a very different impact on the consequences for the trading structure of the home country from one whose activities are designed to substitute for exports from the home country. An MNE that derives substantial economies of common governance through closely integrating the product and sourcing strategies of its global operations may affect the industrialisation policy of its capital-exporting country very differently from one that has a monopoly of the product it supplies, but seeks to serve only its domestic market.

All the above O advantages stem from the favoured possession of or access to particular intangible assets. Others referred to in Chapter 4 arise from the ability of the firm to coordinate a set of interrelated assets more effectively (namely, Ot advantages). This ability essentially reflects the investing firm’s opportunities and capability to internalise cross-border intermediate product markets, and/or to augment its assets and competences better than can some alternative organisational form (for example, joint ventures or cooperative agreements). Such O advantages all arise from the common governance of similar or diversified cross-border value-added activities. As Chapter 4 has shown, such benefits include the sharing of overheads, the arbitraging of differential factor costs, the balancing of country-specific environmental turbulences, the exploitation of scope and scale economies and an integrated strategy towards knowledge- and market-seeking FDI. Thus, it may be hypothesised that the more diversified a firm and the more countries in which it produces, the greater the impact of these assets is likely to be.

In addition to the Oa- and Ot-specific advantages of an MNE, or potential MNE, identified by the eclectic paradigm, in Chapter 5 we added a third: institutionally related competitive advantages (Oi). Such advantages comprise the content and quality of the system of beliefs and incentives which are specific to a particular firm. At any given moment of time, a firm’s institutions are made up of a galaxy of both internally generated and externally imposed incentives, regulations and norms (and the response of the firm to
these). Each, in various ways, may affect managerial decision making, the values, attitudes and behaviour of the firm’s stakeholders, and how each relates to other economic and political actors in the wealth-creating process.439 Such an interactive and holistic incentive system may be formal or informal (in the Northian sense discussed in Chapter 5), and backed up by the firm’s own empowering and/or enforcement mechanisms.

By the specific incorporation of Oi into the eclectic paradigm, we acknowledge it to be an increasingly important attribute of the income-generating assets of firms. Inter alia, this reflects the increasing complexity, volatility and uncertainty of the physical and human environment in which firms are placed.440 As with the resource-based theory of the firm, for Oi advantages to yield a net competitive advantage (compared with the Oi of rival firms), they must be unique, non-imitable and sustainable. At the same time, we recognise that it is the totality of the O-specific advantages of a firm (that is, its Oa, Ot and Oi) which will define its willingness and ability to engage in new, or to increase its existing, foreign value-added activities.

We believe that globalisation and related technological changes, together with the macro-institutional response to these, are compelling scholars to more carefully identify and evaluate the contribution of the Oi of firms to the value-added process, both relative to the Oi of their competitors, and to other forms of O-specific assets. In some cases the advantages may arise from their internalisation of country-specific institutions. Examples include an extension of IPR, a revision of the patent laws, more effective enforcement mechanisms imposed by governments to counteract corporate malfeasance and corrupt practices, and a greater willingness by them to form partnerships with various stakeholders in society to promote more environmentally friendly growth, more ethical consumerism and a more active role in poverty alleviation. In other cases they may be more firm specific, and include a proactive upgrading of corporate social responsibility, or new forms of collaborative arrangements designed to speed up the innovation process. Which particular form or forms, of incentive structure is (are) more likely to achieve any particular behavioural goal? These are questions – and many others like them – which we can only ask but not answer in this volume. But we are suggesting that to better understand the determinants and effects of MNE activity in both developed and developing countries, they do deserve more serious attention by IB scholars.

As we have already indicated, the composition and strength of the Oi advantages of firms is likely to be strongly contextual.441 In particular, it is likely to reflect the character of the macro-institutional infrastructure of the country or countries in which they operate. The extent and ways in which the internal incentive structure of MNEs, or potential MNEs, of a particular nationality take on board these institutions, and adapt them to their own belief systems and strategies, is likely to be an important ingredient of the quality of the former’s unique and sustainable resources and capabilities. For example, an ethnocentric strategy to the institutional management of an MNE’s foreign affiliates which are located in very different cultural or political regimes from that of the investing country, is less likely to generate Oi advantages, compared with that of a geocentric strategy which externalises the distinctive incentive structures of an MNE most useful for organising its cross-border operations.

The institutional portfolio of MNEs is also likely to vary according to the kind of value activities carried out by them and their affiliates, and the raison d’être for these activities. Thus the ‘rules of the game’ and enforcement mechanisms to stimulate cost-effective
innovatory activities – particularly where the latter are jointly undertaken with another firm – are likely to be very different from those underpinning the conduct of both home- and foreign-based personnel managers in their human resource development strategies, or those of purchasing managers in setting standards for the employment conditions and safety practices of their subcontractors, or those of marketing managers in ensuring acceptable quality control procedures by their local distributors.

With respect to the motives for MNE activity, it seems likely that some kinds of strategic asset-seeking FDI are designed to gain access not only to foreign resources, capabilities and markets, but also to firm or country-specific institutions. There is, for example, a strong preference for MNEs to engage in R&D activities in countries which have well-developed and supportive national innovatory systems. Adaptations to the home-based Oi assets of market-seeking MNEs – and particularly of those with the least experience of foreign markets may also need to take account of differences in consumer preferences and behaviour; while the incentive structures underpinning efficiency-seeking FDI – particularly in (and between) low labour cost developing countries may require modifying because of the different expectations, requirements and belief systems of individual workers and/or labour unions. Lastly, the reconciliation of country-specific institutional differences is likely to play a less significant role in the activities of natural resource or capital-intensive MNEs, as these involve relatively few and fairly straightforward transactions, as compared, for example, with those of knowledge-intensive MNEs, which tend to be numerous, complex and volatile.

In our judgement, an increasing proportion of the Oi of firms is being internally generated by MNEs, rather than merely reflecting the institutional context of their home countries. Indeed, one might predict that the greater the cultural diversity of the countries in which a firm operates, and the more volatile and complex the transactions it undertakes, the more likely it is to accumulate and assimilate new forms of Oi – particularly if it pursues a metanational strategy towards its foreign operations (Doz et al., 2001).

10.6.2 L-specific Advantages

In Chapter 4 it was suggested that a firm’s propensity to invest in a particular country is likely to be strongly influenced by the factor endowments, created capabilities and markets available in that country relative to others, as well as the extent to which it is perceived that the economic system and policies of a country enable it to exploit its O advantages profitably.

There are several ways of characterising a country’s L-specific advantages. Two well-known frameworks are the environment/systems/policy (ESP) paradigm of Koopmans and Montias (1971) and the Porter (1990) diamond of competitive advantage. In the ESP paradigm countries are classified according to their economic environment (E), economic systems (S) and government policies (P). Here ‘environment’ encompasses the resources and capabilities, including a wide range of intangible assets to a particular country, as well as the ability of its enterprises to use these to service domestic or foreign markets. ‘System’ means the macro-organisational mechanism within which the allocation of these resources and capabilities is decided. For example, does the market primarily perform the task or is it decided by government fiat or by some combination of the two? What is the role of commercial hierarchies in affecting the transaction costs of different organisational forms?
‘Policy’ means the strategic objectives of governments and the macro or micro measures taken by them, or related institutions, to implement and advance these objectives, within the system and environment of which they are part.

The second (and related) paradigm is Michael Porter’s diamond of competitive advantages, as set out in his book *The Competitive Advantages of Nations*. Porter argues that the competitive (or O-specific) advantages of the firms located in a particular country (hence, those of the country as a whole) are determined by certain attributes which are unique to that country (in our terminology, L-specific assets). Porter identifies four of these attributes:

1. the natural resources, and created capabilities (especially human and innovatory capital, and the wealth-facilitating infrastructure of a country);
2. the level, variation, composition and quality of output demanded by domestic consumers;
3. the presence of ‘clusters’ of suppliers or supporting industries; and
4. the extent and pattern of inter-firm rivalry, and the effect this has on the innovatory and competitive strategies of domestic firms.

Surrounding, and interacting with, these four attributes, Porter identifies two others: the role of national governments and that of chance. Each of these facets of the diamond are, to some extent, interdependent. Although the relative significance of each is likely to vary between countries and between particular industries or segments of industries, it is Porter’s contention that only when they are systemically organised are they likely to be fully effective.

An examination of the literature of the 1970s and 1980s on the attractiveness of particular locations — be they countries or regions within countries — to both domestic and foreign corporations, reveals that, at that time, most emphasis was placed on (a) the costs and quality of particular factor endowments, (b) the size, character and growth of domestic markets and (c) the policies of host government, for example, taxes and fiscal incentives which might affect (a) and (b). Although, in part, (c) contained institutionally related variables, for example, social capital, these were rarely spelled out or treated holistically.

With contemporary globalisation — and particularly as a result of the transition of several Central and Eastern European and the Chinese economies from communism to market-based economic systems — much more attention is now being paid to the content and quality of the country-specific incentive structures and enforcement mechanisms affecting inbound FDI. Box 10.1 presents our taxonomy of the main host country determinants of FDI in the early 2000s. It also identifies the L-specific determinants, which, in our opinion, have become more important over the last decade or more.

Let us now consider the reconﬁguration of L advantages in the light of the new paradigm of development discussed earlier in this chapter. We have seen that the new paradigm differs in a number of important ways from the old approach, in respect of both the objectives of development and the means of achieving these objectives. Once these characteristics have been identiﬁed, the next task of national governments is to ensure that the macro- and micro-incentive structures of the society, and its constituent wealth-creating entities, are best able to create, organise effectively and utilise the resources, capabilities and markets available to them, while promoting its own long-term economic and
BOX 10.1 HOST COUNTRY DETERMINANTS OF FDI

I. General policy framework
   ● Economic, political and social stability
   ● Good governance (transparent and credible policies and their enforcement)
   ● Policies on functioning and structure of markets (especially competition and M&A policies)
   ● Private property protection (including IPR)
   ● Industrial and regional policies; development of competitive clusters
   ● Trade policy (tariffs and non-tariff barriers) and stable exchange rates

II. Policies specific to FDI
   ● Bilateral international investment agreements (IIAs)
   ● Investment incentives and performance requirements (pre- and post-entry)
   ● Pre- and post-investment services (e.g., one-stop shopping)
   ● Social amenities (international schools, quality of life, etc.)

III. Economic determinants by type of investment
   (a) Market-seeking investment
      ● Market size and per capita income
      ● Market growth
      ● Country-specific consumer preferences
      ● Structure of markets
      ● Psychic distance
      ● Access to regional and global markets
   (b) Resource-seeking investment
      ● Land and building costs: rents and rates
      ● Cost of raw materials, components, parts
      ● Low-cost unskilled labour
      ● Availability and cost of skilled labour
   (c) Efficiency-seeking investment
      ● Costs of resources and capabilities listed under (b) adjusted for productivity of labour inputs
      ● Other input costs, e.g., transport and communication costs to, from and within host economy
      ● Membership of a regional integration agreement conducive to promoting a more cost-effective inter-country division of labour
      ● Quality of market-facilitating institutions
   (d) Asset-seeking/asset-augmenting investment
      ● Competition policy (including M&As)
      ● Technological, managerial, relational and other created assets
      ● Physical infrastructure (ports, roads, power, telecommunications)
social goals. To take advantage of being part of a global economy, this also embraces the provision or upgrading of a range of institutions necessary to supplement, by way of imports, FDI and cross-border alliances, the capabilities and resources of foreign firms. But for this to be possible, the recipient country must itself be prepared to offer the institutions and institutional support which the foreign firms need if they are to engage in that kind of production – and to do so in an effective and timely manner.

Such location-bound institutions (Li) stretch along a huge range. At the one end of the spectrum, foreign investors may be influenced by the investment promotion policies of host governments, and by the content of bilateral investment agreements concluded by them. At the other, there are a host of policy options, regulations and incentives directed to influencing the entry, performance and exit conditions imposed on foreign investors (UNCTAD, 1999, 2003a, 2006).

The increasing complexity of cross-border economic transactions, and the new emphasis on the social goals of development, are challenging the willingness and capacity of individuals and organisations which previously had little to do with each other, to work together effectively. At all levels of national life, established institutions influencing and cushioning behavioural patterns are being questioned and reconfigured. Sometimes these relate to the attitudes and actions of individual consumers, workers and investors; sometimes to the business practices of firms; sometimes to the policies of governments; sometimes to the perceptions and actions of supranational agencies. Part of the questioning relates to that of long-held and respected belief systems and traditions. Globalisation is compelling a re-examination of the moral ecology of different home and host economies, not least because its form and content is becoming an L advantage (or disadvantage) in its own right (Dunning, 2003c).

Like the Oi of firms, the Li (and changes in Li) of countries (as they influence the behaviour of firms) are likely to be highly situational. In our present context, we would hypothesise that they would differ very considerably both between developed and developing countries and among developing countries. As an example of the latter, over most of the 1970s, 1980s and early 1990s, the incentive structures of most East Asian countries were much more conducive to promoting the creation and usage of their resources, capabilities and markets, and to advancing their development goals, than those of most Latin American and sub-Saharan African countries. Without a reconfiguration of its belief systems, institutions and social capital, the impressive growth path of China over the last 15–20 years would not have been possible. Finally, the balance between top-down and bottom-up incentive structures, and that between obligatory and voluntary enforcement mechanisms, is likely to be a strongly culture-specific L variable; while, as we have already indicated, without cultural sensitivity and understanding on the part of MNEs, these may

| Macro-innovatory, entrepreneurial and educational capacity/environment |

*Note:* Those determinants marked in *italics* represent those which, in the authors’ opinion (based on recent research), have become more important over the last decade or so.

*Source:* Adapted from Dunning (2006b).
certainly add to the institutional distance between the parent company and its foreign affiliates.447

There are many other country-specific characteristics likely to determine the content of L-specific advantages that we highlighted earlier in this chapter. These include the openness of a country, and the extent to which it is engaged in cross-border commerce involving different countries (compare Singapore with Ghana); how far it is multicultural and tolerant of different belief systems (compare Malaysia with Iran); its stage of economic and social development (which may affect the content and effectiveness of its supportive institutional infrastructure, compare Pakistan with South Korea); the institutional demands of its particular industrial structure (compare Saudi Arabia with Hong Kong); its size (compare Sri Lanka with Indonesia); its attitudes and policies towards wealth creation and entrepreneurship (compare Taiwan with North Korea); the extent and seriousness of its social unrest or dysfunction (compare Colombia with Chile); and, perhaps most important of all, its pattern of governance, particularly as it allows freedom of action to the main wealth creators in society (compare the contemporary situation in Vietnam and Cambodia with that of the 1980s, or that of Zimbabwe with Botswana in the early 2000s). If nothing else, these examples show (a) the importance of the Li component of a country’s unique competitive assets; (b) how sophisticated and complex the composition and quality of its various components are; and (c) how much, and why, institutional distance may vary between particular home and host countries.

In summary, the 21st-century new goals and content of development, combined with recent changes in the world economic and political scenario, suggest that L-based institutions and institutional infrastructure should be at the centre of any study of the determinants and impact of IB activity. If North (1999, 2005) is right in averring that differences in the belief systems and incentive structures between countries are a critical explanation of the trajectory and differential pace of their growth rates and development paths, it follows that the extent, form and quality of a country’s incentive structure, and its dynamic upgrading, is likely to be a critical element in influencing the ways in which inward and outward FDI contribute to that development, and to restructuring strategies of particular countries.

10.6.3 I-related Advantages

Finally, MNEs which possess similar O-specific advantages and are faced with broadly comparable L-specific characteristics of countries may still have different impacts on the countries in which they operate, because they organise and control the use of these assets differently. Chapter 3 has shown that the price and output strategies of a single-activity firm producing in a perfectly competitive market are confined to those which are consistent with profit maximisation. In an imperfect market structure, especially in the presence of technological complexity and uncertainty and where the economies of scope encourage a firm to diversify its products and production outlets, the firm has more options. This being so, it could well be that the organisational governance exerted over any one activity may be different from that exerted over the same activity if it is one of many (Caves, 1981). In other words, the ownership of assets may affect the way in which they are coordinated; and this, in turn, may affect the consequences of their usage.
Basically, throughout this volume we have assumed that an MNE will try and ensure that it controls the management of its value-added activities in such a way as to advance the interests of the enterprise as a whole. Because of differences in the common governance between a firm with many foreign affiliates and one with only one, it follows that the impact on the host country will be different. In fact, as later chapters will show, it is the different strategies of MNEs towards the accessing and use of intermediate products, and the way in which they organise their marketing and distribution networks, that many governments consider as their main distinguishing characteristics vis-à-vis uninational firms. While it is recognised that foreign MNEs may provide new resources, capabilities, markets, incentive structures and entrepreneurial vision, and home-based MNEs export technology and human capital, the unique contribution of MNE qua MNE is the way in which the resources, capabilities and institutions transferred or accessed by it are coordinated with those indigenous to the countries in which they operate.

In our explanation (in Chapter 4) of the organisational choice of deployment of the Oa and Ot assets of a firm in a foreign location, we indicated that many scholars, such as Peter Buckley, Mark Casson, Alan Rugman and Jean-François Hennart, had turned to transaction cost theory. In the case of Oa, the choice between adding value to a particular proprietary right (for example, a patent) by way of a wholly owned affiliate rather than a non-equity collaborative venture, rests on balancing the benefits of hierarchical control, such as those to do with arresting opportunism, moral hazard, a loss of reputation, and inadequate quality control, with those of reduced (or no) capital investment (and the risk attached to this), coupled with the access to added knowledge and more supportive institutional structure which a cooperative agreement might offer. In the case of Ot, by definition, there is no market for such assets apart from their use with Oa; therefore they have to be internalised.

What of the use made of Oi? Let us illustrate by considering the benefits of concluding a joint venture between an MNE and a foreign firm. The first case is where the incentive structure of both firms and the societies of which they are part in the investing and recipient countries is fundamentally the same (for example, as between the US and Canada, and US and Canadian firms). Then, only to the extent to which there are Oi advantages of the investing firm additional to those of the (possible partner) firms in the host country, would the question of the appropriate governance of the cross-border transfer of the assets (or their rights) arise. However, in so far as Oi advantages require to be deployed with Oa- or Ot-specific advantages, then they, perforce, have to be under the governance of the same firm(s).

However, the particularly interesting feature of globalisation and the new paradigm of development is not only that firms may incorporate social variables – for example, those relating to human rights and the environment – into their economic goals; but that the underlying and supportive institutions to help further these additional objectives are likely to differ significantly between investing and recipient countries. This applies no less to North/South and South/South FDI as to South/North FDI. Because of this – and this brings us to our second scenario – the relative merits of alternative trans-border organisational forms are likely to change. At the one extreme (for example, in some kinds of strategic asset-seeking FDI) the social objectives and incentive structures of the investing company or country may be totally inappropriate for it to impose on, or share with, its foreign affiliate(s). The choice is either to adapt its home-based (or global) institutions, or
to engage in some kind of collaboration with a local firm, so that the (other) O advantages transferred and those of the partner firm may be effectively deployed. Such latter institutional forms are likely to be most prevalent between countries with very different business cultures and/or belief systems (for example, China and Tanzania) or between those at different stages of development (for example, Australia and Sri Lanka).

At the same time, if the incentive structures and enforcement mechanisms of the investing firms reflect those which are likely to be eventually embraced by the host countries (as now seems to be happening in the case of Western European FDI in the Baltic states and in Croatia and Slovenia), then the Oi advantages of a firm, at least in the initial stages of its FDI in an unfamiliar country, are more likely to be internalised.

However, as with any form of foreign involvement, much will depend on the host government’s attitude and policies towards the non-resident ownership of its indigenous assets. On the one hand, the liberalisation of markets in the 1990s and the increasing integration of many developing countries into the global economy, is leading to a harmonisation of intra-firm incentive structures. On the other, the increasing attention now being paid to all aspects of CSR has encouraged some developing countries to renew their earlier attempts to ensure that the conduct and performance of foreign affiliates promotes their own particular economic, social and cultural objectives. Inter alia, these include the encouragement of foreign affiliates to abide by the formal and informal institutional mores of the host countries, and to respect the values and belief systems underpinning them. The response of many MNEs is to prefer to conclude non-equity business relationships. Examples include the subcontracting of the labour-intensive processes in the production of textiles, clothing and footwear, and the relocation of call centres from several developed to developing countries (UNCTAD, 2004).

As with Oi and Li advantages, the character and significance of those concerned with the organisational mode of exploiting or augmenting the institutional assets of the investing company is likely to be country, industry and firm specific. In the case of those activities involving culturally sensitive or complex production processes or outputs, or of first-time investors seeking to supply markets in unfamiliar human environments, one might reasonably predict that the institutionally related transaction costs of a firm might be lower if it concluded a partnership with a local producer, rather than pursue a ‘go it alone’ mode of operation. By contrast, in the case of much intra-EU and transatlantic FDI, involving the production of standardised products and relatively few transactions along the value chain, for example, oil refining, generic pharmaceuticals and routine accountancy services, there may be little advantage of a foreign investor seeking to lock into the institutional infrastructure of a partner firm, or wishing to modify that of the host country.

The 1990s saw a period of intense cross-border M&A activity (UNCTAD, 2000b). While, initially, this was primarily of an intra-Triad nature, since the early 2000s, the rate of increase of cross-border purchases of corporations in and by developing countries has outpaced that in and by the rest of the world (UNCTAD, 2006). We would suggest that part of the reason for this is not only to acquire the institutional assets of the foreign company, but also – and this is particularly likely to be the case if the buyer is contemplating expansion or restructuring the product or process portfolio of the acquired firm – to better appreciate the incentive structures and enforcement mechanisms of other organisations in the host country (including those initiated and operated by its government).
10.7 THE INVESTMENT DEVELOPMENT PATH

Having examined how the changing O advantages of firms and the L advantages of countries interact to explain the patterns of inward and outward MNE activity, we now turn to a framework that aims to capture this dynamic from the perspective of a particular country, namely, the investment development path (IDP).

Scholarly research suggests that it is difficult to generalise on the optimum role of FDI in economic development (Dunning and Narula, 1996a). In the 19th century, foreign capital, technology, human skills and entrepreneurship played a variable role in the ‘take-off’ of the development of Western European economies, the US and Japan. The experience of the 20th-century equivalents of these economies is even more diffuse. One needs look no further than the post-Second World War history of Japan and Germany, or South Korea and India, to see that economic development and success do not necessarily rest on a substantial injection of MNE activity.

At the same time, the past experiences of the Indian, Chinese and East European economies also show that the absence of MNE activity does not guarantee economic well-being either. The impact of MNEs on economies that pursue, or have pursued, inward-looking import-substituting or quasi-socialist economic policies, is likely to be very different from that of countries that pursue outward-looking export-orientated and free market strategies. An economy strongly protected by tariffs or non-tariff barriers, such as Canada in the 1960s, Brazil in the 1970s, India until very recently and Japan even in the 1990s, will be affected differently from one in which there are no or few trade restrictions, for example, Singapore, Hong Kong, Switzerland or the UK. As previous sections have sought to show, there is strong evidence to suggest that the contribution of FDI to development is strongly linked to the content and quality of the host countries’ institutions – particularly where these are geared towards competitiveness-enhancing activities.

In Chapter 4, the IDP model put forward by Dunning (1981, 1986a, 1988a), and developed further by Narula (Dunning and Narula, 1996b; Narula, 1996), as a means of incorporating a dynamic element into the theory of international production. The IDP provides a means for describing and analysing the underlying reasons for FDI-induced restructuring at different stages of development. The basic hypothesis is that, as a country develops, the configuration of the OLI advantages facing foreign-owned firms that might invest in that country, and of its own firms that might invest overseas, changes, and that it is possible to identify the determinants of this change as well as its effect on the trajectory of development. The concept also suggests ways in which the interaction between foreign and domestic firms might itself influence the country’s investment path, and this aspect has been incorporated into the literature by Tolentino (1992).

10.7.1 Stages of the IDP

The latest thinking on the IDP set out in Dunning et al. (2001) attempts to incorporate both trade and industrial structural change into its analysis. It takes as its case studies Korea and Taiwan, and identifies four of the five stages of the IDP and how the composition of trade (both imports and exports) and FDI (both outward and inward) link with each other. In Table 10.1 we replicate the main hypotheses underpinning this more inclusive and structurally orientated approach, which, in many respects, mirror those set out
Stage 1
In this phase, a country’s competitive advantages rest mainly on its possession of natural resources. In so far as inward investment is likely to be attracted, it is likely to be directed to the primary product sector and to labour-intensive manufacturing sectors supplying relatively simple consumer goods for sale, either to the local or to export markets. In this phase, the country is likely to have few created capabilities or competences apart, perhaps, from an accumulation of human skills in craft industries and in specialised mining, agribusiness and fishing activities. Its institutions are likely to be simple and underdeveloped. Because of these features, outbound MNE activity is likely to be limited and of either a trade-supporting and/or an asset-seeking kind.

Countries in this stage tend to engage mainly in imports and exports in resource-based and low and medium created asset-intensive sectors, and to impose few performance requirements on foreign affiliates. Asset accumulation is likely to be limited and largely dependent on whether or not the supply capabilities or markets of the host country are sufficient to induce forward processing of primary activities. Without such capabilities, there is a danger that inward investment may simply lead to the establishment of enclaves of economic activity and the promotion of a dual economy.

Stage 2
This stage of development is marked by the growing importance of investment capital in value-added activity and, in some cases, by the size and quality of the domestic market. At the same time, depending on its ability to accumulate and disseminate assets, a country may develop clusters of economic activity. Stage 2 is also likely to be marked by a sharp increase in attention given to institutions promoting secondary education, public health utilities, transport and communications. By upgrading the capabilities and productivity of local resources, and by stimulating competition, inward direct investment may play an important tutorial role in steering the transformation of a country, particularly if it is pursuing an export-led development strategy. On the other hand, a country may prefer to develop its own asset capabilities and restrict the amount of inward investment. This was the initial post-1952 strategy of Japan and South Korea, and that of several Latin American economies in the late 1960s and 1970s (Jenkins, 1984).

During the investment-led stage of development, the structure of a country’s revealed comparative advantage (RCA) is likely to shift towards medium- to large-scale, capital-intensive sectors, such as basic chemicals, iron and steel, and shipbuilding; some smaller-scale and specialised mechanical engineering activities; and the production of labour-intensive, but moderately knowledge-intensive consumer goods, such as electrical products, clothing, leather goods, processed foods and cigarettes. The propensity for inward investment to generate ‘vicious’ or ‘virtuous’ circles of indigenous asset accumulation and industrial restructuring is likely to be strongly contingent on the extent to which host governments are (i) able to foster the supportive institutions and supply capacities, (ii) successfully design and implement the appropriate macroeconomic and organisational policies, and (iii) provide the necessary impetus for their own firms to upgrade the quality of their output to internationally acceptable standards. In Stage 2,
Table 10.1  **Stages of economic development**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Characteristics of inward (I) investment</th>
<th>Characteristics of outward (O) investment</th>
<th>O advantages of firms</th>
<th>L advantages of the home country</th>
<th>I preferred modality of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage I</strong></td>
<td>Little I and negligible O; low intra-industry trade and investment</td>
<td>Resource based</td>
<td>Export supporting; limited resource-seeking investment; agricultural and primary goods sectors; small-scale craft and labour-intensive manufactures, especially textiles and clothing</td>
<td>Limited to small specialised products for sale in neighbouring territories or niche markets</td>
<td>Mainly presence of natural resources, but infrastructural support also important; government role in setting up legal and commercial system</td>
</tr>
<tr>
<td><strong>Stage II</strong></td>
<td>Increasing I and limited O; low intra-industry investment, increasing intra-industry trade</td>
<td>Still resource based, but in more capital-intensive sectors; low-cost labour exploiting</td>
<td>Resource- and market-seeking investment in other developing countries; some ‘escape’ investment to developed countries; mostly regional greenfield investment; natural resource investment (incl. agriculture and aquaculture); light manufacturing employing established technologies; some service investment, e.g. tourism</td>
<td>Ability to produce low-cost, standardised products, or those based on natural resources of home country</td>
<td>Low real wage costs; natural resources; Supply capacity and clusters of local industry; growing importance of education, transport and ICT infrastructure</td>
</tr>
<tr>
<td>Stage III</td>
<td>Innovation driven</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O increasing faster than I; increasing intra-industry trade and investment</td>
<td>In activities supplying more sophisticated products for domestic market, or requiring more skilled labour</td>
<td>All kinds of investment including efficiency-seeking and some asset augmenting investment; mostly still regional and greenfield, but some M&amp;As; mass-produced differentiated consumer goods, e.g. electrical products, clothing; more service investment, e.g. construction, banking</td>
<td>Ability to differentiate products and/or adapt to local consumer tastes; some limited product and process innovation</td>
<td>Entrepreneurship; larger, more sophisticated, markets; government role in economic restructuring and enforcing competitive markets; increasing importance of informal institutions</td>
<td>Tendency for firms to prefer more equity ownership to protect proprietary knowledge and to control markets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stages IV and V</th>
<th>Increasing knowledge and service intensity; knowledge economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substantial I and O; O often exceeds I; substantial intra-industry trade and investment; balance between I and O fluctuates</td>
<td>Increasingly efficiency-seeking and asset-augmenting investment</td>
</tr>
</tbody>
</table>
countries start to attract more inward FDI, but outward investment by indigenous MNEs is still likely to be much less important. In Stages 1 and 2, both trade and FDI are still likely to be between different industrial sectors, that is, *inter*-industry trade and *inter*-industry FDI.

**Stage 3**

In this stage, a developing country is approaching economic maturity and its income level and industrial structure are beginning to resemble those of a developed country. Depending on their size, the structure of their resources and capabilities, and their institutional competence, most countries will be moving towards an industrialised or mixed economy. In either event, but especially so in the former case, the third stage is marked by a switch of emphasis from investment- to *innovation*-driven growth, as shown by a sharp increase in urbanisation and the expenditure on innovatory activities.

As living standards improve, consumers are likely to favour high-quality and differentiated products, while low-cost resource-intensive goods become less competitive in world markets. Stage 3 economies are marked by a noticeable increase in government expenditure on tertiary education and communication facilities. At the same time, the competitiveness of their firms begins to rely less on their possession of indigenous natural resources and more on their managerial and organisational competences, and on the quality of their entrepreneurship.

The role of inward direct investment continues to be valued for the provision of *O* specific assets in which the country has a comparative disadvantage, and for assisting the host country to upgrade its indigenous institutions and capabilities. In addition it will help the host country to restructure its activities away from natural resource- and/or physical capital-intensive sectors, to innovatory-intensive sectors or those producing high-quality differentiated products. Inward investment is likely to be less welcome when it drives out indigenous competitors and promotes a vicious circle of asset decumulation – except where this occurs in sectors in which the country is losing its comparative dynamic advantage.

As indigenous firms begin to generate their own *O* advantages – and much will depend on the educational and innovatory incentive structures fashioned by government – they are likely to exploit these first by exports, and then, as they increase their sales in foreign markets, or the costs of production in the home country rise, by outward direct investment. At this stage, in addition to resource- or market-seeking investment, firms may also begin to engage in efficiency-seeking and strategic asset-acquiring MNE activity. Such firms would seek out foreign technology, brand names, management skills and new markets by engaging in M&As or strategic alliances with firms from Stage 4 or 5 countries.

During Stage 3, the key attributes of the ESP paradigm (see Section 10.6.2) are likely to shift from emphasising the environment and systems to emphasising systems and policies. Devising the right economic system and the optimum policies and institutional instruments to support and, as necessary, modify the system becomes an increasingly important task for governments, and especially in the way they affect the efficiency of markets and the transaction costs of wealth-creating agents, the role of government as a facilitator of efficient resource allocation is likely to become more rather than less significant.
Stage 4
At this stage of the IDP, the L advantages of countries are likely to revolve around the extent and quality of their created assets, while the O advantages of indigenous firms begin to match those of firms from developed countries, at least in some sectors. Inward investment, particularly from other Stage 4 countries is more likely to become sequential, and of a efficiency- or strategic asset-seeking kind. In Stages 3 and 4, the composition of trade and FDI becomes increasingly intra-industry and less inter-industry in character.

Economies at Stage 4 (and Stage 5) are likely to be among the leading spenders on R&D, which, for the most part, is directed towards the innovation of new products and production methods. The radical advances in computing and telecommunications technology have hastened the blurring of the traditional frontiers between manufacturing and services, and particularly the service content of innovatory activities. Thus a larger percentage of the finished output of firms consists either of direct services or of goods which have a high content of services embodied in them. Consequently, economies at this stage of development can also be called ‘post-industrial’ or knowledge economies.

The role of government continues to be important, but its emphasis is now less directed to minimising structural market distortions, and more to assisting firms to circumvent or overcome endemic market failure. Such market failure arises because of the increasing volatility and interdependence of markets, and the technological complexity of the goods and services traded. Both features lead to a more uncertain outcome of transactions concluded and to more externalities associated with them. Both features also demand further institutional upgrading, particularly in respect of the fostering of innovation and human resource development.

Stage 4 in the development process is one in which there are more national and cross-border inter- and intra-firm linkages, both cooperative and equity based, and the success of countries in accumulating assets depends increasingly on the ability of their firms to coordinate their resources and capabilities at regional and global levels. With a broadly similar structure of natural resource endowments, the comparative advantage of countries in Stage 4 is likely to be based more on the efficiency of their macroeconomic and macro-institutional systems. Hence, the value of inward or outward MNE activity is judged not only by the provision of foreign resources and capabilities, but also by the way in which these may be organised, and their spillover effects on the efficiency and competences of local competitors, suppliers and customers. Because a country’s institutional structure is, itself, an asset that is strongly influenced by a country’s culture and belief systems, by linking cultures, MNE activity can materially affect, for good or bad, the ability of Stage 4 economies to retain or advance their global competitive positions (Li in the eclectic paradigm).

Stage 5
This final stage of development was first introduced by Dunning and Narula (1996b), and is exemplified by countries such as the US, Japan and Sweden. Stage 5 countries are much like advanced Stage 4 countries, in that indigenous MNEs draw gradually fewer of their O advantages exclusively from their home countries, and they increasingly engage in efficiency- and strategic asset-seeking investment abroad. Stage 5 countries continue to receive inward FDI – including that of an asset-augmenting kind – and engage in outward FDI in roughly equal measures. Indeed, Dunning and Narula hypothesised that a
fluctuating net foreign investment position (stock) centred around zero would be characteristic of countries in Stage 5. They also predicted that continued cross-investment would help to bring about a convergence of industrial structures, and ultimately of rates of growth between Stage 5 countries.

10.7.2 Institutions and the IDP

The empirical studies on the IDP, such as the contributions in Dunning and Narula (1996a) embracing a range of developed and developing countries, have shown considerable variation across countries in the transition across the development stages. Subsequent studies have been undertaken by Buckley and Castro (1998) on Portugal, Bellak (2001) on Austria, Lantouris et al. (2002) on Greece, Svetlicic and Bellak (2003) on Austria and Slovenia, and Barry et al. (2003a) on Ireland. It is apparent from all these studies that the particular trajectory of the IDP varies considerably between countries owing to differences in resource endowments, institutions and government policy.

For example, in the Portuguese case, only a combination of political and economic factors, namely European Free Trade Association (EFTA) and EU membership and the ending of a dictatorial regime, can explain why the country seemed to have entered the third stage of the IDP twice, in 1975 and 1988, but actually failed to do so until the mid-1990s (Buckley and Castro, 1998). In the Irish case, while the overall pattern of the net outward investment position follows the predictions of the IDP, Irish outward investment is concentrated in non-traded sectors such as construction materials and paper and packaging, while the inward investment is in high-technology sectors (Barry et al., 2003a).

There has been much discussion on the appropriate statistical techniques for testing the predictions of the model, as well as on the appropriateness of using net outward FDI stock per capita rather than outward and inward stocks separately, since countries at the first and fifth stages are both characterised by a zero net outward position. Arguing that GDP per capita is inadequate in capturing the level of development, Duran and Ubeda (2001) used factor analysis to test the impact of a wide range of structural variables on the IDP, and their results indicate that such an approach has some merit, particularly for developing countries. A subsequent analysis by the same authors demonstrated that, while a strong growth in outward FDI is characteristic of countries in Stage 4, this may not lead to a positive net investment position, and that countries in Stages 4 and 5 differ mainly in their endowment of knowledge-intensive assets (Duran and Ubeda, 2005).

An important departure from the original predictions of the IDP is that in the early 2000s, several developing countries appeared to be engaging in outward investment at an earlier stage of their IDP, and thus achieved a positive net outward investment position at lower levels of GDP per capita, or alternatively, a less negative net outward investment position in the case of countries that receive considerable amounts of inward FDI, such as Brazil, China, India, Mexico and South Africa (UNCTAD, 2006:142). The investment by MNEs from developing countries typically combines asset-exploiting and asset-augmenting motivations, and in some cases, such as in China, Malaysia and Singapore, the growth of outward FDI has been encouraged by government policy.

While the IDP has given some consideration to the underlying process of institutional development that enables an economy to move through its various stages of development, this in general has been confined to investment in education and infrastructure
Incorporating more varied institutional incentive structures discussed elsewhere in this chapter into the IDP in the context of the new paradigm for development is a new research area which we believe deserves further attention. These incentive structures are likely to differ at each stage of development. At the earliest stages, and at its most basic level, there is likely to be a shift in economic activity from personal to impersonal forms of exchange (North, 2005). With an increasing division of labour, and more complex forms of exchange, there is a need for a range of coordinating and facilitating institutions, *inter alia* to protect individuals and organisations against information asymmetry and moral hazard, as they ‘know more about less, and less about more’. In addition to institutions that facilitate contract enforcement, these are likely to include those that seek to protect individuals and organisations from other forms of hazard, for example, by instituting environmental and safety regulations. Since formal institutions (for example, laws, regulations, contracts) require informal institutions to function effectively, with greater complexity of transactions, the role of informal institutions is likely to grow as well.

The need for such institutions arises because contracts are necessarily incomplete, and require repeated interaction, well-crafted incentives and/or social relationships to ensure intended performance, as and when unforeseen contingencies arise. To the extent that these conditions are easier to achieve in the domestic context rather than when firms traverse national borders, the pattern of economic activity is likely to reflect a home country bias, which has been observed empirically in many different contexts. Since formal institutions (for example, laws, regulations, contracts) require informal institutions to function effectively, with greater complexity of transactions, the role of informal institutions is likely to grow as well.

At later stages of development, growing uncertainty and technological change will shift the focus from controlling (minimising uncertainty) in the physical environment, to attempts at controlling the human environment. As a result of the growing complexity of exchange, there are likely to be pressures on the mindsets and belief systems of individuals, which can either inhibit or promote the emergence of an appropriate institutional structure for the sequential stages of development. It is at this point that differences in institutional entrepreneurship and adaptive efficiency, both at a corporate and a national level, are likely to generate divergent paths of development.

The development of transparent and consistent formal institutions, such as those intended to promote and enforce property rights, to encourage innovation, to facilitate effective financial markets, and to provide a safety net for those who through no fault of their own are adversely affected by change and unergodic uncertainty, are likely to be necessary to sustain development (North, 2005; Rondinelli, 2005). Although there are examples of countries that only perfected such institutions consequent to economic growth, the more common scenario is the one where institutional development preceded economic development. In either case, at the later stages of development, increasing personal freedom and possibilities for the development of civil society are also likely to become more important (Sen, 1999), as this encourages trust and cooperative behaviour. At the same time, implementing a range of formal institutions that allow for open political participation, reduce the impact of ethnic or religious divisions, and provide a reasonable level of income equality and universal access to education, is likely to reinforce all of the components mentioned above. To the extent that redistributive goals become more prominent only at later stages of development, divergence in economic performance reflecting such choices is also likely to become apparent at this stage (such as between the US and the EU, for example).
10.8 CONCLUSIONS

This chapter has applied an institutional perspective to examine the process of economic development, and the role of MNEs in that process. Its key contention has been that the increasing number and complexity of transactions that are necessary for the scope of economic activity to be expanded, and that results from a more advanced division of labour, introduces uncertainties which require the development of new forms of institutions to mitigate them. Such institutions are of two basic kinds, formal institutions such as laws, regulations and contracts, and informal institutions, such as values and belief systems.

Effective markets require a range of formal and informal institutions to function properly. Primary among these are the formal institutions that protect private property and provide for the enforcement of contracts. However, to minimise the costs of transacting, the presence of supportive informal institutions, including trust and forbearance, is required, since this reduces the likelihood of conflict and contract renegotiation in the event of unforeseen contingencies. As countries become more developed, institutions that not only protect the parties to a contract, but also safeguard society at large, are also likely to play a more important role. Such institutions include many forms of social regulation, whether dealing with the hiring and firing of employees, for example, policies of non-discrimination, or environmental and health protection measures, such as caps on carbon emissions or food safety regulations.

With the broadening of the goals that national governments are called upon to pursue, the ability of individuals and organisations to solve collective action problems, and the social capital required from them to do so, gains in importance. Among the factors contributing to the formation of social capital are a variety of different forms of civic engagement and the presence of generalised trust, which is itself influenced by the prevailing extent of social and economic equality and lack of discrimination. Such features tend to be more prevalent in countries with democratic forms of government, although democracy, by itself, is no guarantee of the accumulation of social capital. However, in general, in countries with more abundant social capital, government policies are more likely to be consistent, and the formal institutions transparent and credible, making them a desirable location for economic activity (Rodrik et al., 2002). In the absence of such conditions, many forms of bad governance, such as corruption and policy reversals, abound, making it difficult for such countries to sustain economic growth.

As the primary actors engaged in shaping the global economy, MNEs respond to the institutional signals flagged by host countries. With the exception of the natural resource-exploiting sectors, it is clear that MNE activity is overwhelmingly concentrated in areas of good governance, leaving countries plagued by inequality and unrest without the benefits of such investment. At the macro level, it is also clear that being able to attract MNE activity is no guarantee of economic growth. The countries that seem to benefit the most are again those that have been able to upgrade their institutions, particularly by investing in education and technological capability (Glaeser et al., 2004). These are also countries that have the ability to adapt their institutions to the demands of the global marketplace, and to use inward (and outward) MNE activity as a tool in the restructuring process (Ozawa, 2003, 2005).

The following chapters in this part of the book will look in detail at the different kinds of contributions made by MNEs to their host and home countries. Such analyses are
better placed than the macro studies examined here to explain the specific mechanisms, both direct and indirect, whereby MNEs affect their host and home economies. Such effects include technology transfer (to and from the host country), the provision of employment opportunities and training, the effects on competition and supply conditions, and the indirect or spillover effects on local firms. The sum total of these effects, some of which are likely to be negative, and some positive, reflects the multifaceted contribution made by MNEs to their home and host countries.
11. Technology and innovatory capacity: the role of firms

11.1 INTRODUCTION

It is widely accepted that the ability to create, acquire, learn how to use and effectively deploy technological capacity is one of the key ingredients of economic success in virtually all societies. It is also acknowledged that, together with institutional reform, advances in product, production, information and organisational technology have accounted for much of the economic growth of nations over the past century. Indeed, there might be reason to think that the diffusion of technology may actually have become more difficult due to its rapid change over the past few decades, while innovation at the frontiers of technology has become more important in explaining differences in economic growth between countries (Fagerberg and Verspagen, 2002).

Prior to the industrial revolution, it was the possession of natural factor endowments, together with entrepreneurship and the facilitating institutional role of the state (for example, with respect to the establishment of a satisfactory legal and taxation system) that determined economic progress. Since the invention of the spinning jenny and steam power, and later managerial capitalism, a stream of technological and organisational innovations have led to a gradual replacement of natural resources by man-made assets as the key drivers of economic progress – at least among the industrially advanced countries.

In recent decades, scientific and technological advances together with improvements in instrumentation, particularly in computing and communications, have increased the application of knowledge in new contexts. Moreover, the literature strongly suggests that, in the past, both inward and outward FDI has often (though not always) been a significant contributory factor to the structure and growth of a country’s technological capacity. While accepting that several nations (for example, New Guinea, Saudi Arabia, Botswana and Jamaica) still obtain a large part of their wealth from primary production, some of the world’s most rapidly growing developing economies (for example, Hong Kong, Singapore and South Korea) almost entirely rely on their ability to obtain or produce the necessary technological capabilities in order to be competitive in world markets, in manufacturing as well as in services.

This chapter will evaluate the role of MNEs as creators of new knowledge and trans- ferors of technology across borders. We begin with an overview of the distribution of the knowledge-creating capacity around the world, by comparing the contribution of different countries to the global R&D effort, measured both by inputs, such as R&D expenditures and the training of scientists and engineers, and by output measures such as patenting and royalties. We then focus on the available evidence regarding the role of MNEs in contributing to the knowledge capabilities of their home and host countries,
both by the transfer and adaptation of existing technologies, and by the internationalisation of corporate R&D activity and other forms of knowledge sourcing.452

11.1.1 Direct and Indirect Effects

The chapters in this part of the book try to assess both the direct and indirect effects of MNEs in different domains of economic activity, using the OLI paradigm as our framework of analysis. When assessing the direct effects, a comparison is typically made between the O-specific characteristics and performance of foreign affiliates (as a group) as opposed to indigenous firms, although an argument could certainly be made that the relevant policy question in developed countries is not so much how foreign multinationals differ from uninational local firms, but how they differ from local multinationals (Bellak, 2004a).

This impact can be both positive and negative, and of net benefit or disbenefit in advancing nations’ economic or social goals. However, due to the importance of innovatory activities to the competitiveness of both firms and countries, the analysis in this chapter extends beyond the effects of MNE activity, to examining the creation, utilisation and transfer of new technology via inbound FDI, and the conditions in the host countries that are conducive to such activity.

This chapter will focus mainly on exploring the consequences of the broadening of technological capacity in the global economy together with the increasing decentralisation of innovative activities of MNEs, including, but not limited to, the question of where affiliate R&D is likely to take place. In terms of the impact of technology transfer and innovative activities of MNEs, the evidence reviewed in this chapter is focused predominantly on the direct effects on the host countries. In Chapter 12, we shall consider the impact of reverse knowledge transfer on the home country, along with the possibility of reverse spillovers to local firms. The indirect consequences of the presence of MNEs on the indigenous firms in the host country, whether through upstream or downstream linkages, or through horizontal spillovers to competitive firms, are discussed in Chapter 16.

It is also worth noting that while this chapter deals quite extensively with technology-intensive industries,453 the creation and dissemination of technology is an important factor in nearly every goods and service sector. Even products that do not appear to be very advanced technologically, such as food, textiles, or hotel services, often involve sophisticated technologies related to production or logistics, before they enter the market. Of course, such industries are still very different from those such as biotechnology, aerospace or semiconductors, which are among the highest spenders on R&D, but the increasing role of science and technology in the production of all goods and services is a reality in the global economy. One illustration of this fundamental change is that while in the 1950s, 80% of the value added in US manufacturing represented primary or processed foodstuffs, materials or mineral products, and 20% of knowledge, by 1995 these proportions had switched to 30 and 70%, respectively (Stewart, 1997). Today, Tobin’s $q$, which is a measure of the intangible assets of the firm, consisting of the ratio between the market value of the firm and the replacement value of its (tangible) assets, is greater than one for most multinationals, and can easily be three to five times as much.454
11.1.2 Some Stylised Facts

At this point, we would make three other general observations. The first is that technological capacity, that is, the human and physical assets necessary to efficiently produce, deploy and organise technology, is highly concentrated in the wealthier industrial economies. It follows that many – indeed most – countries in the world must import the bulk of their technology in the form of intermediate or finished goods, capital equipment and machinery and intermediate services.

The second is that since the production of both technological capacity and technology is an expensive business, it tends to be concentrated among large or specialised enterprises, which are able to finance the necessary R&D.455 Thus it is these enterprises that dominate the organisation and production of technology. In so doing, they use both the market and their own network of subsidiaries and cooperative alliances as vehicles for technology creation and dissemination.

Third, and this partly follows from the first two observations, there is a very considerable amount of cross-border trade in technology, much of which is intra-firm. Moreover, not all this trade is one way. Increasingly, countries – especially the industrialised countries in the Triad – are both exporters and importers of technology. For example, in 2005 the US recorded $57.4 billion in receipts of royalties and licence fees on its balance of payments. Of this amount, $37.9 billion were receipts by US MNEs from their foreign affiliates, and $4.2 billion were receipts by foreign affiliates in the US from their parent companies. In the same year, the US paid $24.5 billion in royalties and licence fees to foreign firms, of which $3.2 billion by US MNEs to their affiliates, and $17.2 billion by foreign affiliates to their parent companies (Koncz et al., 2006).

These data underlie the interest and concern of policy makers in all countries in the generation and acquisition of technological capacity, and the role which their own and foreign-based MNEs may play in its ownership, organisation and disposition. The access to, and creation and control of, knowledge-based assets is indeed one of the main O-specific advantages of enterprises and the L-specific advantages of countries.

Following some definitions and a broad overview of the distribution of technological capacity, two main questions related to MNEs and the transfer of technology will be investigated in this chapter:

1. What kinds of technology get transferred, and how do the O- and I-specific advantages of the MNE, and the L-specific advantages of the host country, affect this decision and the modality of transfer? Broadly speaking, differences in technology account for most of the observed differences in the behaviour and performance of MNEs as opposed to domestic firms. However, specific differences that arise from the use of particular technologies, such as the wage gap between employees of MNEs and domestic firms, or the productivity gap between MNEs and domestic firms, will be addressed in Chapters 13 and 15, respectively.

2. In addition to transferring and adapting existing technologies, under what conditions are MNEs most likely to engage in innovative activities abroad? This section builds on our discussion in Chapter 8 on the MNE as a learning organisation, the internal network of the MNE, and affiliate centres of excellence, and in Chapter 9 on the external network of the MNE. This includes the important issue of internationalisation of
corporate R&D, but it also includes other development-related innovative activities performed abroad. A related question is where is the asset-augmenting activity of MNEs likely to take place? This question is strongly related to the issue of knowledge spillovers, local institutional capabilities and economies of agglomeration, and will therefore be addressed in Chapter 16.

Given the distribution of technological capability, the strategies of MNEs, and the impact of these strategies on national economic and other objectives, the final question is what kinds of policies are available for home and host governments to affect the kind and balance of technologies that are transferred? In Chapter 12, we shall review the case for and against imposing particular institutional mechanisms to affect the technological competences and strategies of MNEs; and also consider the importance of absorptive capacity for host countries. From the perspective of home countries, we shall also consider the impact of outbound (and inbound) technology transfer by MNEs on the domestic economy.

11.1.3 Some Definitions and a Taxonomy of Technology

The taxonomy of technology is a subject in itself, but because the word is loosely used to cover different interpretations, it is necessary to identify some of the concepts in common use. The following are some of the main distinctions made by scholars:

1. Between technological capacity, which represents the stock of technology-producing assets (for example, R&D laboratories, higher educational institutions, scientists and engineers, information of all kinds, the accumulated experience of private and public institutions, and the knowledge of managers and administrative workers) and technology, that is, the output of technological capacity (for example, new product and process technologies, organisational improvements, more efficient inventory control techniques, new forms of transport and communication).

2. Between human and physical technological assets. The former include the stock of scientists and engineers, designers, managers, and so on, and the services flowing from them. The latter embrace buildings, plant and equipment, research laboratories, drawings, specifications, and so on, and capital goods which contain the output of technological capacity. A different, but related, distinction is between ‘hard’ and ‘soft’ technology. The former mainly represents all kinds of tangible innovatory assets, and the latter, drawings, blueprints, formulae, specifications, training manuals, technical skills, organisational management techniques, systems of quality control, inventory management, industrial relations procedures and so on.456

3. Between levels and stages of technological competence. Lall (1987), for example, has suggested that there are various degrees of technological capability, according to its contribution towards raising the productivity of the recipient economy. In particular, Lall distinguishes between ‘know-how’ and ‘know-why’ technology. The former comprises the knowledge of how to make the best use of the technology or technological capacity acquired. Much production technology is of this kind. The application of know-how may also lead to improving plant layout, upgrading quality control and inspection procedures, and the modification of equipment, products or marketing methods. By contrast, Lall categorises know-why as the understanding of the nature
of the underlying materials, process and product technologies, which leads to a substantial adaptation, improvement and even replacement of existing materials, processes and products. Such technological development arises partly as a natural extension and deepening of know-how capabilities and partly as a result of conscious efforts to develop design testing, pilot plant and similar activities (ibid.: 196).

Lall argues that developing countries go through various stages of technological development, where the first stage is the importation of know-how technology. This is followed by the application of the imported knowledge to the process of commercial innovation. The final stage of technological capability (which many countries do not reach), is the ability of countries and firms to undertake their own basic research (know-why), pushing back the frontiers of knowledge without regard to specific commercial applications.457

4. Between *technology transfer*, *dissemination* and *absorption*. ‘Technology transfer’ usually means the transfer of product or process technology within or between firms across national borders, but it could equally be between firms or other organisations in the same country. Such a transfer will not necessarily deprive the sender of the technology transferred. Consequently, ‘transmission’ may be a more appropriate term than transfer. The term ‘dissemination’ implies the diffusion of technology away from the organisation possessing it to other organisations, that is, externalising its ownership or use. Later in this chapter, we shall see that dissemination is likely to occur between firms along the same value-added chain (for example, to suppliers or industrial consumers) or across value-added chains (for example, to competitors or non-competing firms in the same locality). Host countries may be especially interested in the diffusion of technology initially imported by affiliates or foreign MNEs to the rest of the economy. ‘Absorption’ indicates the institutional and other competences of an economy which acquires technology to utilise or adapt it to its advantage. The lack of complementary assets, particularly organisational capabilities and incentive structures of some countries to assimilate foreign technology efficiently, is often as important an obstacle to economic development as the failure of these countries to acquire or obtain the technology in the first place (North, 1990, 2005).

It is almost self-evident that the location of technological capacity and technology, and how, and at what cost, technology is disseminated across national boundaries, will influence the competence of any particular country to advance its own economic, social and strategic goals. No less important, especially in a world in which production is becoming increasingly internationalised, is the nationality of ownership of the technology. Depending, for example, on whether the technological capacity in a particular country is owned by domestic or foreign firms and, if the latter, by multidomestic or globally integrated MNEs, the ability of that country to direct and control its wealth-producing capacity may be affected. It will also influence the extent to which a country is able to access or augment its technological capacity, its macro-organisational governance structure, and its competitive and comparative advantages.

MNEs, in particular, may strongly influence the creation and distribution of the world’s technological assets. While it is true that the R&D undertaken by their foreign affiliates (as a proportion of sales) is generally the same as, or less than, that of their indigenous competitors, the situation is changing as an increasing amount of R&D is being
cross-traded between the more advanced industrialised countries (UNCTAD, 2005c). Moreover, viewed from a host country perspective, the innovatory activities of MNE affiliates are often relatively quite important. But even where foreign affiliates do not undertake much innovatory activity, this does not mean that MNEs do not have an impact on the location of these activities. In fact, for reasons to be discussed later in this chapter, they do exert a very considerable influence.

11.2 THE DISTRIBUTION OF TECHNOLOGICAL CAPACITY

We begin our review of the distribution of technological capability at the national level by looking at two kinds of input measures: R&D expenditure and the training of scientists and engineers. We then move to consider the available evidence on two output measures of technological capacity: the patterns of patenting, and the payment of royalties and licence fees.

11.2.1 R&D Expenditures

A clear trend over the past two decades has been that governments in the OECD countries have provided a declining share of R&D funding, while the share of industry in funding research has increased, although considerable differences across countries remain. Among the G-8 countries, the industrial sector dominates R&D performance, ranging from around 50% in Italy to around 70% in the US, Japan, Germany and Russia. In addition to being performed by industry, most of the industrial R&D is also funded by industry, with the exception of Russia, where the government has funded a considerable portion of industrial R&D (National Science Board, 2006). The share of defence spending of the total R&D effort has also declined in most countries over the past two decades, although in the US this development has been partially reversed due to terrorism-related increases in defence spending in recent years.

Of the total of $652 billion (purchasing power parity: PPP) in R&D expenditures in the year 2002 in the 30 OECD countries, 83% was accounted for by the seven countries of Canada, France, Germany, Italy, Japan, the UK and the US (the G-7 group of countries). The US alone accounted for 43% of the total, and more was spent on R&D in the year 2002 in the US than in the other G-7 countries combined (ibid.). The share of developing countries of total R&D spending is still small, but has grown considerably for some of the NIEs. For example, with 3.5% of the OECD total, South Korea had a higher share of expenditures than, for example, Canada or Italy.

In 1953, industrial R&D performed in the US amounted to $19 billion (measured in constant 1996 dollars). By 1958 that amount had doubled, and by 1980 it had quadrupled, to $76 billion, and by 1997 it had doubled again to $152 billion, finally reaching $185 billion by the year 2000, a tenfold increase in absolute terms. In terms of total R&D expenditures as a proportion of GDP (R&D intensity), these have increased moderately since the 1980s for most OECD countries, notable exceptions being small countries such as Finland, Sweden and Israel, whose R&D expenditures have risen well above the average, and the UK, which has fallen below (see Table 11.1). From a somewhat lower starting level, South Korea and Singapore have also risen above the OECD average over
Table 11.1  Gross domestic expenditure on R&D (GERD) as a percentage of GDP, 1981–2005

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed economies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Union</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>na</td>
<td>na</td>
<td>1.47</td>
<td>1.54</td>
<td>2.04</td>
<td>2.36</td>
</tr>
<tr>
<td>Belgium</td>
<td>na</td>
<td>na</td>
<td>1.62</td>
<td>1.67</td>
<td>2.08</td>
<td>1.82</td>
</tr>
<tr>
<td>Denmark</td>
<td>na</td>
<td>na</td>
<td>1.64</td>
<td>1.82</td>
<td>2.39</td>
<td>2.44</td>
</tr>
<tr>
<td>Finland</td>
<td>na</td>
<td>na</td>
<td>2.04</td>
<td>2.26</td>
<td>3.30</td>
<td>3.48</td>
</tr>
<tr>
<td>France</td>
<td>1.93</td>
<td>2.22</td>
<td>2.37</td>
<td>2.29</td>
<td>2.20</td>
<td>2.13</td>
</tr>
<tr>
<td>Germany</td>
<td>2.43</td>
<td>2.68</td>
<td>2.52</td>
<td>2.19</td>
<td>2.46</td>
<td>2.51</td>
</tr>
<tr>
<td>Ireland</td>
<td>na</td>
<td>na</td>
<td>0.93</td>
<td>1.26</td>
<td>1.10</td>
<td>1.25</td>
</tr>
<tr>
<td>Italy</td>
<td>0.88</td>
<td>1.12</td>
<td>1.23</td>
<td>0.97</td>
<td>1.09</td>
<td>1.10</td>
</tr>
<tr>
<td>Netherlands</td>
<td>na</td>
<td>na</td>
<td>1.97</td>
<td>1.97</td>
<td>1.80</td>
<td>1.78</td>
</tr>
<tr>
<td>Spain</td>
<td>na</td>
<td>na</td>
<td>0.84</td>
<td>0.79</td>
<td>0.91</td>
<td>1.12</td>
</tr>
<tr>
<td>Sweden</td>
<td>na</td>
<td>na</td>
<td>2.72</td>
<td>3.32</td>
<td>4.25</td>
<td>3.86</td>
</tr>
<tr>
<td>UK</td>
<td>2.38</td>
<td>2.24</td>
<td>2.07</td>
<td>1.95</td>
<td>1.83</td>
<td>1.73</td>
</tr>
<tr>
<td>New EU member states</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>na</td>
<td>na</td>
<td>2.02</td>
<td>0.95</td>
<td>1.20</td>
<td>1.42</td>
</tr>
<tr>
<td>Hungary</td>
<td>na</td>
<td>na</td>
<td>1.06</td>
<td>0.71</td>
<td>0.92</td>
<td>0.94</td>
</tr>
<tr>
<td>Poland</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>0.63</td>
<td>0.62</td>
<td>0.57</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>na</td>
<td>na</td>
<td>2.13</td>
<td>0.92</td>
<td>0.63</td>
<td>0.51</td>
</tr>
<tr>
<td>Slovenia</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>1.35</td>
<td>1.55</td>
<td>1.22</td>
</tr>
<tr>
<td>Other Western Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>na</td>
<td>na</td>
<td>2.70</td>
<td>2.67</td>
<td>2.52</td>
<td>2.93</td>
</tr>
<tr>
<td>North America</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>1.24</td>
<td>1.44</td>
<td>1.60</td>
<td>1.70</td>
<td>2.09</td>
<td>1.98</td>
</tr>
<tr>
<td>US</td>
<td>2.34</td>
<td>2.76</td>
<td>2.71</td>
<td>2.51</td>
<td>2.76</td>
<td>2.68</td>
</tr>
<tr>
<td>Other developed economies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>na</td>
<td>na</td>
<td>1.50</td>
<td>1.67</td>
<td>1.63</td>
<td>1.77</td>
</tr>
<tr>
<td>Israel</td>
<td>na</td>
<td>na</td>
<td>2.53</td>
<td>2.91</td>
<td>4.76</td>
<td>4.71</td>
</tr>
<tr>
<td>Japan</td>
<td>2.11</td>
<td>2.54</td>
<td>2.94</td>
<td>2.92</td>
<td>3.13</td>
<td>3.18</td>
</tr>
<tr>
<td>New Zealand</td>
<td>na</td>
<td>na</td>
<td>0.98</td>
<td>0.95</td>
<td>1.13</td>
<td>1.14</td>
</tr>
<tr>
<td>Developing economies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>0.52</td>
<td>0.74</td>
<td>na</td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>0.57</td>
<td>0.95</td>
<td>1.34</td>
</tr>
<tr>
<td>India</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>0.55</td>
<td>0.79</td>
<td>na</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>na</td>
<td>na</td>
<td>1.82</td>
<td>2.37</td>
<td>2.59</td>
<td>2.99</td>
</tr>
<tr>
<td>Singapore</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>1.38</td>
<td>2.11</td>
<td>2.36</td>
</tr>
<tr>
<td>Taiwan, Province of China</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>2.16</td>
<td>na</td>
</tr>
<tr>
<td>Turkey</td>
<td>na</td>
<td>na</td>
<td>0.53</td>
<td>0.38</td>
<td>0.72</td>
<td>0.67</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>0.42</td>
<td>0.42</td>
<td>0.46</td>
</tr>
<tr>
<td>Brazil</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>0.77</td>
<td>1.15</td>
<td>0.92</td>
</tr>
<tr>
<td>Mexico</td>
<td>na</td>
<td>na</td>
<td>0.28</td>
<td>0.31</td>
<td>0.39</td>
<td>0.43</td>
</tr>
</tbody>
</table>
the past decade, while Japan has gradually built on its already high share. Finally, although starting from a much lower base, China has more than doubled its R&D intensity over the past decade, and estimates by the OECD suggest that it surpassed Japan in absolute terms in 2006 (OECD, 2006). The OECD average R&D intensity in 2005 was 2.3%, while the average for the EU-25 was 1.8%, notably below the declared Lisbon/Barcelona target of 3%, to be reached by 2010.

The latest R&D scoreboard published annually by the UK Department of Trade and Industry (DTI, 2006) showed a 7% increase in spending by the top 1,250 companies undertaking R&D globally in 2005–06. The total amount spent on R&D was £249 billion, with the hundred most active companies contributing 61% of the total. US companies increased their R&D spending at a rate of more than twice the average, while European and Japanese companies showed below-average gains in spending. The strongest gains were made by firms from Taiwan and South Korea, both of which are now among the top 15 countries in terms of their proportion of the R&D spending by the top 1,250 firms.

Industrial R&D by sector
Countries also differ considerably in the sectoral distribution of R&D. The US is unique, due to its competence in several different fields, while most other countries show more concentration in particular sectors, such as in Finland, where electronic equipment manufacturing accounted for 49%, and in South Korea, where it accounted for 37%, of total industrial research in 1997–2000. Similarly, the motor vehicle sector in Germany and the pharmaceutical sector in the UK accounted for more than 20% of total industrial R&D performance in both countries (National Science Board, 2004).

Particularly notable is the growth in R&D activity in the service sectors. Essentially this reflects the increasing importance of knowledge-intensive services, such as communication, financial, business, education and health services. For example, in the US, spending on IT (encompassing a large service component) by industrial firms increased fivefold in inflation-adjusted terms between 1990 and 2002 (ibid.). According to OECD data, services accounted for 34% of total industrial R&D in the US in 2000, while they accounted for more than 10% of total industrial R&D in France, Italy and the UK. In Germany, France and Japan, services accounted for less than 10% of industrial R&D.

Table 11.1 (continued)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russian Federation</td>
<td>na</td>
<td>na</td>
<td>1.43</td>
<td>0.96</td>
<td>1.18</td>
<td>1.07</td>
</tr>
<tr>
<td>EU-25</td>
<td>na</td>
<td></td>
<td>1.69</td>
<td>1.79</td>
<td>1.77</td>
<td></td>
</tr>
<tr>
<td>Total for OECD</td>
<td>1.95</td>
<td>2.26</td>
<td>2.21</td>
<td>2.07</td>
<td>2.27</td>
<td>2.25</td>
</tr>
</tbody>
</table>

Sources: Figures for 1981 and 1985 are from National Science Board (2004), based on OECD data; figures for 1991 from OECD, Main Science and Technology Indicators, November 2004 and figures for 1995, 2001 and 2005 are from OECD, Main Science and Technology Indicators, December 2006; additional data obtained from World Bank World Development Indicators and UNCTAD World Investment Report (2005c). Data reflect the closest year available; some figures are estimates.
Furthermore, the service sector share of US industrial R&D rose from 19% in 1996 to 34% in the year 2000, accounting for much of the growth in industrial R&D during this period. By comparison, in the year 2000, service sectors accounted for just 2.1% of industrial R&D in Japan. Within the EU-15, the service sectors accounted for 13% of total EU industrial R&D in 1999 (ibid.). Overall, within the OECD, R&D in services grew at an annual rate of 12% between 1990 and 2003, while that in manufacturing grew by merely 3%, and by 2003, services comprised a quarter of total industrial R&D (OECD, 2006).

The OECD classifies manufacturing industries into four categories based on average R&D intensity measured across countries. Five sectors are classified as high technology, namely, aircraft and spacecraft, pharmaceuticals, computing, communication equipment, and instruments, which have R&D intensities (R&D expenditures as a proportion of gross output) between 7.3 and 14.2%. Medium–high-technology industries range in R&D intensity from 1.9 to 3.9%, and include electrical machinery, motor vehicles, chemicals (excluding pharmaceuticals), transport equipment and non-electrical machinery. The R&D intensities of medium–low-technology industries vary between 0.6 and 1%, and include petroleum, rubber, nonmetallic minerals, shipbuilding, basic metals and fabricated metals. Low-technology industries have R&D intensities between 0.3 and 0.4%, and include pulp and paper, printing and publishing, food and beverages, tobacco, textiles, leather and footwear (National Science Board, 2004).

What makes high-technology sectors particularly important is their higher rate of growth. For example, between 1980 and 2001, production in US high-technology industries grew at an inflation-adjusted average annual rate of nearly 6.5%, compared to 2.4% for other manufactured goods. US high-technology industries also incorporate a higher percentage of value added as a percentage of gross output than do other manufacturing industries, with a difference of about 10 percentage points (ibid.). High-technology services also grew faster than the average for manufacturing industry, although not as fast as high-technology manufacturing. Furthermore, in the 1990s, US exports as a percentage of gross output were well above 50% in high-technology industries, while they were less than 30% in other manufacturing industries (ibid.).

However, growth in high-technology manufacturing and services is not limited to the US. In 1980 the industrialised countries accounted for 77.2% of all manufacturing value added in the world, the transition economies accounted for 8.6%, and developing countries for 14.2%. By the year 2000, the corresponding percentages were 71.8, 4.1 and 24.1% of total value added in manufacturing. Notably, the share of East Asia (excluding mainland China) had grown from 2.7 to 6.8%, while that of China itself had grown from 1.5 to 7.1% (UNIDO, 2004).

At the same time, the growth of manufactured exports in industrialised countries slowed down from 8.6% average annual growth in the 1980s to 4.9% in the 1990s, while they increased from 3 to 9.3% in the transition economies, and from 9.5 to 26.5% in Mexico. East Asia (excluding mainland China) saw a small decline from 12.7% in the 1980s to 10.9% in the 1990s, while China’s annual growth slowed from 20.6 to 17%. By contrast, high-technology exports from the industrialised countries grew at a rate of 8.4% annually in the 1990s, by 12% from the transition economies, and by 19.3% from developing countries. The developing country performance was influenced by very high growth rates of 44.5% in Mexico, 32.7% in China, 18.3% in East Asia (excluding mainland China), 19.1% in Turkey and 17.7% in South Africa. As a proportion of world total
manufactured exports, the share of developing countries rose from 13% in 1980 to 27% in 2000, while as a share of high-technology exports, it grew from 9 to 32%. Over the same time period, high-technology exports increased their share of total manufactured exports worldwide from 14 to 28% (ibid.).

Particularly striking has been the technological advances of countries such as South Korea and Taiwan. In Taiwan, high-technology manufacturing accounted for 8.2% of total manufacturing output in 1980; by 1989 this had reached 12.4%, and 29.2% by 2001. This compares with an estimated 20.9% share of high-technology manufacturing in the US, and 15.8% in Japan. In South Korea, the share grew from 6.1% of total output in 1980 to 31.0% in 2001. In terms of their share of the total global high-technology market, between 1980 and 2001, the US held its share of about 30%, while the share of the EU declined from nearly 30% to below 25%. Similarly, the share of Japan declined from about 20% to less than 15%, while South Korea and China experienced strong growth from just a couple of percentage points to reach 7.1 and 8.7%, respectively, of the world total in 2001 (National Science Board, 2004). As we shall see later, in all these cases MNEs and/or their affiliates played a major role.

11.2.2 Training of Scientists and Engineers

Another way to assess the input side of the technological capabilities of a country is provided by the statistics on the share of university graduates in the population, and particularly the share of science and engineering (S&E) graduates. Tables 11.2 and 11.3 present an overview of the share of S&E graduates in selected countries. Table 11.2 demonstrates the strong decline in S&E graduates in Western Europe over the past 30 years, against a background of strong increases in the overall numbers of graduates. There has been a much lesser decline in Japan, while the US has held its share of science graduates fairly constant, thanks to large numbers of incoming foreign students.

The growth potential of countries like China is again demonstrated by the fact that the number of university graduates (in 2003) with first degrees in science and engineering in China exceeded that of Japan as well as that of the US, which have historically been the countries supplying the largest numbers of science graduates. However, differences in the educational standards aside, fields such as engineering may be accorded very different emphasis by particular countries, with subfields such as chemical, mechanical and software engineering arguably being of more relevance to corporate technological capabilities. It should also be noted that educational statistics take no account of ‘on the job’ training, where, for example, German, Japanese and Swiss firms have traditionally allocated considerable resources.

For these and other reasons, a recent report comparing the availability and quality of S&E graduates in the US, China and India cautions against comparisons of the raw figures, and suggests that the picture is much more nuanced, including an ample supply of qualified engineers in the US (Gereffi and Wadhwa, 2005). Similarly, a study by the McKinsey Global Institute concluded that the proportion of Chinese engineers able to work for global MNEs in terms of their technical and language capabilities might still be as low as 10%. Other estimates suggest that about 25% of engineering graduates and 10–15% of other graduates in India are suitable for work in the export-orientated IT and business services sectors.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First</td>
<td>S&amp;E</td>
<td>First</td>
<td>S&amp;E</td>
<td>First</td>
<td>S&amp;E</td>
<td>First</td>
</tr>
<tr>
<td></td>
<td>degrees</td>
<td>share</td>
<td>degrees</td>
<td>share</td>
<td>degrees</td>
<td>share</td>
<td>degrees</td>
</tr>
<tr>
<td>European Union</td>
<td>97,399</td>
<td>60.8</td>
<td>111,458</td>
<td>54.6</td>
<td>131,969</td>
<td>54.2</td>
<td>147,607</td>
</tr>
<tr>
<td>Germany</td>
<td>55,450</td>
<td>58.2</td>
<td>68,030</td>
<td>56.3</td>
<td>72,000</td>
<td>56.3</td>
<td>77,160</td>
</tr>
<tr>
<td>UK</td>
<td>928,228</td>
<td>32.7</td>
<td>963,778</td>
<td>32.4</td>
<td>1,003,532</td>
<td>33.0</td>
<td>1,143,638</td>
</tr>
<tr>
<td>North America</td>
<td>313,072</td>
<td>70.3</td>
<td>378,666</td>
<td>67.6</td>
<td>373,302</td>
<td>66.2</td>
<td>400,103</td>
</tr>
<tr>
<td>US</td>
<td>34,725</td>
<td>42.1</td>
<td>50,973</td>
<td>41.2</td>
<td>118,584</td>
<td>38.0</td>
<td>165,916</td>
</tr>
<tr>
<td>Other developed</td>
<td>313,072</td>
<td>70.3</td>
<td>378,666</td>
<td>67.6</td>
<td>373,302</td>
<td>66.2</td>
<td>400,103</td>
</tr>
<tr>
<td>economies</td>
<td>China</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>183,241</td>
<td>69.5</td>
<td>273,684</td>
</tr>
<tr>
<td></td>
<td>Republic of Korea</td>
<td>34,725</td>
<td>42.1</td>
<td>50,973</td>
<td>41.2</td>
<td>118,584</td>
<td>38.0</td>
</tr>
</tbody>
</table>

Table 11.3 focuses on doctoral degrees, and shows the distribution of doctoral graduates across natural sciences, mathematics and computer science, agriculture, social and behavioural sciences (including business studies and economics) and engineering. In 2002, the US produced almost twice as many doctoral graduates as the runner-up Germany, while the combined graduates of China, India and Russia exceeded the number of US graduates. For doctoral degrees, the proportions of S&E degrees vary quite considerably between countries, but they are generally higher than those for first degrees. While the numbers of first-degree graduates give a reasonable indication of the current knowledge and skills available in the workforce, doctoral degrees better reflect a country’s ability to engage in cutting-edge research, which lays the foundations for further innovation. The absolute numbers again demonstrate the strength of the US, whose universities receive large numbers of graduate students from all over the world, particularly from India and China, Hong Kong, Singapore, Malaysia, South Korea and Taiwan, which have traditionally sent high proportions of tertiary students overseas (Arora and Fosfuri, 2000; OECD, 2002b).469

11.2.3 Patenting

We now move to consider some output measures of technological capability, beginning with an analysis of the patterns of patenting internationally. There is a substantial literature employing counts of patents as an indicator of technological capability at the national and firm levels, and patent citations as measures of knowledge transfer or the importance of particular patents. Due to the availability of longitudinal data, and the importance of the US market for foreign affiliates, patenting in the US by foreign firms has been used in numerous studies to measure technological capability.

The historical data spanning from 1920 to 1990 presented by Cantwell (1995) shows that the internationalisation of R&D was significant for some home countries such as the UK and Sweden as early as the 1920s and 1930s. For example, between 1920 and 1939, 37% of US patents of Swedish firms in the mechanical sector was attributable to R&D activities in their foreign affiliates, while 42% of US patents in the chemical sector assigned to UK firms was attributable to research located abroad. Following the Second World War, Swedish firms did not regain their former share until the late 1980s, while for the UK, the share grew quite steadily to reach 51% in 1987–90. Switzerland also began to increase its share in several sectors in the late 1960s to reach 43% in 1987–90. The share of German and French firms also grew, but only to around 18%. By contrast, the share of US patents accounted for by the foreign activities of US MNEs was relatively more modest, growing from 3% in 1920–24 to only 9% in 1987–90.470

Of the 169,000 patents granted in the US in 2003, the share granted to foreign firms was 48% (National Science Board, 2006). This share has remained quite stable since 1980, although there has been some fluctuation from year to year.471 Reflecting the different patterns of R&D spending between countries, the patent classes in which patents are sought differ considerably between US firms, and the leading foreign firms seeking US patents.

Japan, Germany, France and the UK accounted for 72% of all US patents awarded to foreigners in the 1963–2001 period (National Science Board, 2004). However, by 2003, the top countries to patent in the US were Japan and Germany, followed by Taiwan, South Korea, the UK, Canada and France. Japan still had by far the largest, although declining,
<table>
<thead>
<tr>
<th>Country/region</th>
<th>All doctoral degrees</th>
<th>Overall S&amp;E share in 2002</th>
<th>Share of S&amp;E fields of all doctoral degrees</th>
<th>Natural sciences</th>
<th>Mathematical &amp; computer science</th>
<th>Agricultural</th>
<th>Social &amp; behavioural</th>
<th>Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Developed economies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Union</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>2,125</td>
<td>49.4</td>
<td>18.7</td>
<td>4.7</td>
<td>2.2</td>
<td>7.5</td>
<td>16.2</td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>1,413</td>
<td>62.8</td>
<td>29.9</td>
<td>8.9</td>
<td>4.2</td>
<td>8.4</td>
<td>11.5</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>732</td>
<td>42.5</td>
<td>24.2</td>
<td>0.0</td>
<td>0.0</td>
<td>8.6</td>
<td>9.7</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>1,797</td>
<td>51.3</td>
<td>13.7</td>
<td>4.2</td>
<td>2.0</td>
<td>11.4</td>
<td>20.0</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>10,404</td>
<td>66.2</td>
<td>40.0</td>
<td>8.0</td>
<td>0.2</td>
<td>8.9</td>
<td>9.2</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>23,043</td>
<td>46.9</td>
<td>22.8</td>
<td>4.3</td>
<td>2.2</td>
<td>8.7</td>
<td>8.8</td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>932</td>
<td>39.4</td>
<td>13.7</td>
<td>4.7</td>
<td>3.9</td>
<td>7.1</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>520</td>
<td>67.5</td>
<td>41.3</td>
<td>5.6</td>
<td>1.9</td>
<td>4.8</td>
<td>13.8</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>3,977</td>
<td>49.2</td>
<td>20.6</td>
<td>0.0</td>
<td>8.6</td>
<td>1.5</td>
<td>18.6</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>2,556</td>
<td>57.9</td>
<td>19.1</td>
<td>0.0</td>
<td>8.7</td>
<td>12.8</td>
<td>17.4</td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>3,723</td>
<td>45.4</td>
<td>11.4</td>
<td>2.0</td>
<td>1.9</td>
<td>16.0</td>
<td>14.0</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>6,905</td>
<td>45.8</td>
<td>24.4</td>
<td>5.5</td>
<td>2.0</td>
<td>6.9</td>
<td>6.9</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>3,517</td>
<td>59.7</td>
<td>18.1</td>
<td>4.6</td>
<td>2.4</td>
<td>8.2</td>
<td>26.4</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>14,870</td>
<td>59.2</td>
<td>25.4</td>
<td>5.0</td>
<td>2.0</td>
<td>13.2</td>
<td>13.6</td>
<td></td>
</tr>
<tr>
<td><strong>New EU member states</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1,327</td>
<td>64.8</td>
<td>20.6</td>
<td>12.7</td>
<td>6.5</td>
<td>7.8</td>
<td>17.2</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>983</td>
<td>36.9</td>
<td>13.6</td>
<td>3.2</td>
<td>4.5</td>
<td>7.1</td>
<td>8.5</td>
<td></td>
</tr>
<tr>
<td><strong>Other Western Europe</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>740</td>
<td>21.9</td>
<td>0.3</td>
<td>0.0</td>
<td>8.0</td>
<td>10.3</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>2,800</td>
<td>45.9</td>
<td>24.1</td>
<td>5.3</td>
<td>1.4</td>
<td>3.6</td>
<td>11.5</td>
<td></td>
</tr>
<tr>
<td><strong>North America</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>3,545</td>
<td>69.8</td>
<td>27.8</td>
<td>3.9</td>
<td>3.8</td>
<td>20.7</td>
<td>13.5</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>40,710</td>
<td>66.1</td>
<td>28.1</td>
<td>4.6</td>
<td>2.3</td>
<td>18.2</td>
<td>12.9</td>
<td></td>
</tr>
</tbody>
</table>
### Other developed economies

<table>
<thead>
<tr>
<th>Country</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>3,910</td>
<td>55.1</td>
<td>24.0</td>
<td>4.5</td>
<td>4.0</td>
<td>10.9</td>
<td>11.7</td>
</tr>
<tr>
<td>Israel</td>
<td>863</td>
<td>69.4</td>
<td>39.0</td>
<td>6.3</td>
<td>5.1</td>
<td>12.6</td>
<td>6.4</td>
</tr>
<tr>
<td>Japan</td>
<td>16,314</td>
<td>46.5</td>
<td>10.1</td>
<td>na</td>
<td>7.7</td>
<td>4.6</td>
<td>24.0</td>
</tr>
</tbody>
</table>

### Developing economies

#### Asia and the Pacific

<table>
<thead>
<tr>
<th>Country</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>12,465</td>
<td>65.4</td>
<td>21.3</td>
<td>na</td>
<td>4.3</td>
<td>5.0</td>
<td>34.8</td>
</tr>
<tr>
<td>India</td>
<td>11,974</td>
<td>46.2</td>
<td>33.0</td>
<td>na</td>
<td>7.0</td>
<td>na</td>
<td>6.1</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>6,690</td>
<td>48.2</td>
<td>8.8</td>
<td>3.9</td>
<td>4.3</td>
<td>2.8</td>
<td>28.4</td>
</tr>
<tr>
<td>Taiwan, Province of China</td>
<td>1,759</td>
<td>66.3</td>
<td>11.5</td>
<td>7.2</td>
<td>5.3</td>
<td>5.1</td>
<td>37.3</td>
</tr>
<tr>
<td>Turkey</td>
<td>2,472</td>
<td>48.8</td>
<td>12.3</td>
<td>3.4</td>
<td>7.9</td>
<td>11.2</td>
<td>13.9</td>
</tr>
</tbody>
</table>

#### Africa

<table>
<thead>
<tr>
<th>Country</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>1,331</td>
<td>35.2</td>
<td>13.7</td>
<td>na</td>
<td>8.5</td>
<td>8.6</td>
<td>4.4</td>
</tr>
</tbody>
</table>

#### Latin America and the Caribbean

<table>
<thead>
<tr>
<th>Country</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>344</td>
<td>68.3</td>
<td>46.5</td>
<td>1.5</td>
<td>0.3</td>
<td>11.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Brazil</td>
<td>3,604</td>
<td>60.4</td>
<td>25.6</td>
<td>2.4</td>
<td>10.4</td>
<td>8.3</td>
<td>13.7</td>
</tr>
<tr>
<td>Mexico</td>
<td>1,801</td>
<td>60.3</td>
<td>21.6</td>
<td>2.1</td>
<td>4.9</td>
<td>23.4</td>
<td>8.2</td>
</tr>
</tbody>
</table>

### CIS

<table>
<thead>
<tr>
<th>Country</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russian Federation</td>
<td>18,274</td>
<td>57.0</td>
<td>19.5</td>
<td>na</td>
<td>3.7</td>
<td>13.2</td>
<td>20.5</td>
</tr>
</tbody>
</table>

**Total**

<table>
<thead>
<tr>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>239,759</td>
<td>52.1</td>
<td>21.1</td>
<td>2.9</td>
<td>3.6</td>
<td>9.6</td>
<td>15.0</td>
</tr>
</tbody>
</table>

**Note:** Differences in the definitions of S&E field account for some of the low (zero) scores in the table.

**Sources:** National Science Board (2006), based on OECD, UNESCO and national sources; authors’ calculations. For some countries, data reflect the closest year available.
share of the patents awarded to foreigners, accounting for 40%, followed by Germany with a 12% share (National Science Board, 2006). Inventors from China, which had filed only 111 patent applications in 1990, reached 1,034 applications by 2003. Similar increases were also registered from other countries that had made strong investments in science and technology, namely India, Israel and Finland (ibid.). Furthermore, for the majority of the developing countries applying for US patents in 2001–03, a high proportion – 63% in the case of China and 40% in India – was due to patents assigned to foreign MNEs. However, for the two leading developing countries registering US patents, namely Taiwan and South Korea, the proportion was only 4% (UNCTAD, 2005c:135).

However, as indicators of technological capability, patent data have some well-known drawbacks. The importance of patenting differs a great deal across countries and sectors, depending on other available measures to protect IPR, and the usefulness of patents in a given technological field. This tends to restrict the analysis to those fields where patenting, rather than copyrights or secrecy, for example, is a primary means of protecting IPR. Another important limitation is that analyses of patent counts typically assign equal importance to all patents, although some patents are known to be of much more (economic) significance than others. Furthermore, since new patents have to cite existing patents reflecting ‘prior art’, patent citations may reflect a ‘scale-economy bias’ by the investigator, in that the patent with which the investigator is already familiar might get citations with greater frequency.

The new OECD database on Triadic patent families was developed to address the issue of significant and insignificant patents by focusing on a subset of inventions for which patent protection was sought in all of the three important markets of the US, Europe and Japan. The idea behind the Triadic patenting data is that the high cost of filing for patents in all three Triad markets should help differentiate between those inventions that represent substantial additions to knowledge, and those that are merely variations on a well-established theme. Table 11.4 shows the development of patenting activity among a wide range of countries between 1995 and 2003 using the classification of Triadic patent families. In this classification, the US and Japan are still clearly in the lead along with Germany, followed at a considerable distance by France and the UK.

11.2.4 Royalties and Licence Fees

The final measure of technological capability we wish to consider, which is also an output measure, is concerned with the value of the payments in the form of royalties and licence fees received by firms that sell their technology over the market. Table 11.5 shows the available data collected by the OECD on cross-border technological payments and receipts accounted for by MNE affiliates for the three host countries for which data are generally available, namely Germany, Japan and the US. In Germany, affiliates of MNEs have accounted for the majority of technological payments, and about a third of the receipts. For Japan, only the amount of payments is available, and about a half of this is accounted for by foreign affiliates. (However, as this figure pertains to Japan as a host country, and since FDI to Japan has been very low, the high foreign affiliate share is not particularly meaningful.) For the US, foreign affiliates have also accounted for more than half of all payments, while their share in technological receipts has accounted for less than a tenth.
Table 11.4  Number of triadic patent families and share (of OECD total) of countries in patent families

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed economies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Union</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>219</td>
<td>0.62</td>
<td>290</td>
<td>0.59</td>
<td>288</td>
<td>0.55</td>
</tr>
<tr>
<td>Belgium</td>
<td>374</td>
<td>1.06</td>
<td>431</td>
<td>0.87</td>
<td>471</td>
<td>0.90</td>
</tr>
<tr>
<td>Denmark</td>
<td>189</td>
<td>0.54</td>
<td>243</td>
<td>0.49</td>
<td>211</td>
<td>0.40</td>
</tr>
<tr>
<td>Finland</td>
<td>312</td>
<td>0.89</td>
<td>539</td>
<td>1.09</td>
<td>635</td>
<td>1.21</td>
</tr>
<tr>
<td>France</td>
<td>1,906</td>
<td>5.42</td>
<td>2,365</td>
<td>4.80</td>
<td>2,379</td>
<td>4.54</td>
</tr>
<tr>
<td>Germany</td>
<td>4,814</td>
<td>13.68</td>
<td>7,142</td>
<td>14.48</td>
<td>7,248</td>
<td>13.82</td>
</tr>
<tr>
<td>Ireland</td>
<td>31</td>
<td>0.09</td>
<td>57</td>
<td>0.12</td>
<td>62</td>
<td>0.12</td>
</tr>
<tr>
<td>Italy</td>
<td>610</td>
<td>1.73</td>
<td>801</td>
<td>1.62</td>
<td>816</td>
<td>1.56</td>
</tr>
<tr>
<td>Netherlands</td>
<td>723</td>
<td>2.05</td>
<td>913</td>
<td>1.85</td>
<td>1,017</td>
<td>1.94</td>
</tr>
<tr>
<td>Spain</td>
<td>87</td>
<td>0.25</td>
<td>122</td>
<td>0.25</td>
<td>119</td>
<td>0.23</td>
</tr>
<tr>
<td>Sweden</td>
<td>700</td>
<td>1.99</td>
<td>949</td>
<td>1.92</td>
<td>794</td>
<td>1.51</td>
</tr>
<tr>
<td>UK</td>
<td>1,643</td>
<td>4.67</td>
<td>2,095</td>
<td>4.25</td>
<td>1,973</td>
<td>3.76</td>
</tr>
<tr>
<td>New EU member states</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>3</td>
<td>0.01</td>
<td>11</td>
<td>0.02</td>
<td>14</td>
<td>0.03</td>
</tr>
<tr>
<td>Hungary</td>
<td>25</td>
<td>0.07</td>
<td>34</td>
<td>0.07</td>
<td>22</td>
<td>0.04</td>
</tr>
<tr>
<td>Poland</td>
<td>5</td>
<td>0.01</td>
<td>10</td>
<td>0.02</td>
<td>11</td>
<td>0.02</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>2</td>
<td>0.01</td>
<td>4</td>
<td>0.01</td>
<td>2</td>
<td>0.00</td>
</tr>
<tr>
<td>Slovenia</td>
<td>7</td>
<td>0.02</td>
<td>9</td>
<td>0.02</td>
<td>4</td>
<td>0.01</td>
</tr>
<tr>
<td>Other Western Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>747</td>
<td>2.12</td>
<td>907</td>
<td>1.84</td>
<td>904</td>
<td>1.72</td>
</tr>
<tr>
<td>North America</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>384</td>
<td>1.09</td>
<td>645</td>
<td>1.31</td>
<td>733</td>
<td>1.40</td>
</tr>
<tr>
<td>US</td>
<td>12,286</td>
<td>34.91</td>
<td>17,440</td>
<td>35.37</td>
<td>19,701</td>
<td>37.56</td>
</tr>
<tr>
<td>Other developed economies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>227</td>
<td>0.64</td>
<td>372</td>
<td>0.75</td>
<td>422</td>
<td>0.80</td>
</tr>
<tr>
<td>Israel</td>
<td>158</td>
<td>0.45</td>
<td>360</td>
<td>0.73</td>
<td>363</td>
<td>0.69</td>
</tr>
<tr>
<td>Japan</td>
<td>9,440</td>
<td>26.82</td>
<td>13,086</td>
<td>26.54</td>
<td>13,557</td>
<td>25.85</td>
</tr>
<tr>
<td>New Zealand</td>
<td>20</td>
<td>0.06</td>
<td>50</td>
<td>0.10</td>
<td>52</td>
<td>0.10</td>
</tr>
<tr>
<td>Developing economies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>na</td>
<td>na</td>
<td>37</td>
<td>0.08</td>
<td>36</td>
<td>0.07</td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>20</td>
<td>0.06</td>
<td>90</td>
<td>0.18</td>
<td>184</td>
<td>0.35</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>326</td>
<td>0.93</td>
<td>644</td>
<td>1.31</td>
<td>839</td>
<td>1.60</td>
</tr>
<tr>
<td>Singapore</td>
<td>26</td>
<td>0.07</td>
<td>79</td>
<td>0.16</td>
<td>84</td>
<td>0.16</td>
</tr>
<tr>
<td>Taiwan, Province of China</td>
<td>25</td>
<td>0.07</td>
<td>81</td>
<td>0.16</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Turkey</td>
<td>2</td>
<td>0.01</td>
<td>6</td>
<td>0.01</td>
<td>8</td>
<td>0.01</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>6</td>
<td>0.02</td>
<td>11</td>
<td>0.02</td>
<td>10</td>
<td>0.02</td>
</tr>
<tr>
<td>Mexico</td>
<td>12</td>
<td>0.03</td>
<td>15</td>
<td>0.03</td>
<td>16</td>
<td>0.03</td>
</tr>
</tbody>
</table>
More detailed evidence is available from the US indicating the technology balance related to the operations of foreign affiliates in the US, and that of US multinationals abroad. Taken together, these data reveal that between 1987 and 2005, the proportion of transactions between affiliated companies has risen from around two-thirds to more than three-quarters (Borga and Mann, 2002, 2004; Koncz et al., 2006). Of the receipts of royalties and licence fees by US MNE parents in 2005, intra-firm transactions accounted for 66%, while the corresponding proportion for payments by US parents was 13% (Koncz et al., 2006). US receipts for intellectual property have generally been four to five times larger than payments, although the gap narrowed to about 2.5 to 1 by the early 1990s. Closing the gap between receipts and payments (also including transactions between unaffiliated companies) may reflect the fact that US affiliates may be increasingly dealing independently with foreign customers (National Science Board, 2004).

Japan and South Korea were the biggest purchasers of US technology in 2003 (National Science Board, 2006). With European countries the exchange of intellectual property was quite balanced until the mid-1990s, when the US began to accumulate a surplus with respect to Europe, partly accounted for by increasing licensing by German, as well as French and Swiss, firms. Germany, the UK and Switzerland have also been among the most important sellers of intellectual property to the US. However, since 1992, Japan has been the single largest foreign supplier of technological know-how to the US, and about one-quarter of US payments in 2003 were made to Japanese firms (ibid.).

### 11.3 THE IMPACT OF MNEs ON HOST COUNTRY TECHNOLOGICAL CAPACITY

Historically, the proportion of R&D activity by MNEs undertaken outside their home countries has generally been quite small and, in the case of Japanese firms, negligible, although evidence presented in Section 11.6 suggests that this proportion has grown notably over the past decade. Moreover, the majority of FDI originates from countries which spend the most on R&D, register the largest number of patents and record the highest enrolment in higher education. This would suggest that the geographical distribution of innovatory capacity between countries and within firms should be broadly

---

**Table 11.4** (continued)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Share</td>
<td>Number</td>
</tr>
<tr>
<td>CIS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russian Federation</td>
<td>63</td>
<td>0.18</td>
<td>66</td>
</tr>
<tr>
<td>EU-25</td>
<td>na</td>
<td>na</td>
<td>16,057</td>
</tr>
<tr>
<td>Total OECD</td>
<td>35,197</td>
<td>100.00</td>
<td>49,314</td>
</tr>
</tbody>
</table>

*Sources:* OECD, Main Science and Technology Indicators, November 2004 and December 2006. Some figures are estimates.
Table 11.5  Payments and receipts of royalties and licence fees by MNE affiliates in selected host countries and affiliate share in host country total (local currency millions and percentages)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Manuf.</td>
<td>Total</td>
<td>Manuf.</td>
<td>Total</td>
<td>Manuf.</td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technological payments</td>
<td>985</td>
<td>1,202</td>
<td>1,730</td>
<td>1,876</td>
<td>1,649</td>
</tr>
<tr>
<td>Affiliate share of total</td>
<td>80.0</td>
<td>77.4</td>
<td>66.6</td>
<td>61.4</td>
<td>67.2</td>
</tr>
<tr>
<td>Technological receipts</td>
<td>118</td>
<td>124</td>
<td>174</td>
<td>195</td>
<td>384</td>
</tr>
<tr>
<td>Affiliate share of total</td>
<td>15.1</td>
<td>15.2</td>
<td>27.6</td>
<td>30.0</td>
<td>29.2</td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technological payments</td>
<td></td>
<td>173,693</td>
<td>203,760</td>
<td>199,408</td>
<td>289,244</td>
</tr>
<tr>
<td>Affiliate share of total</td>
<td></td>
<td>44.7</td>
<td>52.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technological payments</td>
<td>319</td>
<td>568</td>
<td>1,317</td>
<td>1,860</td>
<td>3,350</td>
</tr>
<tr>
<td>Affiliate share of total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technological receipts</td>
<td>58</td>
<td>102</td>
<td>165</td>
<td>709</td>
<td>1,387</td>
</tr>
<tr>
<td>Affiliate share of total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * Figures from 2001.

similar. While this is predominantly the case, it would be incorrect to assume that the impact of MNE-related activity on indigenous innovating capabilities was negligible. Far from it: in a variety of ways, including cooperative modes of technology development, the strategies and policies of MNEs can, and do, markedly affect the capacity of indigenous firms in the countries in which they operate.

11.3.1 Share of Foreign Affiliates in Funding and Performing R&D

One indication of the growing importance of the innovative activities of MNEs in host countries is that foreign sources of R&D funding have increased substantially in the past 20 years. About 85% of the foreign funding is provided by MNE affiliates, although within Europe, foreign sources of R&D funding reflect not only the R&D expenditures of foreign affiliates, but also funding for research carried out under the European framework programmes.474

According to the data compiled by the OECD, in 2005, foreign funding accounted for as much as 26% of industrial R&D in Austria, 23% in the UK, 18% in Hungary and 15% in Canada. By contrast, it accounted for as little as 0.4% in Japan, 0.9% in South Korea, and 1% in Finland, reflecting the low levels of inward FDI in all three countries. In 1981, the share of industrial R&D financed by foreign sources was below 10% for all of the OECD countries. It has increased substantially for Canada and the UK, while in France and Italy it has moved from around 5% to below 10%, and in Germany the foreign share has remained relatively unchanged between 2 and 3% (National Science Board, 2004).

Complementing the role of MNEs in the funding of R&D, Table 11.6 shows the share of R&D performed by foreign affiliates as a share of the total R&D performed in the host country, regardless of what proportion of such activity was funded from outside of the host country. These proportions are generally higher than those pertaining to foreign funding, and they are very high for countries, such as Ireland, Canada, the Czech Republic, Hungary, Sweden and the UK, which are host to a large number of foreign affiliates performing locally funded R&D. Indeed, in countries such as the Netherlands, Sweden and the Czech Republic, the share of foreign affiliates in host country R&D has generally been higher than the affiliate share in value added, employee compensation or gross fixed capital formation (see Table 13.3). In 2004, more than 16% of the industrial R&D within the OECD was performed by affiliates, as compared to 12% in 1993 (OECD, 2006).

More detailed data are again available on the innovatory activities of foreign affiliates in the US, and on the foreign activities of US MNEs, based on the surveys conducted by the BEA. Between 1994 and 2000 the share in total industrial R&D in the US accounted for by foreign affiliates ranged from 11 to 13% (National Science Board, 2004). In 2002, R&D performed by foreign affiliates in the US amounted to $27.5 billion, accounting for 14% of total US industrial R&D performance (National Science Board, 2006). Manufacturing accounted for three-quarters of affiliate R&D, which was mostly concentrated in three industries: chemicals and pharmaceuticals, computer and electronic products and transportation equipment. Seven countries, namely, Germany, the UK, Switzerland, Japan, Canada, France and the Netherlands accounted for about 90% of the R&D performed by foreign affiliates in the US. By 2004, the R&D expenditures of
Table 11.6  R&D expenditures of foreign affiliates as a percentage of host country total in selected developed and developing countries, 1993–2004

<table>
<thead>
<tr>
<th>Host country</th>
<th>1993</th>
<th>1996</th>
<th>1999</th>
<th>2001</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed economies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Union</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>55.6</td>
</tr>
<tr>
<td>Finland</td>
<td>na</td>
<td>13.9</td>
<td>14.9</td>
<td>14.2</td>
<td>16.4</td>
</tr>
<tr>
<td>France</td>
<td>na</td>
<td>16.7</td>
<td>16.4</td>
<td>21.5</td>
<td>25.3</td>
</tr>
<tr>
<td>Germany</td>
<td>13.4</td>
<td>13.0</td>
<td>17.8</td>
<td>24.8</td>
<td>26.7</td>
</tr>
<tr>
<td>Ireland</td>
<td>71.0</td>
<td>65.9</td>
<td>63.8</td>
<td>65.2</td>
<td>72.1</td>
</tr>
<tr>
<td>Italy</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>33.0</td>
<td>32.1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>na</td>
<td>na</td>
<td>21.5</td>
<td>19.6</td>
<td>na</td>
</tr>
<tr>
<td>Spain</td>
<td>39.6</td>
<td>30.0</td>
<td>32.8</td>
<td>31.0</td>
<td>27.0</td>
</tr>
<tr>
<td>Sweden</td>
<td>14.7</td>
<td>18.7</td>
<td>36.4</td>
<td>40.7</td>
<td>45.3</td>
</tr>
<tr>
<td>UK</td>
<td>na</td>
<td>30.1</td>
<td>31.2</td>
<td>39.5</td>
<td>38.6</td>
</tr>
<tr>
<td>New EU member states</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>18.0</td>
<td>18.0</td>
<td>27.4</td>
<td>45.3</td>
<td>48.7</td>
</tr>
<tr>
<td>Hungary</td>
<td>12.4</td>
<td>44.4</td>
<td>78.5</td>
<td>71.4</td>
<td>62.5</td>
</tr>
<tr>
<td>Poland</td>
<td>na</td>
<td>na</td>
<td>20.2</td>
<td>14.6</td>
<td>16.8</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>3.5</td>
<td>4.4</td>
<td>3.2</td>
<td>19.0</td>
<td>20.4</td>
</tr>
<tr>
<td>North America</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>31.8</td>
<td>31.7</td>
<td>32.0</td>
<td>29.6</td>
<td>34.9</td>
</tr>
<tr>
<td>US</td>
<td>12.1</td>
<td>12.4</td>
<td>14.7</td>
<td>13.3</td>
<td>13.6</td>
</tr>
<tr>
<td>Other developed economies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>na</td>
<td>30.3</td>
<td>41.8</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Israel</td>
<td>na</td>
<td>9.7</td>
<td>14.3</td>
<td>20.7</td>
<td>na</td>
</tr>
<tr>
<td>Japan</td>
<td>0.9</td>
<td>0.9</td>
<td>3.9</td>
<td>3.4</td>
<td>4.3</td>
</tr>
<tr>
<td>Developing economies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>na</td>
<td>na</td>
<td>19.2</td>
<td>21.7</td>
<td>23.7</td>
</tr>
<tr>
<td>India</td>
<td>2.0</td>
<td>2.3</td>
<td>3.4</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>na</td>
<td>0.3</td>
<td>1.4</td>
<td>1.7</td>
<td>na</td>
</tr>
<tr>
<td>Singapore</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>57.6</td>
<td>59.8</td>
</tr>
<tr>
<td>Taiwan, Province of China</td>
<td>24.5</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Turkey</td>
<td>16.3</td>
<td>21.7</td>
<td>7.3</td>
<td>10.6</td>
<td>na</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>na</td>
<td>14.3</td>
<td>7.1</td>
<td>16.5</td>
<td>na</td>
</tr>
<tr>
<td>Brazil</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>48.0</td>
<td>47.9</td>
</tr>
<tr>
<td>Mexico</td>
<td>na</td>
<td>51.3</td>
<td>39.9</td>
<td>32.5</td>
<td>na</td>
</tr>
</tbody>
</table>

Sources: Figures for 1993 and 1996 are from UNCTAD (2002), based on various sources; some figures for 1996 and figures for 1999, 2001 and 2004 are from OECD, Main Science and Technology Indicators, November 2004 and December 2006; additional data obtained from UNCTAD (2005c). Some figures are estimates. For some countries, data reflect the closest year available.
nonbank majority-owned affiliates (MOFAs) had increased to $29.9 billion (Anderson and Zeile, 2006).

The picture is very similar when one looks at the innovative activities of US MNEs abroad. For more than two decades, some two-thirds of the R&D performed by US firms outside of their home country was located in only six countries: the UK, Germany, Canada, Japan, France and Sweden. The same industrial sectors that accounted for most of the R&D investment in the US, were also responsible for most of the R&D performed overseas by the affiliates of US MNEs. In 2002, the R&D performed abroad by US affiliates was $21.2 billion, amounting to 11% of industrial R&D in the US (National Science Board, 2006).

On the whole, the contemporary evidence indicates that the R&D activities of foreign firms are becoming more important in the technological activities of host countries, including some developing countries. For example, by 2004, more than 100 MNEs had set up R&D facilities in India, while as many as 700 had set up such facilities in China (Reddy, 2000; UNCTAD, 2005c:141). For developed countries, UNCTAD (ibid.:125) estimates indicate that the share of foreign affiliates in host country R&D grew from 11% in 1996 to 16% in 2002, while the share of developing countries rose from just 2 to 18% in the same period. Much of this trend, particularly within the Triad, is the consequence of extensive M&A activity in several research-intensive fields, including pharmaceuticals, biotechnology and ICT in the 1990s. Furthermore, firms in these sectors have been particularly active in forming technology alliances.

The majority of technology alliances are contractual, and specify where and by whom specific research is to be carried out (see Section 11.7). Technology alliances can thus be seen as a form of relational contracting for the development of new knowledge, which differs from other forms of contractual outsourcing in that the precise characteristics of the output are not known beforehand. As such, alliance agreements would be expected to influence the location and extent of innovative activity, and their collective impact should be reflected in the statistics over time, both in terms of the foreign funding of R&D, as well as in terms of the share of R&D carried out by MNE affiliates.

11.3.2 R&D Intensity of Foreign Affiliates

Even a growing proportional share of MNE affiliates in R&D activity in the host country does not mean that MNE affiliates would be necessarily more R&D intensive than domestic firms in the host country. The early evidence on countries such as the UK (Dunning, 1958), Canada (Safarian, 1966) and Australia (Brash, 1966) seemed to indicate that, in most countries, foreign affiliates tended to spend less on technology-creating activities than did their indigenous competitors. In Brazil, a survey of 183 firms in the São Paulo region in 1967 led Evans (1979) to assert that there was a negative correlation between the extent of foreign ownership and the propensity to undertake R&D. Subsequent evidence on countries such as Sweden, India and Belgium, among others, often found that MNEs spent a smaller proportion of their income on R&D than did their local counterparts (Håkanson, 1981; Rangachand, 1981; Van den Bulcke, 1985; Kumar, 1990; Pearce, 1990a).

While interesting, such studies are less informative than one might have hoped. The problem with any comparisons of MNEs and local firms as a group is that foreign
investors in any (large) host country are likely to be quite heterogeneous, according to the *raison d'être* for the investment. While the average R&D intensity of foreign affiliates is likely to have increased with the internationalisation of corporate R&D over the past two decades, the extent and type of R&D activities carried out by the affiliates vary considerably.

The average R&D intensity of foreign affiliates is also influenced by the industrial sectors predominant in each host country. The data in Section 11.2 demonstrated that the intensity of R&D is likely to vary considerably between sectors. Thus in order to compare like with like, foreign affiliates should be matched with local firms in the same industry, ideally of a similar size, to allow for proper comparison. However, such comparisons are only possible if the FDI takes place in a sector that has strong indigenous firms, such as in the case of European pharmaceutical investments in the US in the 1990s. In countries such as Ireland or Singapore, which have consciously built their industrial sectors with the help of FDI, indigenous firms are necessarily smaller or nonexistent, which makes such comparisons very challenging. The same problem arises when one tries to compare the research intensity of foreign affiliates of different nationalities within one host country. Unless the distribution of industries into which MNEs have made investments is very similar across different nationalities of foreign investors, a meaningful comparison would be difficult to achieve.

11.3.3 Spillovers to Local Firms

In addition to the direct effects of MNE affiliates on the technological capacity of host countries, there are likely to be indirect consequences. Such consequences are typically known as R&D, technology or knowledge spillovers to local firms in the host economy. Since it is not possible to measure spillovers directly, the presence of spillovers has to be inferred from other evidence, such as increases in the productivity of local firms as a result of MNE entry or presence in the host economy. We discuss spillovers and linkage effects in some detail in Chapter 16, including methodological issues and the locational specificity of spillovers. For now, we simply wish to highlight a few studies that, in one way or another, have attempted to trace the origin of the local spillovers to the innovative activities of MNE affiliates.

A study by Xu (2000) on a panel of majority-owned US manufacturing affiliates in 40 countries lends support to the role of technology transfer on the productivity-enhancing impact of FDI in the host countries. The study used spending on royalties and licence fees as a share of value added as an indicator of technology transfer, and found that while technology diffusion had contributed to productivity improvements in developed countries, it had not done so in developing countries due to insufficient absorptive capacity.

Another study by Kinoshita (2001), employing firm-level panel data for the Czech Republic in 1995–98, separated the effects of R&D investment on the productivity of indigenous firms from that of technology spillovers. Kinoshita found that the productivity-enhancing effect of a foreign presence in a sector was limited to those local firms that had invested more in R&D. Finally, a study by Feinberg and Majumdar (2001) on technology spillovers to and from the locally conducted R&D of pharmaceutical MNE affiliates in India found no spillovers to local firms, although the foreign affiliates seemed to benefit from the R&D conducted among themselves.
11.4 THE TRANSFER AND ADAPTATION OF TECHNOLOGY BY MNEs

It might be argued that if the private costs and benefits of engaging in R&D, technology transfer and adaptation were the same as the social costs and benefits to the host countries, and if the MNEs were operating at optimum efficiency, then inbound FDI would automatically provide the right kind of technology and innovatory capacity for the host country. However, there are at least three reasons why this may not be the case. The first is that the goals of MNEs may be different from those of the countries in which they operate; hence their response to a given configuration of L-specific attractions may be different from each other. The second is that, where structural market imperfections exist, the strategic behaviour of MNEs or their affiliates may not accord with the best interests of the recipient country. The third is that the private and social costs and benefits of adaptation – particularly of soft technologies – may be very different. To the firm, the costs of adaptation may be considerable in relation to the perceived costs to the host country. For example, because of their consequences on employment, linkages and market structure, there may be substantial net social gains from such adaptation.477

On the other hand, a host country’s preference for technology adaptation may be linked to its institutional infrastructure, and its economic and social climate. Certainly, a firm’s readiness to access, transfer, utilise and organise foreign technology will be influenced by the content and effectiveness of the innovatory system, and the economic and other signals set by the host government. An economy which pursues a market-orientated and export-led growth development strategy may promote policies and institutions that necessitate fewer process or product adaptations by MNEs than one which pursues a protectionist import-substitution strategy. Similarly, a country which aims at technological self-sufficiency is likely to make different demands on both its own firms and inward direct investors from one which accepts that its knowledge-based strengths will critically influence the structure of its dynamic comparative trading advantages.

The questions now arise: to what extent do (or can) MNEs help to provide host countries with the technological assets they need to upgrade their indigenous resources and capabilities? How far, in practice, are they prepared to invest in new technologies or to adapt their existing technologies, to meet the particular supply and demand requirements of host countries?

While it is difficult to give general answers to these questions, research so far conducted suggests that there are three main determinants of the capabilities and the willingness of MNEs to adapt their O-specific technologies to different country-specific circumstances:

1. size and characteristics of the markets served;
2. differences in cross-border factor costs and the availability of factor inputs and materials; and
3. differences in cross-border cultures, institutions and organisational methods.

Furthermore, such adaptations may take the form either of modifications of the methods by which particular products are produced (for example, process or fabricating technology) or the types of products produced (product technology). We shall discuss each of these kinds of technology adaptation in turn.
11.4.1 Market Size and Characteristics

We have seen that one of the most frequently cited O-specific advantages of MNEs – which are sometimes a cause and sometimes a consequence of their multinationality – is that they are able to access, design and implement production and organisational techniques to take advantage of size and/or scope economies. *Inter alia* this enables them to develop and exploit not only new ‘hard’ production technologies, but also new ‘soft’ technologies (for example, in purchasing, inventory control, work organisation, budgetary control and strategic planning procedures).

The first consequence is that the production functions of a whole range of value-added activities may be different because the foreign affiliate is part of a larger organisational system and network of value-adding activities. The second effect is on the activities which have to be undertaken in the host country – be they in the production of primary, secondary or tertiary goods and services. The evidence suggests that, *ceteris paribus*, MNEs would prefer to standardise their technologies in all their production outlets, thus avoiding the costs of adaptation. In some cases, for example, where the affiliates are producing goods and services for sale to international markets, there may be a disincentive to modify production methods lest product quality be adversely affected. A lot of efficiency-seeking MNE activity is of this kind. In others, such as import-substituting investment where the product is sold only to the local market, which is less developed or smaller than that of the investing country, the cost of ‘scaling down’ production processes may be considerable. In some knowledge-intensive sectors, it may not be feasible at all.

Nevertheless, empirical research suggests that the main reason why MNEs choose to adapt their process technologies in their foreign affiliates – particularly in developing countries – is because of the smaller output produced by the latter. Clearly, the extent to which such adaptation takes place depends upon the substitutability of production processes. In general, extractive firms find it difficult to modify their value-added activities, as do capital-intensive and high-technology firms. However, some scale-motivated adaptation may well be a response to a different structure of factor prices, since the smaller plants may only be competitive where labour costs are lower. It may also be influenced by fiscal and other incentives offered to foreign affiliates if they remodel their production processes in a way which governments perceive will most advance their economic or social objectives.

Market characteristics also affect the willingness of MNEs to adapt their products to meet local needs. Again, it is worth observing that one of the main asset-based advantages of MNEs is that they are frequently in the van of product development and help to upgrade the quality of consumer demand. At the same time, it has to be accepted that the majority of their products tend to be sold to relatively high-income consumers and technologically sophisticated or scale-intensive producers. This may mean that an automobile made to meet the needs of mid-western US consumers may not ideally meet the needs of Finnish, Indian or Chinese consumers; or that food products primarily destined to meet the tastes of German households will not necessarily satisfy those of Japanese or Brazilian consumers; or that electrical appliances suitable for the British market cannot be manufactured without modification for sale in Indonesia, Italy or Mexico.

On the other hand, certain products seem to translate across national boundaries with only minor modifications. Examples include capital goods which globalisation demands
should be standardised, for example, telecommunications systems, several kinds of drugs, and branded consumer products and services including disposable razors, soft drinks, breakfast cereals, some forms of clothing, and hotels. Indeed, one of the appeals of some MNEs to both industrial and personal consumers is that they offer standard quality-controlled goods. Such patterns are further influenced by intensive advertising by MNEs. Many MNEs have maintained that product uniformity is critical if they are to offer a flexible and internationally acceptable sourcing network for their customers. For their part, governments – particularly those from South and East Asia – have frequently used MNEs to promote the image of their countries as producers of high-quality and prestige products. At the same time, there has also been some degree of backlash against the omnipresence of some multinational brands, reflected in popular books such as *No Logo* by Naomi Klein.

The evidence for or against these assertions is mixed. On the one hand, one of the main advantages of some MNEs rests in the quality and uniformity of their branded products supplied to their main markets. They may perceive that the costs of adapting these products to meet the needs of particular consumers are greater than the costs of persuading them to buy these products. This and similar perceptions have led to the development of world or regional (European, Asian, and so on) product mandates. On the other hand, an increasing number of MNEs are recognising that an ability to localise products to country-specific customer needs is a competitive advantage in its own right. This, in part, has been made possible by the introduction of flexible manufacturing methods. So far, such localisation is more in evidence in developed countries. In any event, it is country-specific characteristics (for example, income levels and income distribution) which largely determine demand patterns in most countries.

### 11.4.2 Factor Availability and Price Differentials

Neoclassical economic theory predicts that a firm will select the technology which, given the availability and price of factor inputs and intermediate products, will minimise the costs of producing any given level of output. Where real labour and raw material or energy costs are low and real capital costs are high, the production technology employed is likely to be capital saving. By contrast, where real capital and raw material or energy costs and real labour costs are high, then technology is likely to be labour saving. And where real labour and real capital costs are low and raw material costs or energy costs are high, technology is likely to be materials or energy saving.

Where demand standards are high and there is a sophisticated supply capability of components, parts and raw materials, as well as a range of supportive legal, technological and communications infrastructure, the production methods pursued by MNE affiliates are likely to be more technologically or information intensive than in the absence of these conditions. They will also differ according to the availability and cost of natural resources and created assets in a country. Thus the production of soap, textiles, light bulbs or cigarettes, and the supply of business- and tourist-related services in Sri Lanka or Kenya, is likely to be different from that in Germany or Sweden, irrespective of the ownership of firms, simply because the institutional structure and competitive advantage of the countries are so different.

There is ample evidence to suggest that the factor input ratios of value-added activities
do vary across countries to some degree or another. Moreover, much export-orientated manufacturing and service FDI in developing countries is prompted by the desire to economise on real labour costs. Some value-added activities (for example, tobacco growing, many chemical processes and airline journeys) can only be economically undertaken in a particular way. In others (for example, coal mining, drug dosage preparations, textile finishing, lamp bulb manufacturing, materials handling, accounting procedures, building and construction and call centres), there remains some latitude in production techniques. Indeed, there are few value-added activities or organisations which, at the margin, do not respond to real factor price or quality differentials. In general, it would seem that the greater the specificity of assets required in the production process, the less room there is for product or process adaptation. The more idiosyncratic the end products and the greater the possibility of varying the amount of natural resource inputs, the more flexible production methods are likely to be.

To what extent, then, do MNEs adapt their process technologies to take account of differences in country-specific factor costs and availability? How do the process techniques of their affiliates compare with those of their parent companies or their indigenous competitors? As we suggested earlier, work done on comparing the technology of affiliates of MNEs with indigenous companies is fraught with conceptual and statistical pitfalls. Chief among these is the difficulty of separating the ownership effect from other attributes of the foreign affiliates, and of making comparisons between firms that engage in a similar set of value-added activities. Several studies have shown that foreign affiliates of MNEs employ more capital- or technologically intensive methods than their indigenous competitors. However, on closer inspection this is found to be because the former are more concentrated in capital- and technology-intensive sectors than the latter. Even within sectors, the product composition and degree of vertical integration may differ between firms and regions, and thus cause differences in capital intensity.

The consensus of research findings is that a substantial modification in production processes is only likely to occur in medium–low-technology import-substituting activities in developing countries. The degree of such adaptation would appear to vary between country, sector and firm. To the extent that MNEs tend to enjoy an O advantage over indigenous firms in the creation and deployment of technology, rather than managing people, they may be ‘deskilling’ existing technology to save on skilled labour. However, as Chapter 13 will illustrate, due to changes in the global human environment, this view is increasingly questionable. Certainly in the 1980s and 1990s, Japanese direct investment in the auto and electronic industries in Europe led to an upgrading of indigenous human assets, simply because at that time one of the O-specific advantages of Japanese firms lay in their ability to efficiently manage and organise their intra and inter-firm working relationships. In the early 2000s, the quality of a firm’s human resource management is becoming an increasingly important determinant of the success of both cross-border M&As and of collaborative ventures of one kind or another. Moreover, as Chapter 13 will demonstrate, MNEs have made significant contributions to the training and upgrading of human skills, particularly in upper-middle developing and advanced industrial countries.

An additional reason why MNEs might wish to adapt their production technology in foreign countries is to take account of the differences in the availability and quality of local materials and intermediate products. Such differences are likely to be most
pronounced in the least developed host countries. While foreign affiliates may wish to import some of these inputs, transport costs, tariffs, non-tariff barriers and government import controls may induce local procurement. Usually, materials availability tends to affect the kinds of products supplied rather than the process technology employed. Occasionally, however, it may influence the extent and kind of capital equipment utilised. This is likely to be the case where synthetic materials (the use of which is likely to be relatively capital intensive) are used in place of natural materials (the use of which is likely to be relatively labour intensive). The substantial increase in energy costs and some hard minerals over the past decade is compelling firms to reappraise their extractive techniques (UNCTAD, 2007). The need to economise on materials and/or components in some countries more than others (because of availability or higher real prices) may also affect the organisation of their deployment, including inventory control, testing and inspection procedures, and environmental policies.

It is important to note as well that in industries that rely on specialised technology suppliers for their core technology, process adaptation is likely to be limited. This is particularly the case in industries, such as chemicals, steel and pulp and paper, where specialist engineering firms are involved in the design and engineering of new plants and machinery. The dynamics of the market for the technology sold by these firms are likely to determine the kind of technology available worldwide. Indeed, this is part of the explanation as to why ‘green’ process innovations are likely to travel across borders as part of multinational investment, also in the case of FDI to developing countries (Lundan, 2004b). Aside from any possible desire by the MNE to improve its social performance or reputation, the technology available on the market tends to reflect the state of the art that is known to work in practice, and this is preferred irrespective of where the investment will actually take place.481

Furthermore, the existence of upstream specialised engineering firms in developed countries can have what Arora et al. (2001) have termed an ‘unconventional spillover effect’ on firms in developing countries. They argue that since the fixed costs of developing new process technology in the chemical industry had been absorbed by firms in the developed countries a couple of decades ago, this has enabled developing countries to appropriate the technology at lower cost. While almost certainly the chemical industry would have evolved in the developing countries in the absence of these specialised engineering firms, either through indigenous means or by investment by established MNEs, the authors argue that the development was quicker, and the possibility of indigenous firms to develop in the industry was more likely, due to the competitive market of upstream technology suppliers in developed countries.

11.4.3 Institutional and Cultural Differences

Most of the literature on the costs and benefits of technology transferred by MNEs to host countries has been concerned with hard technology. However, no less important is their willingness and ability to transfer and/or adapt soft technology and, in particular, organisational structures and work practices.482 At the same time, the evidence suggests that, because of differences in corporate cultures and the macro-institutional context, it is often more difficult for MNEs to successfully transfer established soft technologies across national boundaries (Kogut, 1991). In particular, the distinctive
incentive structures and enforcement practices that constitute the institutional advantages of the MNE (see Chapter 5) are likely to play an important role in such technology transfer.

In addition to the advantages of MNEs, the willingness and ability of a country to reconcile the need to adapt its corporate culture to meet the changing needs of world markets—and the speed with which it can do so—can itself be seen as a competitive institutional advantage (Amable, 2003). Such cultural fluidity is demonstrated in various ways, from product labelling in foreign languages, exposure to foreign ideas and concepts, labour-related incentives and standardisation of weights and measures, to a full-blown membership of a regional community. History suggests that some countries—particularly those which are highly dependent on international commerce for their prosperity—are much better at doing this than others. Moreover, some nations have much more distinctive business cultures and macro institutions than others. Japan is one example of a country which is managing to reconfigure its institutions to meet the needs of the global economy without losing its distinctive belief systems and values (Ozawa, 2005). The Chinese business networks are another case in point.

Given a proper sensitivity and respect for national and regional traditions and customs, the MNE can play an important role in introducing new organisational forms and relationships. We begin with a few historical examples. The first is the role of US MNEs in introducing new organisational and financial control systems into their European subsidiaries in the 1920s and 1930s (the multidivisional organisation), and a range of new management and marketing techniques in the 1950s and 1960s (Kipping and Bjarnar, 1998). The second is the successful implantation of Japanese work practices and quality-control procedures (the latter, at least, pioneered in the US by Taylor half a century earlier) into the US and Europe (Dunning, 1986b). The third example is typified by the differences between two distinct organisational philosophies: Fordism and Toyotaism. To some extent, each philosophy is a creature of its time and reflects its country of origin. Yet each is meeting with a certain measure of success when translated into a foreign institutional context. It also deserves to be noted that whereas European firms were fairly quick to introduce the mass production methods in automotive and other industries in the early 20th century, it took them much longer to adopt the multidivisional form of organisation (Kogut, 1990). The transaction costs of overcoming the rigidities of ingrained tradition and business practices are considerably higher than those of replacing a machine or introducing new products.

With increasing global activity by MNEs, a more diverse range of technological norms and management methods are being transferred by MNEs through their affiliate network. In Chapter 5, we gave examples relating to the standards for quality management processes, such as ISO 9000 (Guler et al., 2002), or environmental management processes, such as EMAS and ISO 14000 (Christmann and Taylor, 2001). Indirectly, this also includes the transfer of specific regulatory standards, such as that of elementally chlorine free (ECF) pulping from Scandinavia to the US (Lundan, 2004a), or the diffusion of the arm’s-length standard of transfer pricing within North America (Eden et al., 2001).

In addition to technical standards, models or corporate governance and labour relations can also be subject to cross-border transfer. For example, Khanna and Palepu (2004) have shown that the global product and talent markets (rather than the capital market)
acted as drivers for Infosys to become a benchmark of good corporate governance in India, although this has so far resulted in limited spread to other Indian firms. Transfer can also involve the cross-border transfer of employment practices, such as in the adoption (and adaptation) of workforce diversity policies in six UK affiliates of US MNEs (Ferner et al., 2005). Other social changes not solely attributable to MNEs, but often influenced by them, can include the importation of an anti-union culture centred on individual achievement and individual rewards, as well as challenges to traditional work–life balance, resulting in a more atomistic (less communitarian) society (Guillén, 2000b; Peoples and Sugden, 2000).483

 Nonetheless, even in the cases where the transfer of technology and management processes within the MNE would result in the upgrading of standards in the host country, the process of intra-firm transfer is not without its problems. Jensen and Szulanski (2004) investigated what has been termed ‘stickiness’ by Szulanski (1996) in the transfer and adaptation of organisational practices in cross-border knowledge transfers. Drawing on the work of Kostova (1999) and Kostova and Roth (2002), the authors argue that adaptation can increase both cognitive and normative legitimacy, which, in turn, improves recipient motivation and ability to accept the transferred practices. At the same time, if legitimacy is negatively related to institutional distance, one might expect that as this distance increases, so would the benefits of adaptation. However, Jensen and Szulanski find that adaptation actually seems to exacerbate the difficulties of transferring organisational practices, even when controlling for the effect of institutional distance.484 While subsidiaries have good reasons to prefer local adaptation, the authors present some anecdotal evidence of parent companies who have established policies of no adaptations to established practices, at least during the initial stages of transfer, due to the problems that arise in the transfer process.

11.5 MOTIVATION, TYPE AND ORGANISATION OF AFFILIATE R&D

R&D activities represent a particular form of value-added activity by firms. While these activities are usually perceived to precede the manufacturing of a product, post-manufacturing product modifications and improvements make it desirable to link innovative activities to both past and future output. In this section we review the motivations for affiliate R&D, the types of R&D performed by affiliates, and the factors favouring the centralisation or decentralisation of affiliate R&D. In line with our discussion in Part II, we distinguish between R&D related to the exploitation of the existing capabilities of the MNE, and R&D related to the generation or acquisition of new knowledge and capabilities.

Furthermore, as we discussed in Chapter 9, the external network of the MNE, that is, its connections to other firms and extra-market organisations, has become an important component of the innovative activities of the MNE. The internal innovative activities of the MNE, represented by its R&D investment, are complemented by external activities, such as contract research and R&D alliances. Consequently, while our discussion in this section is concerned with the firm’s own R&D activities, Section 11.7 will pay particular attention to the external knowledge-augmenting activities of MNEs.
11.5.1 Motivations for Affiliate R&D

The extent to which R&D is undertaken by MNE affiliates will depend, first, on whether it is undertaken at all, and second, on the relative advantages of locating the activities in the home country. Unlike foreign production, which requires some kind of O-specific advantage on the part of the investing firm, foreign research is undertaken to create or acquire an advantage. However, such R&D activity is not independent of the existing technological capacity (including the learning experience) of the firm and/or the availability of complementary assets. To the extent that the possession of these latter assets may lower the marginal costs of R&D, the MNE may have an advantage in seeking out, monitoring and incorporating the research facilities and/or output of other firms into its own innovatory portfolio. It may also seek to benefit from (comparatively) favourable institutional environments. Hence, the desire of US corporations to have an innovatory presence in Europe, and of European and Japanese MNEs to have a research base in the US.

It is also worth recalling that the market for innovatory resources is generally considered most imperfect. When such imperfections lead to the price of such resources being relatively lower in foreign countries (in relation to their opportunity and replacement costs) than in home countries, the MNE may have an additional reason for engaging in foreign-based R&D.

The literature identifies several activity-, firm- and country-specific characteristics influencing the extent of the innovative activities undertaken by MNE affiliates. In addition, the age, size and experience of the investing firm and the extent and location of its other foreign value-adding activities are other relevant variables. Generally speaking, apart from where MNEs acquire foreign firms or set up an R&D facility to tap into local innovatory capacity, R&D tends to follow downstream production. Commercial reasons often play a part in the decision to begin R&D abroad. As we discussed in Section 11.2, the availability and cost of scientists and engineers is obviously a critical consideration, while a large national market may require particular products in particular forms.

Pressure and/or support from host governments are also relevant factors and will be discussed in the following chapter. In an attempt to upgrade their national innovatory capacities they are anxious to encourage foreign MNEs to engage in R&D activities in their midst. They use a variety of instruments for this purpose, such as cash or in-kind grants for R&D, procurement preferences and domestic content requirements. Although sometimes appreciable, tax concessions and subsidies do not in general play a very significant part in decisions to move research to other countries due to the uniqueness of knowledge resources.

A variety of studies undertaken in the 1980s revealed that the great majority of R&D undertaken by the foreign affiliates of MNEs was directed to the adaptation of particular products, processes or functions and procedures of the firm rather than to basic or fundamental research (for example, Pearce, 1990a; Casson, 1991; Pearce and Singh, 1992). While this is still often the case, the growing importance of affiliate activity that is directed at generating new knowledge and competences for the MNE as a whole, rather than applying and exploiting its existing knowledge, has increased in the 1990s (Cantwell and Mudambi, 2005). Evidence of this transition was provided in an influential study by Kuemmerle (1999b), who classified R&D affiliates into those engaged in home base exploiting (HBE) and
home base augmenting (HBA) activities. HBE activities are undertaken to adapt home-based innovations to host country markets, while HBA R&D activity abroad is motivated by the desire to tap into the capabilities available in host countries. His sample included 32 large American, Japanese and European MNEs in the pharmaceutical and electronics industries, with a total of 238 research laboratories, of which 156 were abroad.\footnote{488}

Kuemmerle found that 38% of the R&D laboratories were of the HBA type, and 62% were the HBE type, while R&D employment abroad had increased from 6% in 1965 to more than 26% of global R&D employment in 1995. Investment in additional R&D facilities in the home country generally preceded the internationalisation of R&D, and the HBE facilities abroad were typically established before HBA facilities. In the case of Japanese firms, the increase in the extent of foreign R&D followed the wave of FDI in manufacturing with a time lag of 5 to 10 years.

11.5.2 Types of R&D Performed by Affiliates

Chapter 4 argued that firms will normally engage in FDI whenever they perceive that they possess technological or organisational O advantages which they perceive are best exploited internally from a foreign location. However, as we have also seen, MNEs may also be prompted by the need to augment their existing intangible assets, which, coupled with those they already possess, they believe will help sustain or improve their global competitive position. Firms choosing to acquire or engage in foreign innovatory activities may do so for several reasons. In particular, we might identify four types of affiliate R&D.\footnote{489}

**Product, material or process modifications and improvements**

The bulk of the innovatory activities of MNEs outside their national boundaries takes the form of technical and organisational support facilities. Such activities are made necessary by country-specific differences in materials availability, supply capabilities and consumer needs, as well as differences in work practices and organisational customs and innovative structures. Such innovatory activities may be resource based, market orientated, efficiency or asset seeking. They frequently require many kinds of skills, competences and experience, but particularly those of applied scientists, development engineers, technicians and professionals. External contact is mainly with suppliers of intermediate products and with final customers.

This type of R&D both depends on, and affects, the know-how rather than the know-why capabilities of the country in which it is located. It both depends on, and affects, the local technological capacity. Much of the initial innovating investment undertaken by MNEs in their foreign subsidiaries is of this kind. The major exception is where MNEs acquire foreign firms with existing R&D facilities. Moreover, it has been the dominant type of R&D carried out in developing countries, except for sectors such as agribusiness, food processing, textiles and clothing, pharmaceuticals, advertising and management consultancy, and in a few countries, such as Brazil, China, India, South Korea, Mexico, Singapore and Taiwan. However, in some cases, the R&D consequent upon MNE activity is externalised to upstream sellers or downstream buyers.
Basic materials or product research
This kind of research is most likely to be located in the MNE’s home country. Occasionally, the absence or high cost of particular materials in that country, or host government policies may necessitate a complete reappraisal of the siting of both production methods and innovatory activities. If and when the latter are relocated outside the home country, the R&D is likely to be of two main kinds. The first is where the inputs required for the research are themselves immobile (for example, tea plantations, bauxite mining, a particular climate or ecological condition, quality improvement techniques for agribusiness and so on). The second is where the need for regular testing and customer interaction requires a local R&D facility. The latter requirement is similar to that for a close proximity between R&D and production in the first stage of the product cycle. The output of this research may be used for products supplied to local or export markets.

This latter type of research is likely to make more demands on the local innovatory infrastructure. It is more of a know-why than a know-how variety, and is most likely to flourish where it is part of a cluster of similar R&D activities and where MNE affiliates have good access to university or cooperative research facilities, and where the institutional setting encourages entrepreneurship in product and process innovation. At the same time, MNE activity might itself influence, for good or bad, the development of such localised innovatory clusters.

Efficiency-seeking research
This R&D is the equivalent of rationalised or efficiency-seeking production. To gain economies of scale and scope, MNEs may choose to concentrate certain types of R&D in particular foreign countries, the output of which they export to other parts of their organisation. Like the second type of R&D, specialised or rationalised research will usually be attracted to countries with a sophisticated technological and educational infrastructure, and which are host to related or supportive industries. There is some evidence to suggest that this type of R&D is increasing the fastest, particularly among the developed countries, and in those sectors in which the degree of multinationality is most marked and where intra-firm specialisation is the most pronounced (Pearce and Singh, 1992).

Research to acquire or tap into technological assets or capabilities
As the ownership of R&D becomes increasingly concentrated but its location becomes more dispersed, many MNEs, particularly in the technologically intensive sectors, are finding it desirable to have an innovating, as well as a manufacturing presence in the main industrialised countries. At the same time, competitive pressures and the escalating costs of R&D are leading an increasing number of companies to conclude cross-border research alliances. Companies such as IBM, Philips, Siemens, Nokia, Sony, ICI, SKF, Unilever and DuPont all have R&D facilities in Europe, the US and Asia. Countries anxious to attract high-value activities of firms are attempting to create centres of innovatory excellence. Some MNEs from investment-driven developing countries are also investing in Europe and North America to acquire or gain access to technological capabilities, and to benefit from more favourable innovation systems in the same way as firms from industrialised countries invest in some developing countries to access or acquire raw materials or low-cost labour. A recent survey on the location of corporate
R&D involving a sample of 203 MNEs mostly from the US and Europe indicated that over 45% of the work performed in developed countries involved ‘new science’, while the figure for emerging countries (China and India) was only 22% (Thursby and Thursby, 2006).

11.5.3 Organisation of Affiliate R&D

Assuming that the MNE wishes to add to its stock of knowledge by undertaking in-house R&D rather than through contractual means (for example, through R&D alliances), or by acquiring licences and patents, it faces the question of how best its innovative activities should be organised. This involves essentially two choices, one concerning the extent of decentralisation, and the other concerning the strategic role of its affiliates, and the scope and content of their mandate.

There are powerful locational reasons for the centralisation and decentralisation of R&D. Those favouring centralisation include the desire to gain and exploit economies of scale in R&D, the availability and quality of supporting institutions and agglomeration economies in the home country, and the possible benefits gained from co-location with production units and supplier firms. The most powerful motive for decentralising R&D is the desire to exploit the pool of research talents of another country by ‘tapping into’ the institutions that make up the national or regional innovation system. The localised knowledge may be necessary for adapting the product or service to local tastes. Alternatively, it may reflect the host country’s comparative advantage in certain types of research (and resources), and the inputs needed to effectively pursue it.

Within these parameters, MNEs may pursue various strategies towards the international organisation of their research activities. Bartlett and Ghoshal (1990) delineated the innovatory activities of MNEs according to where the R&D is undertaken and for what purpose. Thus they defined local-for-local R&D activities as those in which a particular national affiliate of the MNE creates and complements innovations entirely at a national level. Where these innovations are found to be applicable in multiple locations, they become local-for-global activities. By contrast, a centre-for-global innovatory strategy is one in which a central R&D laboratory creates a product, process or system for worldwide use; while global-for-global innovations are those created by pooling the resources and capabilities of many different R&D units to help solve a worldwide problem (Nohria and Ghoshal, 1997).

As we discussed in Chapter 8, increased affiliate autonomy and the emergence of centres of excellence have made knowledge management a key strategic issue for the MNE. Entrepreneurial affiliates are increasingly likely to develop capabilities that allow the MNE to enhance its stock of technological assets, but their strategic role also creates tension between affiliate autonomy and centralised control within the MNE.

Some insight into the strategic role of R&D affiliates is given by Florida (1997), who used a comprehensive listing of R&D affiliates in the US in 1994 to study 186 foreign-affiliated R&D laboratories (representing a response rate of nearly 90%). He found that the R&D spending of these affiliates, rather than being directed to the simple adaptation of products to the local market, was primarily related to developing new products, obtaining information on scientific and technological development, and obtaining access to high-technology scientists and engineers and designers. Particularly important was their
ability to attract high-quality scientific and technical talent. Universities were considered as relatively unimportant sources of innovation (defined as new product ideas), except in some science-based sectors such as biotechnology. The affiliates exhibited considerable autonomy in initiating new projects and in hiring scientists and engineers, although they regularly reported to sister R&D facilities and corporate headquarters on general administrative matters. With respect to their management and organisational practices, most MNEs preferred to emulate the innovation management systems of US R&D laboratories, firms and universities, rather than their counterparts in their home country (Kenney and Florida, 1995).

In Canada, Niosi and Godin (1999) identified 60 firms with research-active affiliates abroad, of whom 18 responded to the survey. Most of their R&D activities took place in the US, and indeed some of the affiliates conducted no R&D in Canada. They engaged mostly in commercially related R&D, with proximity to customers being the prominent reason for establishing a foreign R&D base, along with the demands of the foreign affiliate, and supporting local manufacturing ventures. Although for a subset of the affiliates the recruitment of highly skilled personnel and monitoring technical developments was also important, their budget allocations were fairly evenly split between commercially related R&D and development activities. The affiliates in this study enjoyed relatively high autonomy, many of them submitting only major projects for Canadian headquarters for approval.

Evidence for R&D facilities in the UK is provided by Pearce (1999), who conducted two field surveys. The first was addressed to the production subsidiaries of foreign MNEs, where replies were received from 190 subsidiaries out of a total of 812. The second was that of the R&D laboratories of foreign MNEs in the UK, where replies were received from 48 of the 180 R&D labs. The surveys were carried out in 1992–94. The main conclusions of these surveys were that there had been a shift in the role of decentralised R&D operations first from product adaptation to product development, and second, towards the pursuance of global programmes of basic or applied pre-competitive research, which inter alia took advantage of localised sources of knowledge.

In a further study on the funding sources of the same 48 R&D units in the UK, Papanastassiou and Pearce (2005) hypothesised that the different roles of the subsidiaries were reflected in their sources of funding, particularly that from the affiliate itself. They identified four distinct kinds of roles: two of these consisted of traditional support laboratories that helped develop products for the local markets based on existing technologies; the third consisted of locally integrated laboratories engaged in the transfer and adaptation of internal MNE technologies to new products; and the fourth of the internationally interdependent laboratory, which was a pure research facility that coordinated its efforts with other research units within the MNE. While parent funding was found to be important in each of these roles, it was most critical in the case of subsidiaries, which typically had an internationally interdependent laboratory role – for example, the pharmaceutical affiliates. By contrast, own financing was the highest in the case of electronics affiliates, which were more locally orientated and identified as either support laboratories, or locally integrated laboratories in the survey.

As regards the R&D activities of Japanese manufacturing affiliates abroad, Belderbos (2003) compiled a sample of 420 affiliates using MITI data for the year 1993. He found that the greenfield affiliates reflected an incremental growth pattern of foreign R&D as
their experience and capabilities increased. This is consistent with an explanation of the Japanese being relative latecomers to the internationalisation of production, and that of R&D lagging behind foreign production. Traditionally, it has been argued that the Japanese firms’ focus on development rather than research, and the close ties between manufacturing, applied R&D and engineering, lead Japanese firms to centralise their R&D activities in the home base (Westney, 1994; Kenney and Florida, 1995). However, the high R&D intensity of acquired affiliates reported by Belderbos is evidence of the use of foreign acquisitions and joint ventures to gain access to technology and innovation systems abroad, which has allowed Japanese affiliates to acquire R&D capabilities at a faster pace.

11.6 THE INTERNATIONALISATION OF CORPORATE R&D

While Section 11.2 presented different measures of the technological capacity of a group of advanced home countries, and Section 11.3 presented some evidence of the contribution of MNE affiliates to the technological capacity of their host countries, this section concentrates on reviewing the evidence on the changes in the extent and distribution of R&D activity within the MNE.

We begin by exploring the historical co-evolution of technological diversification and internationalisation within firms, and within countries. We also investigate the contemporary technological profiles of large MNEs, and to what extent these have changed over time. We then consider the extent to which the R&D activities of MNEs have become more internationalised. Overall, we find that while the bulk of the R&D undertaken by most MNEs is still concentrated in the home country, the proportion undertaken abroad has risen over the past two decades. The R&D activities of MNEs are also still overwhelmingly concentrated in the developed countries, although, again, the growing trend of more research being conducted in some NICs is evident.

11.6.1 Diversification and the Technological Profiles of MNEs

In a study of 440 of the largest firms of US, European and Japanese origin, Patel and Pavitt (1997) found that the majority of such firms typically possessed a wide range of technological competences, including in non-electrical machinery, instruments and computing, which generate technologies with applications in a wide range of industries. Focusing on output measures, Patel and Pavitt employed a fourfold classification of the technological profiles of firms based on their share of patenting in a given sector, and the revealed technological advantage (RTA) of the firm in that sector. The RTA consists of two components: the share of the firm’s patents in a particular sector relative to patents granted to other firms in the same industry, and the firm’s overall share of patents (across sectors) relative to the share of other firms’ patents in the industry (across sectors). Core and background fields are areas of high patenting (knowledge accumulation) by the firm, with core fields being those in which the company had a distinct capability. Marginal and niche fields are those in which the company accumulates less knowledge in terms of patenting, with marginal activities being in areas of lower RTA, and niche activities being in areas of higher RTA.
Based on an analysis of US patenting by the sample firms between 1969–74 and 1985–90, Patel and Pavitt found that 90% had profiles that were significantly similar between the two periods. In addition to their core technologies, most of the firms were found to have significant activities in other (background) technologies as well. Such activities according to authors reflect the interdependence of technological knowledge, and the need for firms to acquire a first-hand understanding of the technologies of their suppliers, even if such activities are ultimately outsourced. The second reason to maintain significant activities in the background fields is to be able to be alerted to emerging technological opportunities. Even so, the firms’ technological profiles were still strongly influenced by the sector they were in, so that it was almost five times more likely (and even higher in sectors like computers and pharmaceuticals) that one would find another firm with a similar profile in the same sector than outside of it.

In a related study, Cantwell and Piscitello (2000) identified three historical phases in the growth of firms in terms of diversification and internationalisation. They empirically tested the timing of each phase by following the trajectories of innovation (measured by US patenting) in 166 European and American firms from 1901 to 1995. The authors used the inverse of the coefficient of variation of the RTA index as their measure of diversification. Internationalisation was proxied by the share of corporate patenting performed abroad, while competence accumulation was defined as growth in the number of patents registered each year. Since mutual causality between diversification and internationalisation could not be rejected, the authors used simultaneous equations to jointly model the two variables.

Their results broadly conformed to the three periods outlined in the literature. In the early post-war period until the early 1970s, diversification and internationalisation were alternative means of corporate growth, while the role played by affiliate R&D was mainly the adaptation of the products supplied by their parent companies to host market conditions. The second phase, from the late 1970s to the early 1980s, marked a shift in the technological paradigm (Freeman and Perez, 1988), as the potential of existing technologies to exploit scale and scope economies had begun to be exhausted, while asset-seeking investment had not yet taken off. In the third (and current) phase, which dates from the late 1980s, technological diversification is increasingly reflecting the growing interrelatedness between technologies, and previously disconnected efforts within firms are now being integrated into an interactive network, which help to create new competences. The increasing complementarity between competence accumulation, diversification and internationalisation, is thus a characteristic of the third phase.

There is thus evidence that the technological capabilities of firms are strongly path dependent, that firms within industrial sectors have broadly similar technological profiles, and that the search for new technologies is constrained by the quality of the firm’s existing capabilities. The fact that the technological profiles of firms share the strongest similarity with other firms in their own industry, and that the profiles are quite diversified, offers possibilities for considerable product diversification using a combination of old and new technologies. Indeed, the ‘excess’ of R&D that firms perform outside of their core technological fields might provide both the push and pull for the development of external knowledge-sourcing activities (Granstrand, 1998). A command of a wide range of technologies allows the firm to explore new opportunities within a broader range of activities. This makes it better able to appropriate the results achieved by another firm in a related field, while, at the same time, it makes it more likely that the firm has something
of interest to offer a potential partner. Thus more internal diversification should also prompt increases in external knowledge sourcing over time.\textsuperscript{500}

11.6.2 How International Is Corporate R&D?

The extent to which it is possible to identify a growing trend of internationalisation of corporate R\&D is somewhat contentious owing to the paucity of the data. It was shown in Section 11.4 that the share of research funded and conducted by MNEs in host countries has risen considerably over the past two decades. However, from the point of view of the home country, only the US records comprehensive data on the foreign R\&D activities of their MNEs. For other countries, we have to rely on survey-based evidence on the extent of the internationalisation of R\&D activities by large MNEs. However, recent evidence points to growth in the share of MNE research performed abroad, while, at the same time, it is quite clear that the internationalisation of R\&D has not reached the levels of internationalisation of foreign production or foreign employment (UNCTAD, 2005c).

Data compiled on the world’s largest industrial companies showed that in 1982, about 30\% of their production was undertaken outside their national boundaries, while only about 12\% of their innovatory activities were (Dunning and Pearce, 1985). These data were largely corroborated by a 1989 field study of the geographical distribution of the innovatory activities of 167 of the world’s largest industrial enterprises (Pearce and Singh, 1992). The survey found that, although 44\% of these companies undertook no foreign R\&D, 21\% allocated more than one-fifth of their global R\&D budget to their overseas activities. The propensity to engage in foreign R\&D was most pronounced in the case of food, drink and pharmaceutical MNEs, and among those of European origin. Most of the foreign R\&D units were relatively new, 42\% having been set up after 1980. About two-thirds of R\&D facilities established since 1980 had been located in foreign countries, compared with only one-third of those set up prior to 1980.

More recent survey-based evidence on the increasing propensity of large MNEs to source technological assets abroad indicates that in the case of some European firms, especially in the pharmaceutical, food, drink and tobacco sectors, foreign R\&D expenditure exceeded that undertaken in the home country (Dunning and Lundan, 1998). The average share of foreign R\&D across the 85 large MNEs was 21\%. Among the leading European MNEs, firms such as SKF, Pilkington, Hoechst, BAT, Nestlé and Philips, and among US and Canadian MNEs, firms such as Amoco (now part of BP), Goodyear and Alcan, all conducted more than 40\% of their R\&D abroad in 1993.

In their review of the empirical evidence, Niosi and Godin (1999) concluded that large firms from small countries such as Belgium, Canada, the Netherlands, Sweden and Switzerland tend to record the highest share of their global R\&D from their foreign affiliates. Firms from the UK also conduct a significant proportion of their R\&D activities abroad, while Italian and Japanese firms typically conduct a large share of their innovation at home. American, French and German MNEs typically fall somewhere in between.\textsuperscript{501} This general pattern was also confirmed by the evidence reviewed in a report by UNCTAD in 2005, although the share of foreign R\&D conducted by German MNEs had grown substantially, from 2,000 employees in foreign R\&D affiliates in 1996 to 11,000 in 2003 (UNCTAD, 2005c:124).
In 2004, the proportion of R&D performed by the majority-owned foreign affiliates of US MNEs was 15% (Yorgason, 2007). This represents an increase from 2000, when the proportion was 13%. Nonetheless, the latter figure was still notably lower than the equivalent proportion of global MNE employment (26%), sales (28%) and value added (22%), but considerably higher than the 7% of R&D undertaken outside the US in 1982 (National Science Board, 2004).

For more than two decades, some two-thirds of the R&D performed by US firms outside of their home country was located in only six countries, namely the UK, Germany, Canada, Japan, France and Sweden. Even in 2004, 47% of affiliate R&D expenditures were accounted for by the UK, Germany and Canada (Yorgason, 2007). However, between 1994 and 2002, the R&D spending of the affiliates grew at a faster rate (7.5% per annum) than the spending of their US parents (5.3%), and an increasing share of innovatory activities is beginning to be directed to smaller host countries, such as Singapore, Israel and Ireland, and to developing countries, notably China (National Science Board, 2006).

US R&D performed in non-traditional markets, namely Singapore, Israel, Ireland, China, Hong Kong, Mexico, Brazil, Malaysia, Taiwan and South Korea accounted for just $1.3 billion or 11% of the R&D expenditures of US foreign affiliates in 1994. This had grown to $3.5 billion, or 18% of affiliate R&D expenditures, by the year 2000 (measured in current dollars). Even more notable is the fact that R&D expenditures in this group increased by an average annual rate of 15.9% (in real, that is, inflation-adjusted terms), as compared to a 6.9% growth for the aggregate of all host countries (National Science Board, 2004).

Comprehensive Swedish data presented by Fors (1998) indicates that in 1994, foreign R&D accounted for 25% in all sectors, 29% in chemicals, 63% in non-electric machinery and 25% in electric machinery. At that time, 65% of the research of Swedish MNEs was conducted in Europe. This compares with data from 1970, when foreign R&D accounted for 9% in all sectors, 10% in the chemical sector, 14% in non-electric machinery and 12% in electric machinery, and 75% of the foreign R&D of Swedish firms took place in Europe. However, there was a considerable increase in the share of foreign R&D expenditure of Swedish MNEs in the latter half of the 1990s, so that by 1999, the ratio had nearly doubled to 42%, remaining at 43% in 2003 (UNCTAD, 2005c:123). Similar developments also took place in Finland, where the share of foreign R&D expenditures of Finnish firms grew rapidly in the late 1990s, reaching a high of 45% in 2001 (Ali-Yrkkö and Palmberg, 2006).

For Japan, which historically has had very low levels of foreign R&D, Granstrand (1999) reports a percentage of R&D conducted abroad in 1987 of 1.6%, and as high as 5% in 1991 for a sample of 24 large Japanese MNEs in the chemical, electric and mechanical industries. Other estimates presented by Kumar (2001) using MITI data show that between 1989 and 1997 the R&D expenditure of foreign affiliates of Japanese firms grew from 1.4 to 2.3% of the R&D expenditures of their parent group. Latest estimates from UNCTAD (2005c:123) indicate that the share of foreign affiliate R&D of Japanese MNEs had also increased in the late 1990s, and reached 4% by 2002.

Finally, we would mention the results of two recent surveys, which sought to evaluate the factors important to the choice of location of international R&D facilities. The first involved a sample of 95 MNEs drawn from the top 500 R&D spending firms in Europe (European Commission, 2006). The most important locational factors identified in this
survey were the availability of researchers, access to specialised R&D, market access and a predictable IPR framework. The cost of research personnel was among the least important factors, and in two-thirds of the cases, the home country was considered to be the most attractive R&D location. The US was clearly the preferred location outside of the EU, followed by China and India.

The second survey involved a sample of 203 MNEs mostly from the US and Europe (Thursby and Thursby, 2006). The questions were posed in terms of R&D employment rather than expenditures to minimise inaccuracies and problems due to currency translation. When considering the siting of a new R&D facility, 70% of the respondents envisaged an expansion, rather than the relocation of existing facilities. The factors most important for location choice were the quality of R&D personnel and output markets, high IPR protection and university collaboration. By contrast, tax breaks and lower costs of R&D personnel were ranked near the bottom, also in the case of developing countries (China and India).

Both surveys thus underlined the importance of IPR protection to the location decisions concerning the R&D activities of MNEs. At the same time, both surveys highlighted the importance of the (potential) output market, which in the case of China and India has served to counterbalance some of the firms’ concerns regarding IPR enforcement.

11.7 EXTERNAL TECHNOLOGY SOURCING BY MNEs

Having reviewed the evidence concerning the internationalisation of corporate R&D in the previous section, this section will briefly discuss the motivations and evidence for the use of external forms of technology sourcing and development by MNEs (that is, open innovation). In doing so we shall concentrate particularly on the role of cross-border R&D alliances and acquisitions. Other forms of external knowledge sourcing, such as knowledge spillovers from innovative clusters that link local universities, research institutions, and domestic and foreign firms conducting research in a specific area will be explored in more detail in Chapter 16.

Some indication of the increasing importance of external knowledge sourcing can be gauged from the fact that in 2003, the ratio of contract research to in-house R&D was 5.6% for all US industries, which marked a notable increase from 3.7% in 1993. Furthermore, these figures provide only a partial view, as they are limited to contract research performed in the US (National Science Board, 2006). A recent survey of 95 R&D-intensive MNEs in Europe indicated that nine out of 10 respondents outsourced some of their R&D activities, with an average of 15% of their R&D being performed by other firms (European Commission, 2006).

11.7.1 Motivations for R&D Alliances

In Chapter 9, we argued that cooperative R&D activity was an important component of the growth of alliances over the past two decades. The most frequently identified motivations for, and expectations of, strategic alliance, as listed in Hagedoorn and Lundan (2001) were:
the need to monitor and engage in the cross-fertilisation of technological disciplines;
the need to achieve economies of scale and scope in R&D;
the need to share the costs of R&D projects;
the need to shorten the innovation cycle;
the desire to incorporate complementary technologies;
the desire to search for technological synergies;
the desire to capture a partner’s tacit knowledge; and
the desire to jointly manage R&D uncertainty.

Such cooperative agreements embrace technology and R&D-sharing resources through project-based groups of engineers and scientists from each parent company. The costs of capital investment, such as laboratories, office space, equipment and so on, are shared between the partners. Although contractual R&D alliances normally have a limited time horizon due to their project-based organisation, they appear to require a relatively strong commitment of resources by the companies involved, and a corresponding level of inter-organisational interdependence during the joint project. In high-technology industries such as biotechnology, pharmaceuticals and IT, contractual arrangements are frequently focused on in-depth research activities while, in many other industries, such partnerships will tend to focus more on the development and engineering of new products or processes.

Although firms of all sizes and different degrees of multinationality engage in strategic alliances, the size of firm (as measured by the number of employees) has been found to be an important factor in explaining the propensity of firms to form alliances (Duysters and Hagedoorn, 1995). Additionally, Hagedoorn (1995) has demonstrated that, in most industrial sectors, the largest MNEs are among the most active alliance partners. A network analysis of several sectors revealed that many of these MNEs are ‘nodal’ players in networks of strategic alliances with a variety of alliance partners, with domestic (uninational) firms playing a much more limited role.

11.7.2 Trends in Alliance Activity

To obtain some understanding of the industrial and geographical distribution of technology alliances, we need to draw on the available research employing one of two large databases on technology exploiting or augmenting alliances. The first of these is the CATI (Cooperative Agreements and Technology Indicators) database maintained by the Maastricht Economic Research Institute on Innovation and Technology (MERIT), which concentrates on technology alliances. The second is the database of the Securities Data Corporation (SDC), which includes data on alliances, mergers and acquisitions.

According to CATI data presented by Hagedoorn and Lundan (2001), the 1980s marked a steep increase from about 200 partnerships created annually to over 500 new R&D partnerships each year at the turn of the decade. The first couple of years of the 1990s showed a fall in the newly made partnerships to about 350 annually, but in 1995, there was another peak with a record of nearly 700 new R&D partnerships being concluded. At the end of the decade, the number of new R&D partnerships was decreasing again, to about 500 per annum, but it reached a new peak in 2003, with 695 alliances being formed (National Science Board, 2006).
The most striking development to date has been the explosion in contractual forms of alliances. While, in 1980, joint ventures and contractual alliances accounted for roughly half each of annual alliance formation, by 1998 contractual alliances accounted for about 90% on the annual alliances, and since the mid-1990s this trend has remained constant. Indeed, the growth in newly made R&D partnerships since the early 1980s was largely caused by an overwhelming increase in the absolute numbers of contractual partnerships.

From 1980 to 1998, the share of high-technology industries in all newly established R&D partnerships increased from about 50% to over 80%. During the same period, the share of medium-technology industries in these new R&D partnerships decreased sharply from about 40% to less than 20%. Thus, in addition to contributing to the explosive growth of contractual forms of alliances, high-technology alliances in sectors such as biotechnology, IT and new materials have accounted for the vast majority of newly formed alliances over the past decade. Indeed, biotechnology alliances alone accounted for 63% of all alliances in 2002 and 53% in 2003 in the CATI database (ibid.).

Cross-border alliances
According to Hagedoorn and Schakenraad (1991), during the 1980s, about one-third of European companies followed a regional strategy in their technology partnering, while their Japanese and US counterparts were more inclined to favour an international or global strategy. Hagedoorn and Schakenraad also discovered that there had been a marginal increase in the globalisation of strategic alliances in the second half of the 1980s, particularly by Japanese MNEs, and by firms of all nationalities in the chemical and automotive sectors. Nevertheless, according to the CATI database, only 6% of the several thousands of firms which engaged in alliances in the late 1980s actually did so as part of a clearly identifiable global strategy.

According to the same authors (Hagedoorn and Schakenraad, 1990), at least 21 MNEs had each concluded more than 100 technology-related alliances in the 1980s. Between them they accounted for 3,805 or 76% of the alliances identified by the authors. Of the alliances identified by Hagedoorn and Schakenraad, Japanese MNEs accounted for 42% – the Europeans came second with 37% and the Americans third with 21.1%. Indeed, for quite some time, it had been part of the Japanese government’s strategy to foster such alliances as a means of accessing new technology and penetrating new markets. Inter alia, this raised concerns that they might be trying to siphon off the technological capabilities of US (and European) firms.

Later data presented by Hagedoorn and Lundan (2001) demonstrates that as a proportion, international alliances declined from about 70% during the first years of the 1980s to about 60% of all alliances in the early 1990s. By the late 1990s the share of international partnerships was below 50% of all new R&D partnerships, although it should be noted that this share is of a total number of new alliances, which was then more than twice as high as it was in 1980. Alliances between US and European firms have generally accounted for 20–30% of the total, while alliances between US and Japanese firms have declined from a high of around 20% in the early 1980s, to less than 10% in the early 2000s (National Science Board, 2006).

In another contribution, Hagedoorn and Narula (1996) have shown that strategic partnering activity is more evenly distributed between industrial sectors in the more technologically advanced countries, with specific regions attracting clusters of international
strategic technology partnering activity. This is particularly seen to be so in the large number of technological alliances concluded between European pharmaceutical companies and US biotechnology companies, and the many long-term alliances between European IT companies and semiconductor and software companies from Silicon Valley.

Although Freeman and Hagedoorn (1994) found that over 95% of all strategic technology alliances were formed between companies from the developed economies, there is some recent evidence that MNEs from a small group of Asian economies (South Korea, China, Taiwan, Hong Kong) are engaging in asset-augmenting alliances with firms in the developed countries, particularly so in industries such as electronics and related industries (Duysters and Hagedoorn, 2000).

11.7.3 Choice between Alliances and Acquisitions

When the firm’s primary motivation is not protecting or gaining market share but accessing knowledge-intensive assets, the entry mode choice is often that between an acquisition and an alliance.\textsuperscript{506} Research by Hagedoorn and Duysters (2002a) on 153 firms combining CATI data on alliances with SDC data on M&As, indicates that M&As are still frequently preferred to alliances where the object of the acquiring firm is to upgrade its core O-specific advantages. They also found that experience with one or the other mode influences the choice between acquisitions and alliances. However, in high-technology sectors, firms preferred alliances to acquisitions, while in low-technology sectors the opposite was true. While in absolute terms, high-technology firms engaged in many M&As, they undertook even more alliances. This was driven by the rapid rate of technological development in high-technology sectors, along with the constraints to equity acquisition posed by time, money and the availability of suitable targets.

While the motivation for undertaking both mergers and alliances is often related to the possibility for learning and knowledge transfer, the two modes carry distinct benefits and costs. Indeed, research by Hagedoorn and Sadowski (1999) confirms that technology alliances do not appear to be a gateway to mergers, since of the nearly 13,000 instances of alliance formation in the CATI database, only less than 3% were converted into mergers over a three-year period. According to their evidence, not only are conversions from alliances to mergers rare, but they are seemingly random, as neither size nor country of origin had a significant impact on the rate of conversion.

In contrast to the 1980s, when cooperative R&D activity, particularly by Japanese firms, was seen in the context of a ‘learning race’ between the partners, the more recent evidence would seem to suggest that acquisitions and partnering should be seen instead as complementary means of enabling technological specialisation between firms (Zeng and Hennart, 2002).

11.8 CONCLUSIONS

This chapter has reviewed the role of MNEs as creators of new knowledge and transfers of technology across borders. It began with an overview of the distribution of the knowledge-creating capacity around the world. This revealed a broadening of the locations where innovative activity is undertaken, while at the same time it confirmed the
overwhelming concentration of technology-intensive activities in a small group of mostly
developed countries. The chapter then turned to consider the available evidence on the
role of MNEs in contributing to the knowledge capabilities of their home and host coun-
tries, both by the transfer and adaptation of existing technologies, and as a result of the
internationalisation of corporate R&D activity and other forms of knowledge sourcing.

We demonstrated that the internal innovative activities of the MNE, represented by its
R&D expenditures, are increasingly being complemented by external activities, such as
contract research and R&D alliances. The internationalisation of the internal R&D activities
of MNEs, combined with the much wider reach of innovative activities conducted
through their external networks, were also found to have contributed to the heterogene-
ity of technological capabilities between MNEs. An interesting conjecture advanced by
Castellani and Zanfei (2006) is that, in part at least, this heterogeneity may explain why
there appear to be large differences across firms, both as sources and recipients of tech-
nology spillovers. We take up this point again in Chapter 16.

The chapter next reviewed the motivations for affiliate R&D, the types of R&D per-
formed by affiliates, and the factors favouring the centralisation or decentralisation of
affiliate R&D. It also drew a distinction between R&D related to the exploitation of the
existing capabilities of the MNE, and R&D related to the generation or acquisition of
new knowledge and capabilities. While we found the bulk of the R&D undertaken by most
MNEs to still be concentrated in the home country, the proportion undertaken abroad
has risen over the past two decades. The R&D activities of MNEs are also still over-
whelmingly concentrated in the developed countries, although again the growing trend of
more research being conducted in some NICs is evident.

We concluded by discussing the motivations and evidence for the use of external forms
of technology sourcing and development by MNEs (that is, open innovation), concen-
trating particularly on the role of cross-border R&D alliances. Having described the range
of innovative activities undertaken by MNEs, and the contingent factors affecting the
propensity of MNEs to transfer technology and to locate innovative activities in foreign
locations, the following chapter will evaluate the role of national governments in both
couraging and mitigating the effects of MNEs in the home and host countries.
12. Technology and innovatory capacity: the role of government

12.1 INTRODUCTION

This chapter will concern itself with the role of the host and home governments in affecting the creation and the development of the technological capabilities of the organisations under their jurisdictions, and the extent to which MNE activity is likely to contribute to, or detract from, this particular objective. In particular, while host countries are keen to appropriate the maximum gain from the presence of technology-intensive MNEs in their economies, home countries may fear that, as and when innovatory activities are relocated abroad, this may lead to an erosion of their domestic technological base (UNCTAD, 2005c, 2006). Since most developed economies act as both home and hosts to the technological activities of MNEs, the concerns of governments are likely to reflect both kinds of considerations. We begin with the role of government in host countries.

12.2 THE ROLE OF GOVERNMENT IN HOST COUNTRIES

What is at stake for the host countries? We have argued that the hard and soft technologies transferred by MNEs contribute to the knowledge base of the host country, and consequently affect its productivity, economic restructuring and long-term growth. While it is impossible to construct a single measure that would reflect all of the direct and indirect effects of MNEs on any host country, some indication of these effects can be gauged by looking at the impact of inward FDI on productivity. One example from the UK will suffice here, as we shall return to the issue of productivity gaps between foreign and domestic firms, as well as productivity spillovers, in Chapters 15 and 16.

Barrell and Pain (1997) assessed the impact of changes in the stock of inward FDI (in constant prices) on the growth of output by using a labour demand equation together with a technical progress coefficient, which they estimate. Their results indicated that in the 1985–95 decade, inward FDI to the UK increased manufacturing output by 12.5%, or about 1.2% per annum. This would mean that as much as 30% of the growth in UK manufacturing productivity could be attributed to the impact of inward investment. These results suggest that significant transfers of technology have taken place, either directly or indirectly.

However, there is nothing automatic about such transfers. The investing MNE may be largely uninterested in the transfer of technology, and may therefore act as a reluctant disseminator. On the other hand, local firms may be poorly motivated or incapable of appropriating the knowledge transferred by the MNE, even if it actively participated in the
transfer. For example, Veugelers and Cassiman (2004) used data from the first (1992) EU Community Innovation Survey to assess how likely it was that foreign manufacturing firms in Belgium would transfer technology to local firms. They found that the total effect was a combination of a direct and indirect effect of opposite signs. The direct negative effect was that foreign affiliates were less likely to share knowledge locally. The indirect positive effect was that foreign firms that sourced knowledge internationally were more likely to transfer it, and that their affiliates were more likely to obtain their knowledge internationally. The total effect was negative but insignificant, which indicated that MNE affiliates in Belgium were probably more able, but less likely, to transfer knowledge when compared to local firms. Consequently, the extent to which governments can influence both the indigenous capabilities of local firms, as well as the MNEs’ willingness to transfer technology, is the focus of this section.

12.2.1 The Ability of Governments to Affect Indigenous Technological Capacity

Of all the exogenous factors influencing the impact of MNEs on the creation and location of innovatory capacity, and of the dissemination of its output, perhaps none is more important than the attitudes and actions of the governments of the countries in which they operate. It is well known that by regulation, commissioning or funding R&D activities, national governments and regional authorities may directly influence the level and structure of innovation-related activities. Somewhat less appreciated is the indirect role which governments may play in fashioning the institutional framework within which firms (including MNEs) may be induced to undertake such activities and, in some cases, in determining which firms undertake these activities. The complex interactions among firms, universities, research institutes and government agencies that constitute a so-called ‘national innovation system’ (NIS) play an important role in the knowledge-creating activities of MNEs in both the home and host countries (Lundvall, 1992; Nelson, 1993).

Numerous studies have identified the multifaceted role of government in influencing the supply of trained manpower. These include the provision and/or encouragement of educational and vocational training programmes through the availability of finance capital, appropriate interest rates and fiscal policies (especially towards savings); through ensuring a supportive transportation and communications infrastructure; through fostering the kind of market structures within which firms operate, innovate and conclude cooperative alliances; through setting environmental regulations and purchasing standards; through encouraging entrepreneurial incentives and the work ethos; and through an adequate protection of IPR. Each of these policies, and their institutional implementation, may influence the ability and motivation of both domestic- and foreign-owned firms to enhance the knowledge component of their value-adding activities. However, perhaps no less critical is the way in which these policies are implemented and integrated with one another. Let us explain what we mean.

For the most part, in advanced industrial societies at least, government policies are geared towards achieving a mix of economic and social objectives. Rarely, in the past, have the upgrading of national resources and the promotion of competitiveness been key strategic objectives. In other words, although it may be recognised that competition, education, fiscal, environmental, security and other policies, and their supporting institutions, may affect the innovatory capabilities of the country, this is rarely the main focus
of such policies. Viewed from the perspective of advancing competitiveness, then, such policies often appear piecemeal, uncoordinated and inefficient. Moreover, government policies aimed at directly influencing innovatory systems and capacity are often less successful than they might be simply because other government policies are not supportive of this objective!

It is not the purpose of this chapter to make a comparison between the attitudes, policy measures and institutions of different governments that directly and indirectly impinge upon innovating capacity and the role played by MNEs. However, there can be little doubt of the diversity of such attitudes and policies, and their effectiveness. The contrast between the holistic and coordinated economic strategies of Japan, South Korea and China – geared towards a systematic upgrading of their resources and innovatory systems and capabilities – and the fragmented and uncoordinated microeconomic policies of many Western nations, has been well documented, for example, by Porter (1990). Even the organisation of R&D policies may differ. Ergas (1988), for example, distinguished between the ‘mission’-orientated technological policies of the US, the UK and France, and the ‘diffusion’-orientated policies of Germany, Switzerland and Sweden, which he suggests are likely to have very different effects on the types and structures of innovatory capacity.

Much less attention has been paid to policies towards the creation or diffusion of innovatory capabilities by foreign firms, or indeed to that arising from the foreign location of R&D by domestic MNEs. While the R&D activities of both foreign and domestic firms are likely to be encouraged by similar factors, the path-dependent co-evolution of domestic firms and NISs has both beneficial and detrimental effects on the former. This is illustrated in the context of Norway by Narula (2002), who identified two groups of firms, those in the ‘traditional’ industries that had historically been supported by the innovation system, and those in the newer sectors that were not as well served by it. While one might expect the latter group of firms to be more internationalised in their R&D activities, he found that both groups of firms were in fact notably ‘locked in’ to the innovation system of their home country. This was partly due to resource constraints, but more importantly to the complexity and non-transferability of the formal and informal relationships that constitute the innovation system.

Why should it matter who owns or controls the innovatory capacity of a country? Consider, the case of inward investment. The simple economic answer is that as long as the social rate of return from inward investment (which is equal to the value added created by, less profits accruing to, the foreign owners) is greater than the opportunity cost of the resources used, it is likely to be beneficial. This condition is easier to identify than to measure, particularly over any length of time. The critical issue is not so much whether the investment of foreign affiliates yields a higher domestic value added than that of indigenous firms, or whether outward investment yields a higher rate of return than that of domestic investment, but of how, through their product and innovatory policies, contacts with suppliers and customers, competitive stimuli and entrepreneurial example, foreign and domestic MNEs may better upgrade indigenous resources and advance economic and/or social welfare, than can domestic or uninational firms.508

The type of foreign investment is likely to matter as well. Asset-seeking investment through M&As may have little initial impact on indigenous capabilities, but its long-term impact might be positive, if it results in technological and organisational upgrading, and
an improved competitive position for the acquired firm. To the extent that MNEs tend to be more productive than purely domestic firms, asset-exploiting greenfield investment is also likely to contribute to the upgrading of indigenous capabilities, but its long-term impact depends on the strategy of the investing MNE, and the development of indigenous capabilities (see Chapters 15 and 16).

The basic concern over the impact of inward investment on innovatory capacity is twofold. The first is lest MNEs should undertake only low value-added activities in the host country, and centralise their innovatory activities in the home country – or indeed in another foreign affiliate. The argument then goes on to predict that, by their competitive strategies, MNEs will drive out local firms which perform higher value-added activities. The innovatory base of the host is then eroded, and one country’s vicious circle of asset decumulation then becomes another’s virtuous circle of asset accumulation. The second anxiety is that the global objectives of multinationals are not necessarily good for the innovatory development of the host economy. While there is nothing new about these concerns, the increasing importance attributed by countries (particularly advanced industrialised countries) to upgrading the productivity of their indigenous resources and capabilities makes the contribution of MNEs to innovatory capacity a more salient concern.

However, while these anxieties are understandable, they are based on a set of assumptions which may or may not be justified. First, it is virtually certain that, had the investment in question not been attracted to the host country in question, but to another country instead, the competitive threat posed by the MNE would not have gone away. Second, it cannot be presumed that the local resources used by an MNE would have been put to better use elsewhere in the economy, for example, by indigenous firms. In this instance, much depends on the macroeconomic and organisational policies pursued by the government, and the relative efficiency of resource usage by domestic and foreign firms. Third, the presence of foreign-owned firms may not only stimulate indigenous firms to be more efficient; it may also help to create and sustain centres of R&D activity which yield agglomerative economies of benefit to competitors (we return to this issue in Chapter 16). Fourth, even if it could be demonstrated that the presence of foreign affiliates weakens the innovatory capacity of the sector in which they invest, it might well be that the released resources would be of even greater value if they were used elsewhere in the host economy and that inward investment performs a useful restructuring function. Much, of course, depends on the assumptions made about the adequacy of the existing institutional structure for innovatory development, and the role of government in implementing resource-allocative mechanisms which best lead to the improvement of the quality and use of human, physical and financial resources at the lowest possible cost. Such policies relate not only to innovatory activities per se, but also to those that affect these activities (for example, anti-trust, monetary, public procurement, education and training, fiscal, transport and communications, and trade and investment policies). Innovatory competitiveness in a modern global economy depends, first and foremost, on the pursuance of pro-competitive public policies and on the provision of adequate and supportive institutional infrastructures.

As we argued in Chapter 10, ‘getting the institutions right’ implies that both the formal and informal institutions interact to create an environment conducive to economic growth. For example, in Central and Eastern Europe, creating and sustaining an
environment that encourages entrepreneurial activity and private enterprise has been the primary challenge for the governments. Only once this is accomplished can the institutions of market development effectively define the ‘rules of the game’ that make inward FDI and technology transfers both possible and desirable (Behrman and Rondinelli, 1999; Tihanyi and Roath, 2002; Bevan et al., 2003; Dunning, 2005a). The role of the government is to act as facilitators, rather than controllers of technology transfer, and in this respect it has an armoury of incentives available to it.

When it comes to the ability of governments to promote knowledge transfer and/or to attract the innovative activities of MNE affiliates, perhaps the most salient feature of the institutional fabric of a potential host country relates to its IPR enforcement. While foreign investors are likely to consider the entire package of resources and institutions offered by the host country, and while host countries with well-developed human resources and credible regulatory authorities are also likely to have supportive policies on IPR, the evidence on US MNEs suggests that the IPR regimes are a critical influence on the locational profile of their knowledge-enhancing activities.

In their study on US MNEs, Lee and Mansfield (1996) found that they were reluctant to license strategically important technology, and unwilling to transfer such technology even within the firm, to countries with an insufficient IPR regime. Conversely, in a cross-sectional study Nunnenkamp and Spatz (2004b) revealed that strong IPR protection induced higher-quality FDI by US MNEs, and that the R&D spending of their foreign affiliates increased with the level of IPR protection. Using a longitudinal panel of US MNEs in 1982–99, Branstetter et al. (2005) confirmed that royalty payments and R&D spending by US affiliates increased following IPR reforms in the host countries.

One of the difficulties in evaluating the economic impact of inbound MNE activity on technological capacity where intermediate product markets are imperfect and distorted, is to assess the true economic worth of the resources used. Almost all the markets identified contain elements of imperfection. Sometimes, governments add to these imperfections by imposing import quotas, offering regional subsidies, regulating prices and so on. Sometimes they may help to reduce them (for example, by anti-trust policies, reducing uncertainties and upgrading the relevant institutions). However, when assessing the response of policy makers to inward and outward direct investment, it is entirely possible that the effects are not as beneficial as they might be, either because of market distortions or because of the failure of markets correctly to signal the need for socially beneficial innovatory-related activities. Rather than controlling the activities, we believe that it is preferable to enact policies and the supporting institutional mechanisms, which, taking cognisance of the globalisation of markets, will best enable governments to upgrade and restructure their resources and capabilities, to meet the needs of both domestic and international consumers.

We accept, of course, that however much governments may seek to put their internal economic affairs in order, they may still be faced with structural distortions in international markets caused by other governments seeking to advance the interests of their own national champions. Where these cannot be regulated or neutralised by international action or negotiation, it is entirely understandable that the disadvantaged governments may wish to respond by some kind of retaliatory action, such as trade or industrial strategies, which may directly affect the innovatory capacity of domestic- and foreign-owned firms.
12.2.2 Strategies of Host Governments

Host countries may differ considerably in their attitudes towards the foreign ownership of technology and technological capacity, which may affect their ability to attract new inward investment. Even governments that believe in the virtues of free trade and economic interdependence are uncomfortable if certain technologies and organisational competences (notably those considered necessary for them to fulfil their strategic and social objectives) are not within their own ambience of control. To the extent, too, that the political power or influence of a country is strongly dependent on its economic strength, and that this largely rests on its knowledge-enhancing capabilities, a government may be reluctant to surrender an undue amount of these capabilities to foreign ownership. In this respect, a developed country is likely to protect its technology-related assets jealously in the same way that a developing resource-rich country might not wish to surrender ownership or control of its key resources to foreign investors.

Furthermore, a country’s strategies and policies towards its technological capacity will depend not only on how it perceives actual or potential foreign direct investors will react, but also on the policies, institutional mechanisms and strategies of other countries. This will especially be the case where technology is used to promote export-orientated value-added activities.

Let us now consider some actions which a host government might pursue towards inward knowledge transfers, owned or controlled by foreign MNEs, and the conditions under which these are most likely to be successful. It should be observed that the policies are not necessarily mutually exclusive. For example, a government may decide to eliminate restrictions on the use of transferred technology while encouraging the development of its own knowledge-intensive capabilities.

First, a government might do nothing. Such a policy may be favoured by two kinds of countries. The first are those that are strong and confident that their institutions and their microeconomic strategies are adequate both to attract the right kind of foreign technology and to ensure that the benefits accruing from it are optimised or near optimised. Such countries are likely to be large and innovation driven; and to possess sophisticated innovative systems. More often than not, they will be substantial foreign direct investors and exporters of technology in their own right.

Alternatively, countries may adopt a ‘do nothing’ policy from a position of weakness. Such weakness may reflect ignorance as to the effects of inward foreign investment, or the inability to implement appropriate policies to deal with it. It may also reflect a lack of bargaining power to force the MNE to adapt its technology to local needs, or an inadequacy of indigenous capability to develop an alternative to inbound investment. This position applies to most of the smaller natural resource-driven developing countries – notably those in sub-Saharan Africa – as well as to other host countries, in sectors in which foreign MNEs possess key O-specific advantages, but who are competing intensively among themselves for the same investment.

A variant of the ‘do nothing’ policy is to offer a variety of fiscal incentives to foreign direct investors but impose no penalties or requirements on them. The sole aim of such a policy is to attract investment away from other countries. Such a policy is more likely to be pursued by relatively weak countries in the investment-driven stage of development.
Strong countries usually combine an integrated and market-supporting package of incentives and disincentives.

Second, a government might limit certain sectors to domestic ownership. All countries disallow the ownership or control of some sectors from falling into foreign hands. In the past, such control has usually been introduced to achieve strategic and cultural objectives, rather than to reduce or limit the country’s technological dependence. The increasing role of knowledge capital as a resource influencing economic prosperity has, however, added to the need of countries to protect their interests in this area. This has led to more industries being identified as technologically sensitive. At the same time, the costs of technological self-reliance have risen, as have the opportunities for trade in technology or research-intensive products. Moreover, the movement towards regional integration has led to a reduction of controls over intra-regional investment and technological transfers. The net result of these forces has been an increase in the division of labour in the production of many kinds of knowledge; at the same time several countries – particularly from Asia and Latin America – have become more sensitive of the need to be at least partially self-sufficient in the production of some key technologies. Often, MNEs may play an important role in a country’s R&D strategies through their policies towards the location of technological capacity (see the fourth point, below).

Third, a government might limit the amount of inward investment. This is a variant of the previous policy: some direct investment is freely permitted, but only as long as there remains a viable domestic alternative. In practice, several industrial countries, which pursue basically liberal policies towards investment, deploy this kind of strategy. Three arguments are usually put forward in its justification. The first is that, without some limitation on inbound MNE activity, there would be little hope of the indigenous sector reaching its full innovation-driven potential and becoming competitive in global markets, either as a producer of technology (know-why) or of the goods the technology embodies (know-how). This is essentially a variant of the infant industry argument as applied to knowledge as a commodity in its own right. The second argument is that the foreign MNEs are supported by their own governments or are pursuing anti-competitive practices. This is essentially the assertion of the strategic trade economists (Krugman, 1986; Stegemann, 1989). The third is the concern that the withdrawal of inbound direct investment would leave the sector bereft of any indigenous capability, in a defence or security-sensitive sector.

Again, while there is some force in these arguments, particularly where governments are actively seeking to promote the dynamic comparative advantage of their location-bound resources in a world of rapidly increasing technological costs and interdependence, there is a danger that anything approaching an isolationist or self-sufficient policy will be too costly to make any economic sense. This, of course, has long since been recognised by small industrialised or industrialising economies, such as Belgium, Switzerland and Singapore. Increasingly, even the largest and most prosperous economies (for example, the US) and the most nationalistic (for example, until recently India) are accepting that, to paraphrase John Donne’s words, ‘no country is a technological island’ – especially in respect of advanced or cutting-edge technologies. Of course, a reliance on foreign technology does not necessarily mean that its use will be controlled by foreign companies; in practice, however, most technologies required by other than the least advanced (for example, some African) economies, is supplied by MNEs either via FDI or by non-equity contractual arrangements and strategic alliances.
Fourth, a government might specify performance requirements for foreign investors. To some extent or another, explicitly or implicitly, most governments either encourage or insist on foreign affiliates fulfilling some performance requirements. Until the early 1970s, these requirements were mainly directed to saving foreign currency and increasing domestic employment. Since then, they have widened to embrace the discouragement of the setting up of purely assembling or ‘screwdriver’ plants by foreign firms, both in developed and developing countries, and the encouragement of the transfer of ‘state of the art’ technology and the creation or upgrading of indigenous technological capacity. The debate over the local content of Japanese auto affiliates in the European Community (EC) in the 1980s was not only driven by employment considerations, but by concern over the technological competitiveness of the European motor component industry vis-à-vis its Japanese counterpart. To avoid being dubbed Trojan horses, Japanese MNEs were compelled to accelerate their establishment of innovatory facilities, and to demonstrate their support for, and participation in, university-funded research and science parks.

How far governments of host countries are right to encourage or insist on such technological performance requirements is another question. Like any other market intervention, much depends on the extent to which the actions of government are likely to enhance long-term allocative and technical efficiency and lower economic and social transaction costs, or whether they are simply another form of market-distorting protectionism. Clearly, as Japan, Taiwan, South Korea and France have shown, there is a case for government playing its role in facilitating the development of a technological base by providing, or offering incentives for others to provide, the necessary institutional and physical infrastructure, by raising technical standards, and by prompting both public and private organisations to upgrade their expenditures on knowledge-creating activities up to a point where its marginal social benefits are equal to its marginal social costs.

In parallel with performance requirements, many countries offer foreign companies incentives to engage in particular kinds of value-added activity. By such means as tax concessions, patent protection, R&D, subsidies or grants, government procurement policies, the funding of research councils and of higher education, and the initiation and financing of vocational training or retraining schemes, governments may and do play a key role in affecting the level and structure of technology-related activities. Like indigenous firms, foreign subsidiaries can and do take advantage of these provisions. In addition, some countries might give special inducements to foreign investors, such as the relaxation of performance requirements (for example, with respect to access to local capital markets and the sourcing of components).

As we discussed in the previous chapter, the technology transferred by MNEs can take various forms. These include technical documentation, education and training of the employees, exchanges of technical personnel, actual machinery and equipment and continuing technical assistance. Only some of these technological exchanges are priced on the open market; the rest consist of intra-firm transactions which are subject to error and manipulation through transfer pricing. Using data on US majority-owned affiliates abroad in 1982, Kay et al. (1996) found that the imposition of performance requirements by host countries did not facilitate technology transfer between the parent and the affiliate; in fact it had an adverse impact. The performance requirements included import restrictions, a minimum local content and minimal local employment rules. The authors discovered that the presence of such requirements was negatively related to the payment
of licence fees, although it had no discernible impact on the imports of capital equipment. This led them to suggest that policies directed to promoting local investment, competition and education might be better alternatives to the use of performance requirements.

Nonetheless, there is still something of a debate as to whether it is preferable to encourage foreign affiliates to undertake R&D, or to develop indigenous technological capability. The technological sophistication of modern manufacturing and service activities, and a growing appreciation of the role of absorptive capacity in enabling firms to appropriate new knowledge, through both direct and indirect means, would argue against the usefulness of performance requirements. From this perspective, such institutional devices would merely distort the behaviour of the investing MNE, with little hope of a benefit being created for the indigenous firms. Furthermore, since the impact of MNEs on the host economy depends on both their direct and indirect effects (spillovers), which are difficult to measure, the likelihood that governments would either miss their target, or overpay to achieve a specific level of performance is considerable (Kokko and Blomström, 1995; Bellak, 2004b).

Fifth, a government could discourage restrictive clauses on technology transfer. For a variety of reasons, it may be in the best interests of foreign MNEs to attach terms and conditions to the technology transferred to their subsidiaries. Many of these accord with normal commercial practice, and would be quite acceptable to a government if imposed by the head office of a domestic firm on one of its branch plants located elsewhere in the same country. The difference is that while, in the latter case, the benefits resulting from the imposed conditions may redound to the good of both firm and country, decisions taken by a foreign-owned firm, which affect the allocation of its output between the countries in which it operates, are likely to have mixed consequences on the cross-border distribution of economic welfare. For example, to the extent that a host country may be adversely affected by a decision by a foreign MNE to limit the R&D activities of its subsidiary in that country, or to restrict the output it may produce, or the markets it may serve, from the technology it transfers, such provisions may be deemed ‘restrictive’ to advancing its own welfare. However, de facto it may be exceedingly difficult to distinguish between the act of restricting the use made of technology resulting from FDI, which may be interpreted as unacceptable business behaviour, and the act of not transferring the technology in the first place, which, while no less damaging, may not be regarded as a restrictive practice per se.

Nevertheless, by a variety of means, host governments may be able to discourage MNEs from imposing unwelcome constraints of the first kind on their affiliates. Foremost among these is to make it economically worthwhile for the foreign MNEs not to wish to impose such restrictions (for example, by the removal of some kinds of performance requirements and improving the attractions of their indigenous resources or markets). Such actions may include a reduction in transaction costs, for example, those arising from political uncertainty, insufficient protection against abuse of property rights and an ineffective science and technology policy. A development strategy designed to protect domestic firms from foreign competition, rather than encouraging them to develop their own comparative dynamic advantage in world markets, is unlikely to induce foreign-owned firms to develop new technologies for use in products intended for export markets. Moreover, while several studies have shown that the setting up of export enclaves by MNEs does little to promote indigenous technological development, a healthy home market may be a
precursor to innovating new products and processes specific to the needs of domestic consumers, but which may be later exported to foreign markets.

Sixth, a government might influence terms and conditions of technology transfer. It is obviously in the interests of host countries to acquire technology from foreign sources at minimum real cost. At the same time, it may wish to obtain the level and type of technology that will best contribute to its long-term economic and other goals. The two objectives need not be inconsistent with each other, but if a host government presses a foreign firm (already producing in the country) to accept a lower return for its technology than its opportunity cost, the latter is likely to both reduce its flow of future technology and lessen its inducement to transfer (or create new) technological capacity, which otherwise would have benefited the host country.

The extent to which a host country possesses any latitude to influence the terms on which it obtains foreign-owned or -sourced knowledge will depend first on the market conditions in which it supplied, and second on its ability to extract the highest possible share of economic rent (or consumers’ surplus) generated by the transaction. Where technology is standardised and supplied by several producers on the open market, then its price is likely to reflect its true opportunity cost. At the other extreme, technology may be highly idiosyncratic and owned by only one firm. Moreover, because of market failure, the firm may desire to add value to this technology itself. In so far as it wishes to do so from a foreign location, it will then seek to transfer it internally. Assume, finally, that the technology and/or the technological capacity associated with it is highly sought after by several host countries, but cannot be economically utilised by more than one or two of these. In such a situation, not only is the value of the technology likely to be well above its competitive price, but the selling firm may be in a strong bargaining position vis-à-vis the host country because its options are so much wider. Most types of technology transfer by MNEs involve trading situations somewhere in between these two extremes.

Even accepting some of the exogenous factors making for a high price for some technologies, host countries may still not be obtaining their technology on the most favourable conditions. This is because their competitive advantage or bargaining power is weak. Chapter 19 will discuss the issues of negotiating and bargaining in some detail. For the moment, we would simply observe that countries may not be optimising the terms on which they acquire technology from MNEs for two reasons. The first is lack of information or understanding about:

1. the technology being supplied (for example, how valuable it is to the host country, how easy or difficult it is to obtain from other sources, how costly it is to produce);
2. the production and transaction costs facing supplying firms, and their opportunities for selling the technology or engaging in technological capacity in other countries; and
3. the terms and conditions offered by other countries for the same technology.

The second reason concerns the bargaining capabilities of the host administration of the country. This is partly a matter of negotiating competence per se and partly a question of the incentives a host country can offer foreign MNEs to supply the technology or create the technological capacity it needs. Foremost among these incentives are a good supply of professional and skilled manpower, a well-motivated labour force, an adequate local supplier capability, high-quality and effective institutions, for example, as set out by
Rondinelli (2005), and an appreciation, by the regulatory authorities, of the need for inward investors to sometimes engage in particular acts of resource allocation and organisational strategies which may not always be in the best interests of the host country. Finally, the extent to which a country may be able to purchase similar technology by another route (for example, licensing or local production) will also affect its bargaining position.

Improving the terms of technology transfer, then, may require changes in policies, institutional mechanisms and administrative procedures, which may affect the wider costs and benefits of FDI. Indeed, this is a general conclusion on the possible reactions to all aspects of FDI. All too frequently, the different components of FDI policy are viewed in a fragmented, issue-specific way, when what is required is a holistic and integrated framework towards both inbound and outbound MNE FDI activity (which may well be the same as that towards all investment into which specific areas of policy fit like pieces of a jigsaw). We shall amplify on this point in Part IV.512

Seventh, a government might encourage indigenous technological development. An alternative to importing technology is for a country to produce it itself. This may be more costly, at least in the short run, but if it eventually leads to a more efficient allocation of resources, it may be a sensible thing to do. The economic justification for intervention by governments to develop indigenous technological and organisational capacity essentially rests on the reasons why markets fail to fulfil this task. The fact that technology is frequently supplied under conditions of monopoly or near monopoly, and that there are costs involved in promoting dynamic comparative advantage, suggests that the market mechanism, by itself, may not always ensure an optimum supply of technology. Often individual enterprises (or the capital market in general) may view the risks of investment differently from that of the community of which they are part. Also, where the potential producers of technology are sheltered from competition, they may lack the incentive to develop their full potential.

Governments have long accepted that the social costs and benefits of innovating activity are not the same as the private costs and benefits, and that extra-market incentives may be necessary to induce the socially optimum amount and structure of such activity. At the same time, governments may be tempted to go beyond this level of encouragement, without properly evaluating the net benefits of the expenditure involved. Sometimes they may subsidise R&D by their own firms to curtail the market power of companies who, for the most part, are not under their jurisdiction.

Indigenous R&D might also be inhibited because of an inappropriate domestic industrial structure and the unwillingness of the participants in the market – perhaps because of higher adjustment costs or anti-monopoly legislation – to create production units of a size and technological strength capable of undertaking R&D. Here, governments may assist by facilitating (or not prohibiting) mergers, acquisitions or cooperative alliances, or, indeed, by establishing or strengthening state-owned corporations. This, again, is a strategy not specifically or necessarily intended to achieve only technological goals, and is widespread in some developing countries, particularly in resource-based sectors (for example, oil and hard minerals) and service industries (for example, banking, insurance, hotels and wholesale trade). Among the developing countries, India, South Korea, Brazil and Mexico were most prone to follow this route in the 1970s and 1980s. In the industrialised world, for many years and by a variety of means, including the outright nationalisation of private
companies, both the UK and French governments have sought to encourage and promote their own national champions against the inroads made by the large US and Japanese MNEs.513

Again, it is difficult to prescribe the conditions in which governments should intervene to ensure that the best of some sectors of activity remains in indigenous hands. Similarly, it is difficult to suggest the optimum modality of that intervention. Partly this is because a mixture of economic and non-economic motives are involved, and partly because any such social cost–benefit analysis must involve a set of heroic hypotheses and assumptions. On economic grounds, however, it might be argued that this is only relevant if and when the foreign ownership of value-added activity leads to a less desirable pattern of resource allocation or industrial restructuring than would have occurred under domestic ownership. Often, at the end of the day, it is the uncertainty over, or inability to control, the objectives and strategies of foreign affiliates which are perceived to be less compatible with national economic interests than those of domestically owned firms, which host governments may attempt to counteract by limiting the dependence on foreign-owned technology. However, it is also possible to argue that this position is becoming less tenable in the light of the increasing geographical diversification of R&D (UNCTAD, 2005c), where an increasing number of countries are participating in regional trading blocs, and where firms from a particular region (for example, the EU) may influence, for good or bad, the technological capabilities of a country within that region, no less than can foreign firms from outside the region.

Eight, the government might encourage cross-border collaborative R&D. Competition from foreign MNEs might also encourage governments to engage in cross-border technological cooperation. Nowhere is this more clearly an issue than in the EU. Among the best known of these programmes was the European Strategic Project on Information Technology (ESPRIT), which was initiated in 1984 by Etienne Davignon, an EC commissioner who had earlier helped to revitalise and rationalise the European steel industry.514 The purpose of this 10-year research programme was to target the R&D-intensive sectors of the IT industry, in which the challenge of US and Japanese competition was especially fierce. This was to be achieved by providing European-owned firms with the technologies they needed to be competitive, by promoting intra-European cooperation among these firms, and by developing internationally acceptable standards.

From the outset, there was a conflict among European policy makers as to whether subsidiaries of non-EC-owned firms should be allowed to participate in ESPRIT. In the end a compromise was struck, by which in Phase 1 of ESPRIT, which lasted until the end of 1987, membership was reserved for firms based in EC countries; in Phase 2 it was opened to partners from other European countries. Non-European firms were only allowed to participate in a limited way through their EC subsidiaries. Up to the time Fujitsu gained control of ICL in 1990, they had been involved in less than 10% of the projects involved. In the final Phase 3, as part of the fourth framework programme (1994–98), participation was opened to all firms collaborating with European partners in nearly all areas of the programme.

There is now general agreement that ESPRIT was successful in promoting the exchange of information and developing standards, but a more cautious judgement needs to be made regarding the extent to which it achieved the first of its three objectives. There is more general disquiet as to whether the principle of using government subsidies to finance
technological development – particularly start-up ventures of small entrepreneurial firms – is the most cost-effective way of creating and sustaining technological capability, even in the ‘pre-competitive’ stage of R&D activity. In this regard, the gradual removal of the remaining barriers to the flow of people, assets, goods and services since the completion of the Single Market in 1992, may well have acted as a no less powerful incentive to achieving the balance of collaboration and competition among EU firms, and that between intra- and inter-EU FDI, which is best able to promote indigenous innovatory capacity (Economists Advisory Group Ltd, 1996).

However, since the aim of the Single Market was to encourage competition, Ramsay et al. (2001) have argued that economic integration may well make some forms of collaboration more risky. At the same time, the establishment of the framework programmes to coordinate R&D activities within the EU has had, as its explicit goal, the fostering of cooperative relationships within the Community. Consequently, the authors presented two basic propositions combining these two effects: first that, over time, the ratio of mergers to joint ventures should increase as vehicles for cross-border transactions within the EU; and second, that cross-border cooperative activity within the EU should diminish in proportion to global cooperative activity. (Since the predictions are proportional, they are not affected by changes in the absolute levels of M&A activity or cross-border collaboration.) While the evidence in their original paper provided support for the first proposition, evidence to address the second proposition was provided by Narula (1999), who presented data on non-subsidised strategic technology alliances by European firms between 1980 and 1994. Although the total number of alliances by European firms increased, these data confirmed the declining share of intra-EU cross-border alliance activity.

Of course, such data do not show whether the observed decline in intra-EU cooperative activity would have been even stronger in the absence of the framework programmes. Nor do they give much indication of the effectiveness of the framework programmes per se, since the degree of complementarity between public R&D and private R&D spending is not easy to establish. Nonetheless, they do reinforce the idea that technological collaboration limited to one geographical region no longer makes sense in a global economy, and that the opening up of the EU collaborative programmes to firms outside of the EU is the only sensible course of action.

One other collaborative research programme which deserves brief mention is that of the European Research Coordinating Agency (EUREKA) which was set up in 1985 as a European (non-defence-related) response to the US Strategic Defense Initiative programme (SDI). EUREKA’s original objective was to facilitate cooperative R&D with commercial applications, rather than basic research. EUREKA is an intergovernmental European initiative, but not part of the R&D activities of the European Commission. By encouraging and assisting businesses to innovate, EUREKA complements the EU’s framework programmes in working towards the objective of raising investment in R&D to 3% of GDP, and creating an integrated European Research Area. This is part of the Lisbon strategy of the EU, which aims to make Europe the most dynamic and competitive knowledge-based economy in the world by 2010.

Ninth, the government might attempt to obtain knowledge through alternative routes (unbundling the package). The previous paragraphs have shown that host countries have two major concerns over importing technology or technological capability through the
good offices of MNEs. The first relates to the extent, pattern and terms of technology transfer, and the second to the control exerted over the way in which the technology is used. One way in which host countries may try to overcome the second concern is to try to buy technology on the open market, and, in so doing, separate this capability from the other resources associated with FDI, and the control exercised over their deployment. Both concerns relate to the effect such reliance on foreign-owned technology has on the economic and social objectives of the recipient country, and on its future asset accumulation and diamond of competitive advantage (Porter, 1990; Rugman and Verbeke, 1990; Verbeke, 2005).

The question at issue is whether such a strategy is likely to reduce or increase the net benefits of obtaining technology from foreign-owned firms. The argument that a country may pay less for its technology by buying it from the open market than through inbound direct investment presupposes that, in the absence of government intervention or encouragement, this would not have occurred. However, where technology is currently, or is likely to be, supplied through a 100%-owned subsidiary, it may be appropriate for the government to consider forcing the foreign firm to shed part of its ownership and the control over the technology it supplies. Where this does happen, there is an implicit assumption that the country can obtain its technology at a lower real cost and/or without as many strings attached to it. Whether or not this is the case depends on the composition of the market for technology. Where there is only one supplier, it may make little difference to the purchaser how it is provided. Indeed, if the supplying firm is forced to relinquish some of the external benefits of controlling the use of the technology, it may charge the purchaser a higher price for it. This, of course, may still be considered worthwhile by the host nation if domestic ownership offers other benefits.

Where there are many sellers, a host country may well benefit from acquiring the technology from the market if the MNE charges a higher price. However, if this is the case, the MNE is likely to have already adjusted its price accordingly. On the other hand, there may be considerable benefits or externalities to the host country in buying its technology along with other ingredients of the package of FDI. Indeed, there is reason to suppose that host governments frequently underestimate the transaction costs associated with the management and absorption of technology bought from independent firms. Rarely does an MNE supply only technical knowledge to its affiliates. Along with the hardware usually comes installation, operating and servicing advice, and frequently the transfer of institutional practices. Where a system is based on several different techniques and practices, the MNE is likely to provide guidance as to the organisation and management of the system. In addition, an affiliate may receive regular modifications and updating of technology from the global network of its parent company, which may also allow scientists and technicians from the subsidiary to visit its own R&D laboratories and training facilities. It may also promote a more entrepreneurial and risk-bearing culture. In some cases at least, being part of a global family unit may offer considerable technical, managerial and institutional benefits to the local affiliate (and to the country in which it is situated).

The extent to which there are likely to be alternatives to FDI, by which a host country can acquire technology, will clearly depend on the type of technology being sought, the need to adapt it to the indigenous resources and capabilities of host countries, and the local technological and institutional infrastructure to effectively assimilate and manage it. We have already suggested that firms are often reluctant to externalise cross-border
transfers of technology where the transaction costs of the market are high, and there are worthwhile production or transactional benefits of hierarchical control. The evidence further suggests that the technology and organisational skills associated with market-seeking investment directed to national resource or investment-driven economies are more likely to be available from external sources than are those associated with efficiency-seeking and asset-augmenting investment directed to innovation-driven economies. Similarly, host governments are most likely to want to encourage external technology flows where they perceive that the advantages of integrating or forming alliances with local firms, relative to those within a multinational network, will be cost effective. These, too, may be greater in the case of market-seeking MNE activity, but as a long-term strategy, the sensible integration of all forms of resource acquisition (including that of R&D facilities) may be preferable. However, it is frequently the non-technological benefits of the presence of multinational affiliates (for example, access to markets, superior managerial practices and the transfer of more-effective institutional forms) which make such alternative modalities, which do not provide these externalities, less attractive than they might otherwise be.

In conclusion, it would seem that there is a tendency for governments of host countries to overestimate the availability, and underestimate the cost of seeking out and acquiring, foreign technology not owned by MNEs, as well as their own institutional capabilities to assimilate and manage this technology. On the other hand, there is no denying that the control of technology and technological capacity by MNEs will not always optimise the asset accumulation or economic restructuring programmes of host countries. The Japanese case of limiting inward MNE activity in the 1970s and 1980s, while making full use of other routes to acquire foreign technology, is particularly instructive. It shows that it is possible for a country, at least, to move through the initial stages of its IDP without undue reliance on FDI. However, it also shows that it can only do so if it has the right domestic resource and institutional infrastructure, and particularly a strong technological back-up and an entrepreneurial and work ethic dedicated to the improvement of product quality and consumer satisfaction.\textsuperscript{518} The Indian example also demonstrates that economic progress can be made with little or no FDI, but in this case the pace of change has been very much slower. Since India currently has one of the best educational and technological infrastructures of all developing countries, the recent opening up of India to both inward and outward FDI is likely to pay high dividends, both directly, by contributing to the indigenous technological base, and indirectly, by providing the stimulus for an upgrading and restructuring of Indian institutions.

12.2.3 Developing Countries and Technological Capabilities

In Chapter 11 we presented evidence that the share of world trade of technology-intensive products has been consistently growing. A few facts bear repeating here. High-technology sectors are of considerable importance in the exports of developing countries, particularly those that are engaged in complex integrated systems of production, such as automobiles in Mexico, Brazil and Argentina and electronics in Malaysia, Singapore, the Philippines and Mexico. Additionally, countries such as South Korea, Taiwan and China engage in extensive OEM production, so that up to 60–70% of their consumer electronics are sold on an OEM basis (Lall, 2002; UNCTAD, 2003b).
While there are only a handful of developing countries, most notably Brazil, India, South Korea, Singapore, Taiwan and China, in which MNE affiliates conduct basic R&D, the potential for such higher-level value-adding activities is increasing (UNCTAD, 2005c). In each of these countries, the growth of innovatory activities conducted by foreign affiliates and domestic firms under contract has also promoted a ‘reverse brain drain’ by encouraging scientists, engineers and entrepreneurs working abroad to return to their country of origin. For example, of the 14,000 firms located in the Zhongguancun Science Park in Beijing, China in 2004, 2,500 had been established by graduates returning from abroad (ibid.).

Lall (2002) has identified four different strategies adopted by developing countries with respect to their technology development:

1. The autonomous strategy focuses on developing the capability of domestic firms using extensive industrial and educational policies and supportive institutional mechanisms, with restrictions on inward FDI, and a strong encouragement for exports. Examples include South Korea and Taiwan. As revealed in Chapter 11, the investment by South Korea in education and R&D rivals that of most developed countries, and is considerably higher than that of other advanced developing countries.

2. The strategic FDI dependent strategy is, as its name suggests, driven by attracting inward FDI, and promoting exports particularly within MNE networks. This approach uses the selective targeting of particular kinds of FDI by IPAs, along with policies on skill creation and institution building to encourage the MNE affiliates to move into higher value-added activities. Examples of countries pursuing this strategy include Singapore, and more recently, China.

3. The passive FDI dependent strategy also relies on inward FDI, but with few interventions by the government. Its main focus is on creating the right domestic conditions for attracting FDI, and providing strong incentives for exports. Examples are Malaysia, Thailand, the Philippines; the maquiladoras of Mexico also fit into this category.

4. The import-substituting industry restructuring strategy is similar to the autonomous strategy, but where indigenous capabilities are weaker, and where overall coordination of policies to improve domestic competitiveness is unlikely to be successful. The emphasis of this strategy is likely to be directed to encouraging exports and upgrading of skills in the import-substituting industries. Examples include India (until recently), and the large Latin American economies, although aspects of this strategy are present elsewhere as well.

Policies such as targeting specific kinds of investors that have the highest possibilities for success in a host economy, such as in the case of Singapore, Ireland and Costa Rica, require a close coordination of different macro-organisational strategies, so that they – and the institutions they give rise to – not only work together, but also address the specific needs of foreign investors. The alternative to these policies is to focus on building indigenous capabilities, as was done in South Korea and Taiwan in the 1970s and 1980s. In South Korea, the government alleviated coordination failures by promoting giant private conglomerates (the Chaebol), while in Taiwan the government concentrated on building the SME sector by an extensive institutional system for the technological upgrading of
SMEs. However, as we discussed in Chapter 10, not every country has the governance capabilities for the execution of such policies, and they may be unsuitable for countries where government failures are likely to exceed or equal market failures.

At the same time, we agree with Lall (2002) that this really is not a question of whether governments should intervene, but in what form. The liberalisation of the global economy has proceeded on the assumption that once liberalised, markets require few, if any, adjustments by extra-market entities. To the extent that this has served to limit the extent of unhelpful and distortive government intervention, this is a welcome development. As we argued earlier, if one is able to undertake coordinated macro-organisational policies, and to provide the right institutional conditions, FDI can be attracted even to countries whose skills and capabilities are not very advanced. A critical question posed by Lall (1998) is how far can MNEs be expected to build on these initial endowments, when it becomes uneconomic for them (as private entities) to do so? The evidence to date strongly suggests that the process of upgrading is unlikely to manage itself, and the key is not only to determine the point at which governments should step in to reappraise their education, innovatory and competitiveness-enhancing policies, but to ensure that the institutional infrastructure is in place for these policies to be successful. The fact that past policies have not worked because they have been badly designed or badly implemented is not a reason to abandon the role of government, but rather to improve its performance. By paying more attention to institutional support mechanisms and limiting government intervention to areas of identifiable market failure, it should be possible, over time, to improve the effectiveness of this form of extra-market organisation.

While the prevailing view of the role of government is more facilitative than interventionist, Mahmood and Rufin (2005) present an interesting, if somewhat unfashionable, argument relating to the role of national governments in technological development. They argue that in a developing country that has a large technology gap with the rest of the world, economic development and restructuring can be boosted by centralising economic and political control. However, as the country approaches the technological frontier, the more such decision making must embrace the demands for economic and political freedom. This dynamic relies on a distinction between imitative technological activities and innovative technological activities, and the kind of political and economic context that is conducive to such activity. Thus centralisation would be appropriate for the process of imitation or catching up with the technological frontier, while innovation requires some relinquishing of that control, and the encouragement of decentralised entrepreneurship. The contemporary situation in China is well reflecting the challenge of this dynamic.

In addition to the changing role of national governments, the authors also consider whether domestic business groups and MNEs are likely to complement or substitute for the role of the government. Specifically, they suggest that the inward FDI is likely to raise the threshold at which economic centralisation needs to be reversed, while domestic business groups would lower this threshold. Both domestic business groups and MNEs would increase the threshold at which political centralisation needs to be reversed for further development to take place.

In the framework of Mahmood and Rufin, the role of government is directly linked to fostering the technological development of the country in a manner that is largely complementary to our views on development set out in Chapter 10. As the authors acknowledge, technological development is only one part, albeit a very important part, of
economic development and restructuring, and the paper is addressing the essential question of how do countries break the cycle of not having the right kind of technological capabilities to be able to attract additional investment. The view we presented in Chapter 10 was that FDI is unlikely to take place unless fundamental institutions such as rule of law and enforcement of property rights are credible. While the authors agree that its imperative is to ‘get the institutions right’, respect for property rights, while necessary, may not be sufficient at the imitation stage to allow for countries to begin the process of technological accumulation.

Instead, they argue that economic and political centralisation can be a means to move the economy out of a poverty trap that results from coordination failures in the market. The means to achieve economic centralisation could involve interventions such as coordinating private sector investment decisions, using taxes and subsidies, or creating public enterprises. Political centralisation, on the other hand, gives governments decisiveness and policy autonomy. It is thus a ‘strong hand of government’ kind of argument, but one that is quite nuanced in its understanding of technological development. Instead, they argue that economic and political centralisation can be a means to move the economy out of a poverty trap that results from coordination failures in the market. The means to achieve economic centralisation could involve interventions such as coordinating private sector investment decisions, using taxes and subsidies, or creating public enterprises. Political centralisation, on the other hand, gives governments decisiveness and policy autonomy. It is thus a ‘strong hand of government’ kind of argument, but one that is quite nuanced in its understanding of technological development.521 We would simply add that political and economic centralisation is unlikely to work unless the institutional preconditions, and particularly the values and belief systems underlying institutions, are conducive to growth, since any form of centralisation can also turn from being beneficial into crony capitalism and rent seeking.522

12.3 THE ROLE OF GOVERNMENT IN HOME COUNTRIES

Nations have always sought to protect themselves against the perceived erosion of their competitive advantages. In the early 19th century, the UK, for example, disallowed or strongly discouraged its overseas possessions from producing the first generation of modern technology-embodied goods (for example, textiles, iron and steel products). Fearful of the emergence of rivals from later industrialising nations, it tried to bar the export of knowledge, machinery, drawings and patterns. Yet such legislation failed to stop either the smuggling of technology or the emigration of well-qualified technicians, managers and entrepreneurs. Indeed, it is not too much to say that in one form or another, non-resident (and especially UK) technology helped create and sustain the basis of secondary industry on which the future wealth of the US and Canada was built.523

It is frequently asserted that, since technology has some of the characteristics of a public good, by transferring it to a foreign country at low marginal cost, the MNE may help to erode the competitive advantage of the home country. Put another way, the recipients of the technology are not paying the full (marginal) social cost of that technology, which inter alia should include the possible erosion of the benefits of technological accumulation of the exporting country.

Although it may be difficult to separate the various effects of technology transfer, as far as possible we shall focus our attention in this section on the consequences of outward FDI designed to exploit the O advantages of the investing firm, whether in connection with market-, resource- or efficiency-seeking investment. In the following subsection we deal more specifically with the likely effects and policy implications of asset-augmenting FDI for the technological prowess of the home country.


12.3.1 Effects of Asset-exploiting Investment

The concerns of most policy makers in industrialised market economies about the effects of technology transfer by their own MNEs first surfaced in the late 1970s. It was sparked by two main factors. The first was a marked slowing down of international economic growth – itself a result of the second oil crisis of the 1970s – which coincided with a downswing in technological innovation, rising domestic unemployment, stagnant industrial productivity and widespread inflation. Later in the 1980s, these concerns became crystallised into a broader-based anxiety about international competitiveness in countries such as Sweden, the US and the UK, which had experienced the most dramatic fall in their share of world trade in manufactured goods and relative technological status.

Second, and partly related to this first concern, has been the increasing effort of developing countries to shift the balance of economic and industrial power from the North to the South. Attempts by the developing and transition countries to pursue a policy of rapid industrialisation and asset accumulation have led the established industrial powers to fear not only an erosion of their industrial hegemony, but also an undermining of their future competitive capabilities.

While no commentator would go as far as to ascribe the relative decline in the competitiveness of some of the advanced industrial nations solely, or even mainly, to the transfer of technology by MNEs, there are two main thrusts to this general allegation. The first is that MNEs, by engaging in FDI, divert their resources and energies away from technology-innovating activities in their home countries. The second is that technological exports – most of which are undertaken within MNEs – improve the global competitiveness of firms in the recipient country at the expense of those in the sending country. This, in turn, so the argument runs, erodes the market base of the technology-exporting firms, and makes the rising costs of R&D more difficult to recoup. In the case of labour-intensive industries, the effect is more dramatically and immediately felt on domestic employment. In the context of North–South technology transfers, the debate has been less to do with falling export shares of industrial nations and more with the increasing import competition faced by them. Nonetheless, it is a variant of the ‘we want to sell more milk and fewer cows’ type of argument.

To what extent are such concerns justified, and how far can they be specifically attributed to the activities of MNEs? What, if anything, can be done about them, and how far are the possible social costs of technology transfer outweighed by reverse transfers of strategic asset-acquiring investments?

Depending on the modality of cross-border technological transfer, various gains may be expected to accrue to both the transferor and the transferee or, in the case of strategic alliances, to each of the participating firms. To the firm selling under contract, these primarily comprise the revenue it receives from the sale of technology. As long as the marginal revenue exceeds the marginal opportunity costs (including externalities) of supplying the technology, the firm will find the transfer worthwhile. In practice, for many firms selling technology that would have been produced in any case for sale or use in the domestic market, the costs reduce the marginal negotiating and transaction costs. In other cases, particularly for technology-supplying specialists such as construction contractors, project engineers, systems analysts and petrochemical consultants, the resource costs of producing the technology are relevant (Teece, 1977, 1981a; Graham, 1981). To the MNE,
transferring (or sharing) technology by way of FDI is frequently the preferred means of appropriating the full economic rent of the technology, and of the unique O-specific advantages transferred with it. The gains from the transfer are those that accrue to the enterprise as a whole. They include not only the profits earned on the capital invested but also a range of other benefits that arise from foreign production, including the securing of new markets which help spread the R&D and other overhead costs of the parent company.

Excepting, then, cases of business misjudgement, to suggest that a home country may not benefit from an export of technology on the part of its firms is to suggest that the social opportunity costs of such export transfers exceeded the private opportunity costs. This may be so if only because MNEs and home countries are not pursuing the same goals. MNEs are primarily (though not exclusively) interested in making profitable investments independently of where those profits are earned. Consequently they will engage in foreign production and transfer the necessary technology with this objective in mind. Investing countries, on the other hand, are interested in the activities of their MNEs from a wider perspective. Their goals include the growth of GDP, promoting full employment, controlling inflation, building up indigenous technological capacity, protecting the environment, and restructuring the use of their indigenous resources. There is no presumption that, in pursuing their own objectives, firms will necessarily advance those of their home countries.

At the same time, it would be wrong to judge the macroeconomic consequences of a transfer of technology by an MNE by its microeconomic opportunity costs, or to attribute such costs solely to the MNE. Suppose, for example, that, as a result of the transfer of technology by their parent companies, US affiliates in South Korea are able to outcompete domestic producers in the supply of televisions to the US market and that jobs are displaced in the US industry. Suppose also that the people who are made unemployed do not find other work. Then the immediate gains to the US of the transfer of technology will be the profits, net of foreign tax, earned by the foreign affiliates together with any reduction in the price of televisions passed on to the US consumers, while the opportunity cost will be any loss in the GDP caused by unemployment. To the MNE, on the other hand, the effect of the transfer may be higher sales and profits than otherwise would have been possible.

It is obvious that this conclusion may be entirely false. It may be quite wrong to attribute any fall in domestic employment to a foreign capital outflow. This is because, in its absence, the investment might have been made by other firms. This would not only have resulted in a similar fall in domestic jobs and output but would also have meant that the US economy would have lost the profits and other benefits which it otherwise would have achieved from the foreign operations of its own MNEs. Moreover, the resulting unemployment may only be temporary and, over time, the labour displaced may be employed in more productive activities, either in the same firm or elsewhere in the economy, so raising, rather than lowering, the GDP.

All this, of course, approaches the question from a microeconomic standpoint. Depending on their consequences for the host countries, however, it is not only the costs and benefits of the investing firms that have to be taken into account. The main beneficiaries of outbound MNE activity are often the suppliers of capital equipment and intermediary products to the foreign affiliates. All, or part, of these exports would have
been lost without the FDI, as investment by firms of other nationalities may well have bought these same goods from their home countries. On the other hand, the extra output produced abroad may replace not only domestic output by the investing MNEs, but that of its domestic competitors as well. Again, the effects depend critically on the assumptions made about what would have happened in the absence of such a transfer of technology, or as a consequence of it.

It is worth observing that in the neoclassical literature, provided that there are no market distortions, a transfer or dissemination of technology between countries will normally be expected to increase world real output by raising both allocative and technical efficiency. Moreover, both technology-exporting and -importing countries would benefit, although some redeployment of resources may be necessary. The difficulty of using this approach in the current context is that the assumptions underlying it are unrealistic. MNEs do not normally transfer technology in a competitive market situation; nor are governments always able to ensure that, come what may, full employment is achieved. Moreover, the welfare functions of countries embrace goals other than the maximisation of output or growth of output, which could be adversely affected by the transfer of technology. It may be that the transfer of technology is not as beneficial to the home country as it could be, precisely because of market distortions. In such an event, rather than controlling the outflow of technology, policy might be better directed to removing the distortions that gave rise to it in the first place.

So far, much of this argument has implied that the technology being transferred by MNEs will be used to produce products competitive to those produced by the transferring firm or country. With market-seeking investment, much of the technology will be of this kind. But even here, experience has shown that where a foreign affiliate is set up to produce one line of goods, its presence may stimulate the imports of other lines of goods from the home firm or country. This has proved to be especially common in the case of firms producing branded consumer goods, for example, televisions, motor vehicles, processed food products, cigarettes, cosmetics and pharmaceuticals.524

With other kinds of asset-exploiting FDI, the technology transferred may be used to produce complementary, or even quite unrelated, goods to those produced by the transferring firm or country. In such cases, output and employment in the home country may be increased and its technology base strengthened. Investment by MNEs in trade and distributive activities is of this kind. While it may improve the marketing competence of recipient firms, it may directly increase the exports of goods from the home country. Investment in building and construction, capital equipment and energy ventures, and by chemical and engineering consultancies, may have the same effect. It is, of course, a moot point how far technology is transferred through physical assets and goods, but, for the purpose of this analysis, we shall treat such exports as a benefit to the home firm and country.

The transfer of technology through international backward integration by MNEs in resource-based sectors may also result in a spin-off in technological capacity in the home country, depending on the extent to which the higher-value activities, for example, R&D and secondary processing, are undertaken in the host or the home country. Even if there is a transfer of technological capacity, imports of capital equipment are likely to take place. These are more likely to be obtained from the home rather than from other countries. In some service industries, such as banking, tourism and business services, similar externalities are likely.
Efficiency-seeking investment between countries with dissimilar economic structures is likely to have the greatest effect on domestic employment, as such investment often involves labour-intensive activities. Chapter 3 identified two forms of this kind of investment. One is to produce complete goods and/or services which require substantial inputs of labour. Here the advantages of specialisation and division of labour would seem to dictate that MNEs should concentrate their production of labour-intensive goods in labour-rich countries, and of capital- or technology-intensive goods and services in countries that are rich in capital and technology. The second kind of export platform investment is in labour-intensive parts of a production process for sale in world markets, the capital- or technology-intensive part of the production being produced in the capital- or technology-rich countries. Recent examples include the increased offshoring of call centres and regional offices (UNCTAD, 2004). Again, this conforms to the principle of the international division of labour, except in so far as the action may sometimes be prompted by distorted markets or government policies.

Efficiency-seeking investment between countries with similar economic structures is intended to exploit the benefits of intra-sectoral (rather than inter-sectoral) product specialisation and the economies of scale and scope. In general, efficiency-seeking FDI – such as efficiency-seeking trade between countries with similar economic structures – is likely to promote a cross-border division of labour, provided that it is undertaken to overcome endemic market failure rather than to advance the market power of the investing firm, or in response to government-induced price and other distortions.

Such a division of labour is normally horizontal rather than vertical, although it may occur in both intermediate products (electrical equipment, textiles, automobile engines, business services) and final products (refrigerators, autos, computer software, microwave ovens). With such specialisation, then, depending on the nature of the products and processes, the production technology and technological capacity related to these activities is likely to be dispersed at the same time. Both the organisation of the technologies employed in the various affiliates and the development of the new technologies essential to the competitive advantage of the MNE may continue to be centralised. Put another way, rationalised MNE production may lead to a ‘hollowing out’ of some of the technological functions of the home country, while allowing for a more efficient organisation of the innovative activities of domestic MNEs.

Finally, there are multiplier effects of the income generated from the transfer of technology, whatever its kind. In the 19th century, these yielded substantial benefits to the UK economy. Rising incomes of recipient countries generated by the exports of British capital and expertise provided markets for UK-manufactured goods which helped to finance new investment and, through the economies of firm size, reduce the price of goods supplied to home markets. Although there is no economy currently as internationally dominant as the UK once was, it is nevertheless the case that, depending on the value added by the foreign affiliates and the recipient country’s marginal propensity to import from the investing country, gains may accrue to the latter. Earlier research undertaken by Hufbauer and Adler (1968) and Bergsten et al. (1978) suggests that these consequences may have been significant for the US economy.

The above paragraphs suggest that the impact of outbound MNE activity on the technological capacity of the home country will depend on the motives of such activity, the conditions under which it occurs, the characteristics of the home and host countries
involved, and the time horizon being considered. Gains include any feedback in technology resulting from the FDI (particularly important where the investment is in a technologically more advanced economy); extra business to technology suppliers in the home country; and (unique to FDI compared with other forms of technology exports) control over the use of technology. The possible costs to the home country include an erosion of its long-term competitive advantage and a weakening of its balance of payments position. At the same time, it is important to take account both of the costs of not exporting technology, and of the opportunities FDI might provide for a restructuring of domestic technological activities. On the first point, it is quite possible that if (say) US MNEs did not export technology or relocate technological capacity to another country, German or UK MNEs would have done so – and the effects on the US economy would be even less welcome. Clearly, the ‘alternative’ or ‘counterfactual’ position one assumes is very important. On the second point, it is quite possible that the foreign activities of MNEs might replace similar activities in the home country. But, this may release resources for the undertaking of different (and higher grade) technological activities.

12.3.2 Effects of Asset-augmenting Investment

The intensification of competition as a result of globalisation, and the increasing complexity of modern technology, have resulted in a need to speed up the innovatory process, and consequently, to an escalation of the costs of R&D for firms. In addition to employing a variety of non-equity means to share the risks and costs of R&D, MNEs have engaged in a large number of cross-border M&As – mainly intra-Triad – in an effort to promote and augment their competitive advantages (UNCTAD, 2000b; Lundan and Hagedoorn, 2001a). Although such deals are typically motivated by multiple factors, including market access and the expected benefits of a larger market share, many M&As have been prompted by the need to augment the acquiring firms’ technological and organisational assets.

When a firm – for whatever reason – purchases another firm, it gains its stock of technological assets as well. While this will increase its global technological capability, the extent to which the home country gains will depend, in the short run, on the effect of the acquisition on the form and distribution of its own technological activities, and whether any switch in the location of innovatory activities is desired. In the long run, it will depend on the global competitiveness of the acquiring firm. However, ownership is no guarantee of successful technology transfer, and as Chapter 9 has demonstrated, non-equity cooperation in R&D is frequently a necessary complement to the in-house development activities of MNEs. Furthermore, the emergence of a number of new countries, such as China and Brazil, as noteworthy locations for innovative activities has increased the likelihood that at least some R&D activity will be conducted outside of the home country of the MNE (see Chapter 11).

In the event of a strategic alliance, the short- and medium-run benefits are uncertain, and, again, are likely to depend on the relative technological strengths of the partners to the exchange. Moreover, while most cross-border collaborative ventures in R&D or in technologically advanced industries are designed to strengthen the overall innovatory capacity of the participating companies, whether or not this also benefits the home
countries depends on the geographical distribution of the innovatory capacity. In the long run, the benefits will rest on how the coalition affects the global competitive positions of the investing firms.

While in the 1980s and 1990s most asset-augmenting investment took place within the Triad, the first decade of the 21st century has also seen notable growth in asset- and resource-seeking investment by developing country MNEs. The resource-seeking investment, typically undertaken via cross-border M&As, has been undertaken primarily to ensure supplies of energy and minerals, particularly in Central Asia and sub-Saharan Africa, by rapidly growing but relatively resource-poor countries such as China, India and Turkey. Other asset-seeking investment has often involved mixed motivations on the part of the investors.

According to a recent survey by UNCTAD (2006), market-seeking investments still account for much of the outward MNE activity from developing countries, while asset-seeking investment was far less common. A notable exception was Chinese MNEs, half of whom questioned by UNCTAD considered it an important motive for FDI. None the less, the report points out that because of the need for MNEs from developing countries to develop the necessary capabilities to absorb knowledge from other firms, their FDIs frequently combine both asset-exploiting and asset-augmenting elements. For example, in the past five years, in addition to seeking new markets for their products, the Turkish appliance manufacturer Arçelik has engaged in M&As to acquire brands in Europe, while the Chinese firm Haier has invested in manufacturing and R&D facilities in the US and in a number of developing countries, including Indonesia, Iran and Malaysia. Haier also tried unsuccessfully to acquire the US appliance manufacturer Maytag in 2005. Furthermore, at least three home countries, namely, China, Malaysia and Singapore, have policies that explicitly encourage outward FDI for the purposes of asset exploitation as well as asset augmentation (UNCTAD, 2006:163).

Even in the absence of specific policies promoting asset-augmenting investment, home countries have an important role to play by fostering institutions that support the development of the management and organisational skills of the acquiring firms, so that they can effectively integrate the newly acquired technologies with their own strategies and operations. On one level, this is the familiar issue of absorptive capacity, or the requisite level of technological sophistication that allows for learning to take place. However, we would argue that successful reverse technology transfer from abroad is also an issue of the informal institutions, or the values and norms, that support entrepreneurship and encourage experimentation in the home country. While the former is likely to pose an obstacle only in the context of developing countries that suffer from deficiencies in their human resource development, the latter might impede technological upgrading even in advanced economies.

**Reverse technology spillovers**

Aside from the investment that is specifically intended to augment the technological and organisational assets of the MNE, outward FDI may also encourage indirect reverse technology transfer through spillovers that contribute to the technological capabilities of the home country more broadly. Here we are referring to the technological learning in the home country, by local firms, that is attributable to the foreign operations of its MNEs. While such home country spillovers have received considerably less attention in the
literature than host country spillovers, discussed in Chapter 16, a few interesting studies are worthy of mention.

We begin with the broad question investigated by Potterie and Lichtenberg (2001), concerning the extent to which FDI (inward and outward) has served as a channel for international technology diffusion among the US, Japan and 11 European countries in 1971–90. In their study, they regressed TFP of these countries with a set of independent variables which included domestic R&D stock, the foreign R&D stock incorporated in imports, and inward FDI and outward FDI. Their results indicated that while both imports and outward FDI increased productivity in the home country, inward FDI flows did not contribute to (or detract from) the technological productivity of these developed economies. While the benefits drawn from imports were higher in the 1970s than in the 1980s, the opposite was true of the effect of outward FDI, which became larger over time.

Another approach, again linking trade to technological learning, is that of Coe and Helpman (1995), who investigated the extent to which a country’s TFP depended on domestic and foreign R&D expenditures, where foreign R&D expenditures were measured as a weighted sum of its trade partners’ cumulative R&D spending. They found that foreign R&D had beneficial effects on domestic productivity, and the effects were stronger the more open economy was to trade. In a subsequent paper (Coe and Helpman, 1997), the authors concentrated specifically on developing countries. Here they assumed that developing countries had a domestic stock of R&D of zero, and looked for changes in the country’s TFP attributable to foreign R&D spending, imports of machinery and equipment, and secondary school enrolment. The basic argument was again that openness to trade improves productivity by making available products that would otherwise not be available, and/or useful information which would be difficult and costly to acquire by other means. They discovered that TFP was positively related to the foreign R&D spending, as well as to the country’s openness to trade and a better-educated labour force. However, they also showed that foreign R&D affected developing country productivity primarily through its interaction with machinery and equipment imports.

Aside from these macro-level studies, a few studies have been conducted at the firm level by using patent citations as indicators of home country knowledge spillovers. One such study was conducted by Globerman et al. (2000), who used patent citations to trace the diffusion of foreign knowledge into Sweden. Instead of using patent citations to map the geography of local spillovers in host countries (see Almeida, 1996), the authors examined the effects of outward direct investment on patterns of citations in the home country. The sample covered 109 patents filed by large Swedish MNEs in 1986 that included 263 references to existing patents. It also included 111 patents filed by Swedish SMEs without any foreign operations, including 310 citations to earlier patents. The authors estimated a conditional logit model, where each citation was treated as a separate observation, thus yielding the probability that a patent from a particular country gets cited.

Following Jaffe et al. (1993), Globerman and his co-authors first investigated international trade as a possible conduit for international R&D spillovers. Here they hypothesised that importers can learn from the imports of machinery and equipment, as well as from technology embodied in other products, which can be reverse engineered, while exporters benefit from contact with foreign customers, who require adaptations to existing products, and may assist in finding new technical solutions. Additionally, the
researchers investigated inward and outward FDI links with the countries being cited as possible conduits of technology transfer. The main findings arising from the study were that both the patent stock in the country being cited, and that outward FDI to the country being cited, were positive and significant determinants. Inward FDI was found to be a negative but often insignificant determinant, which may have reflected the extent of MNE activity from other Nordic countries. Additionally, trade contacts appeared more important for SMEs than for MNEs.

What is particularly interesting, however, is that outward FDI was shown to have a positive influence both for the group of Swedish MNEs, as well as for the group of SMEs, which had not engaged in any outward FDI. This could either mean that the outward FDI variable was capturing something about the host country not included in the model, or as the authors suggest, it could be evidence that, in a small economy, the benefits derived from FDI in terms of technological learning are disseminated by MNEs back to their home country, and within the home country to the SMEs. This is an intriguing proposition, and capable of being investigated further by comparing the patent citations made by SMEs and MNEs over time.

Other recent research employing a similar methodology includes a study by Criscuolo (2004), who conducted an interview-based study of intra-firm transfer of technology, and analysed patent citations as evidence of inter-firm spillovers in the European chemicals and pharmaceutical sectors. She found that firms in the home country of the MNE had a higher than average propensity to cite the patents of the foreign subsidiaries of their ‘national champions’ in the chemicals sector, but not in the pharmaceutical sector. This was explained by the structure of R&D, which in the pharmaceutical sector tends to be conducted through multiple hubs, while R&D in the chemicals sector is still strongly based in the home country.

She also found that in terms of the total number of citations, the spillovers were quite small, which is what one would expect, particularly when the measurement is not contaminated by those direct transfers within the MNE which constitute a reverse flow of technology, but are clearly not spillovers. In Chapter 16, we distinguish between linkage effects that accrue to local firms in an upstream or downstream relationship with the MNE affiliates, from the indirect effects on local firms that have no formal connection to the affiliates. While most studies on such indirect effects do not control for the kind of relationship local firms have with the inward direct investors, it is reasonable to expect that most of the spillovers would be experienced by local firms so connected.

Another interesting study that carefully controls for the ‘noise’ added by the patent examiner to the citation record was conducted by Popovici (2005), who found robust evidence that US affiliates conducting R&D overseas facilitated the flow of knowledge from the host to the home country. Specifically, she found that US firms citing the patents of US affiliates in a particular host country, say Japan, were more likely to cite other patents registered by firms from that country. This adds to the earlier findings by Branstetter (2000) who found evidence of knowledge spillovers (as measured by patent citations) from Japanese affiliates to US firms and vice versa. His results were particularly notable due to the very low levels of R&D typically conducted by Japanese affiliates. Evidence from the interviews conducted as part of the study confirmed the importance of foreign affiliates in potentially broadening the reach of the R&D that had traditionally been conducted by the parent company in Japan.
12.3.3 FDI as a Means of Domestic Technological Restructuring

In any process of industrial restructuring, the new jobs being created require different skills from those which are being replaced. In such cases, without effective retraining programmes, structural unemployment is likely to persist. Most unemployment of this kind has occurred in the labour-intensive sectors, notably textiles and clothing, consumer electronics and light engineering. For example, the expiry of the multi-fibre agreement in 2005, which restricted textile imports from developing into developed countries, has re-ignited concerns about the adverse impact of outward FDI on the EU and US labour markets. That this is an old problem, and the inevitable outcome of a changing and international division of labour, is of little comfort to those adversely affected.527

Clearly, there are divergences of interest between home and host countries as to the technological impact of MNE activity. To the host country, the opportunity cost of obtaining technology via inward direct investment is the cost of obtaining it by other routes or by the internal generation of that technology. To the home country, the cost is essentially the impact – beneficial or otherwise – which the outward MNE activity might make on its global competitive position. In the last resort, and in the absence of market forces that adequately take account of the extra-market consequences of technology transfer, it is difficult to see how these issues can be resolved, other than by the acceptance of general principles on the way in which successful innovation should be rewarded, and on an ad hoc basis around the negotiating table.

As we showed in Chapter 11, quite a high proportion of patents registered by MNEs originate in their foreign subsidiaries. More generally, it is only by undertaking investments in the most competitive locations that many high-technology firms can secure the global markets which are needed to finance their innovatory activities, which themselves are critical to their survival.

However, other analysts (for example, Porter, 1990) have suggested that in some sectors, such as semiconductors, the readiness of US MNEs to switch locations to lower their production costs may have been a misplaced strategy, in so far as it reduced their incentive to invest in product innovations and improvements at home. At the same time, there is evidence to suggest that some Swedish, North American and UK MNEs have relocated some of their R&D activities outside their national boundaries to gain access to more-plentiful and better-qualified personnel, or to tap into a more vibrant and sympathetic innovatory environment.

One thing does seem crystal clear. Because of the globalisation of economic activity and the role of MNEs as exporters of technology and relocators of technological capacity, home governments are being forced to reappraise their policies towards technological creation and productivity. In particular, a new emphasis on institutional measures to enhance the quality of human capital, improve the motive for, and the capability of, firms to undertake innovatory activities and/or their competences to engage in successful collaborative agreements is needed. It requires, too, a generally liberal stance towards trade and investment and a refusal to enter into sheltering agreements with its own firms (Rugman and Verbeke, 1990) – except, perhaps, those intended to counteract strategically distorting policies on the part of foreign competitors or governments.

In the longer run, there are basically four policies open to governments of the capital-exporting nations. First, they can resort to some form of technological protectionism.
Second, they can enter into agreements with their newly industrialised competitors to control their increase in manufacturing or service exports or to insist that they should import from industrial countries as much as they export to them (the assurance of fair trading comes into this category). Third, they can encourage their firms to differentiate their products and introduce new production techniques more suited to their particular supply capabilities. Fourth, they can seek to identify emerging patterns of dynamic comparative advantage, and introduce policies to help firms and individuals to move into the appropriate value-added activities.

If the last policy is judged the first-best solution, then many governments need to introduce more decisive and far-reaching strategies to stimulate productivity, encourage innovation, and promote the upgrading of technology-intensive activities. In the interim, however, the problem is how best to minimise the adjustment costs of market disruptions and maximise the smoothness of the adaptation and restructuring. Where appropriate, it is necessary to encourage firms affected by competition from NICs to be more efficient.

To solve these problems, which may well mean controlling the character and pace of the restructuring process, some form of phased import restrictions cannot be completely ruled out.

A current issue which combines anxieties about the prospect of job losses, and the loss of technological competitiveness in developed countries, has to do with the rise of the software industry in developing countries, and particularly in India. Arora and Gambardella (2004) suggest that these concerns might be alleviated by examining in more detail what kind of software development takes place in the US, and comparing with that in India. As we showed in Chapter 11, the US has a considerable advantage in the availability of highly skilled engineers, many of whom are, indeed, of Indian origin. The activities in which US producers specialise are the design of software solutions to meet clients’ needs; while the kind of work being carried out in India consists of coding and adaptations to existing products. The comparative advantage of the Indian market in the early 2000s is in the accumulated skills in managing these kinds of outsourcing projects. Consequently the authors conclude that there is little to indicate a serious threat to the US dominance in the higher value-added activities in the software industry. Indeed, they suggest that the successful outsourcing undertaken by American MNEs might even have given them a cost advantage over their European and Japanese counterparts.

Another issue that has pitted the technology-producing countries against the technology-receiving countries has to do with the obligations of WTO member states under the TRIPs (trade-related aspects of intellectual property rights) regime, particularly in the pharmaceutical sector. Manufacturers of generic drugs in India and Brazil have argued that the imposition of TRIPs rules impedes their ability to deliver generic versions of drugs used to combat endemic diseases in the developing world such as malaria, tuberculosis and HIV/AIDS (Fink and Maskus, 2005). Specifically, while the TRIPs agreements allow for compulsory licensing in the event of public health emergencies, the interpretation of these rules, such as those related to the use of the results from clinical trials, might severely impede the developing nations’ ability to avail themselves of the compulsory licensing provisions (Heath and Kamperman Sanders, 2005). At least in this case, the US has argued vigorously on behalf of the pharmaceutical industry to protect the position of the American patent holders.
More broadly, these examples illustrate emerging debates in the area of IPR protection, which range from the patentability of software programs or biological organisms, to the extent to which protection is given to creative works such as music or books. These debates are opening up new areas of conflict between the property rights holders and their users, particularly where the rights extend beyond the initial sale to those that govern subsequent use. Given the importance of innovative activities to economic growth in the global economy, there is every reason to suspect that such conflicts are likely to become even more prominent in the future.

It is, however, difficult to understand how regulating the activities of MNEs in developing countries, whether in the manufacturing or services sectors, can advance the goals of the home countries, any more than did the controls exerted by the UK on the export of technology in the 19th century (Rosenberg, 1981). If any attention at all is needed in this direction, it should be towards removing any distorting influences which might encourage MNEs to transfer different amounts or types of technology than they might otherwise have done, or which might interfere with their returning the maximum benefits to the home country. Again, action may involve institutional changes to the IPR or tax systems, at least some of which might operate against the short-term interests of the technology-receiving countries. At the same time, care must be taken to ensure that any such changes do not simply protect the interests of current IPR holders to the detriment of developing countries’ efforts to catch up to the technological frontier.

This discussion began with the expression of concern of developed countries about the possible adverse effects of exporting technology to developing countries through their own MNEs. It ends by asking the question: can developed countries afford not to export technology to developing countries through their own MNEs? If the activities of MNEs are seen not as a threat to domestic investment, jobs and technological capacity, but as a means of:

1. gaining or protecting access to foreign markets,
2. acquiring or accessing resources and capabilities vital to the competitiveness of the capital-exporting country,
3. ensuring a stake in the prosperity of developing countries, and
4. protecting or advancing the international competitive position of one industrialised country relative to another,

then the question of whether the export of technology is a ‘good’ or a ‘bad’ thing takes on a completely new meaning. The case presented in this chapter is not that the latter proposition is in any way proven, but that it deserves at least as much attention as the alternative thesis which, for some years now, has been more vigorously presented and actively researched.

12.4 CONCLUSIONS

It is difficult to generalise on the direct or indirect effects of MNEs on the technological and innovatory capacity of both home and host countries. So much depends on the reasons for the ownership and cross-border location of value-added activities of MNEs,
and on the response of indigenous firms to them. This, in turn, will depend upon the institutional environment in which R&D is organised and located, and on the role of government in shaping this environment, and in facilitating the upgrading of its indigenous resources and capabilities.

In the past, countries have adopted a variety of policies towards both inward and outward direct investment according to how they have perceived that such investment might affect national economic objectives. Two main views have been expressed. The first is that FDI speeds up the process of domestic economic development and restructuring. It does so both by providing technology, entrepreneurship, organisational skills and incentive structures at a lower cost than any alternative deployment of resources, and by its competitive stimulus and spillover effects on the rest of the economy. The alternative view is that while in the short run this may, or may not, be the case, in the long run it is only likely to happen if MNEs do not distort (or add to the distortion of) asset or product markets; and also as long as the control exerted over their affiliates’ activities is consistent with the innovatory goals of the host and/or home countries. To a certain extent, the globalisation of markets and the growth of intra-industry trade and investment is helping to bridge these views by directing more attention to the macro-organisational actions of governments in setting the conditions in which MNEs are able efficiently to perform the role required of them.

The perception that because they are faced with market distortions and failures, MNEs and/or their affiliates will not, left to themselves, ensure the best cross-border distribution of innovatory capacity, has dominated the thinking of countries such as South Korea and Japan. In these cases, not only has government policy towards outward direct investment been geared to prompting the domestic innovatory capacity of the home country; it has also deliberately limited inward investment until it is perceived that indigenous technological capability is sufficiently robust for such investment to interact with it in a mutually beneficial way. Germany, Ireland and Singapore have followed a different strategy. Their policies have reflected the belief that inward investment is the quickest (and often the cheapest) way of upgrading local technological capability, and that the opportunity cost of foreign ownership is more than covered by the increases in social productivity it brings about. The debate is by no means resolved: indeed it is being increasingly complicated by the fact that the avenues for creating or obtaining innovatory knowledge are widening both for firms and countries. Joint ventures, strategic alliances, subcontracting arrangements and inter-government cooperation are some of these ways, each of which has its own particular costs and benefits for the participating partners and for the countries involved.

We would make four final points. The first is that, however understandable it may be that countries wish to advance their technological prowess, and however much one might judge the success of inward and outward direct investment in these terms, all countries cannot expect to be technologically competent in all sectors. The principle of comparative dynamic advantage is no less applicable in explaining the international allocation of R&D than it is in explaining the trade in final goods and services (UNCTAD, 2005c). Unless it is prepared to sacrifice economic welfare for other goals, no country – even large industrialised countries – can expect to be entirely self-sufficient in its technological capabilities. So the role of the MNE must be judged in the light of the effect it has not only on the generation of new knowledge-intensive assets, but also on the allocation of these
assets; and this, in turn, on the long-term economic interests of the country concerned. Indeed, it is possible to conceive of an MNE doing its home country a service by relocating some of its R&D elsewhere, whenever this opens the door to more productive R&D – or, for that matter, more productive non-R&D activities – in that country.

The second point is that to be able to utilise efficiently the accumulated technological expertise of foreign MNEs, host governments need to pursue a positive and well-defined technological strategy and the requisite institutions to implement that strategy. Such a strategy should be part of a wider FDI and macro-organisational strategy, and be directed not only to encouraging the upgrading of human skills and innovatory capacity, but also to providing the scientific, communications and entrepreneurial infrastructure that high-technology MNEs regard as the *sine qua non* for their full participation in the countries in which they invest. In the case of developing countries, one of the most cost-effective ways of assimilating and disseminating imported technology is to ensure that there are adequate local design, engineering and organising capabilities. It is these capabilities that so often provide the critical bridge between the technology provided by the MNE, and the local innovatory capabilities, incentive structures and consumer needs.

The third point is the following. This chapter has demonstrated that some countries may have limited power to influence the kind of technology (broadly conceived) they receive from MNEs or the terms of the technology creation or transfer. In such instances, countries may find it beneficial to group together to exchange information *inter alia* about each other’s bargaining and negotiating strategies and/or to formulate common policies towards technology acquisition and/or the creation of technological capacity by MNEs. Chapter 20 will describe some of the multilateral strategies which countries might pursue, and such attempts as have been made by international agencies (for example, the OECD, the UN) to formulate codes of practice or guidelines to both MNEs and governments about the form and terms of technology transfer and/or local technology production, and the kinds of action host governments might take to ensure that such transfers will be in the best interests of their economic and other objectives.

The fourth point is that in today’s globalising economy, any policies by national governments towards technological development and restructuring need to take a holistic and integrated approach to the ways and means by which both outward and inward FDI may help to achieve this goal (Dunning, 2006a); and also to acknowledge that any such benefits arising from MNE activity need to be evaluated in terms of the next best alternative. As today’s newer generation of MNEs are showing, a selective encouragement of outbound asset-augmenting and ‘learning’ FDI, and of inbound asset-exploiting FDI may be entirely consistent with, and indeed may help to promote, an optimum IDP and economic restructuring of both developing and developed countries (Dunning and Narula, 2004; UNCTAD, 2006).
13. Employment and human resource development

13.1 INTRODUCTION

Almost all actions by MNEs or their affiliates are likely to directly or indirectly impinge on the level, quality, growth, stability and motivation of the labour force. Chapter 11 emphasised the fact that, in the modern global economy, the competitiveness of most industrial countries rests on their willingness and ability both to upgrade and to more effectively utilise their income-creating assets. Such assets we identified as physical capital (for example, R&D laboratories, university buildings, machines, equipment) and their supporting infrastructures, and trained human resources, such as scientists, engineers, skilled craftsmen, managers, administrators and sales people. It is a fact that, over the past decades, the advanced industrial countries that have devoted the most attention to upgrading these assets and motivating their citizens to produce more wealth are those which have recorded the fastest rates of economic growth.

Indeed, it is almost a truism that a country’s economic progress must largely rest on the entrepreneurship, ingenuity and dedicated work of its people. New products and new ways of producing goods and services stem from the learning initiatives and intelligence of individuals. Research discoveries emanate from the imagination, inquisitiveness, brains and perseverance of individuals. Work and working practices are organised by individuals. New advertising slogans and marketing techniques are conceived by individuals. The service economy, as its name implies, comprises the services provided by one group of individuals to another. The success of inter-firm alliances rests on the willingness and ability of the people involved to cooperate with each other. Even in our modern age, science, technology and commerce are the servants of people, not vice versa.

This chapter will review some of the scholarly research which has sought to identify and evaluate the role MNEs and their affiliates with respect to:

1. the level, structure and composition of employment, wages and working conditions of individuals;
2. the productivity and upgrading of human skills and capabilities in the context of the human resource strategies of MNEs;
3. the motivation of human beings to create wealth in a socially responsible way; and
4. the role of government and supranational entities in fashioning the institutional environment as it influences factors (1)–(3).

While these topics are interrelated in the sense that a worker’s productivity and satisfaction may be linked to the quality of the work he or she performs, we shall treat the first
more from the perspective of the welfare of the worker, *qua* worker, and the other three primarily from that of the competitiveness of the firms, industries or nations of which the worker is part. Our focus, then, is on the economic and social impact of the MNE on the home and host countries, and not on the managerial challenges faced by the integrated network MNE. Even so, this chapter can hardly be expected to cover more than the tip of the iceberg on employment- and human resource-related issues. Readers who are interested in this topic would be well advised to consult the various reviews and research studies published by the ILO and UNCTAD.

Issues such as an MNE’s use of expatriates in key management positions abroad, and the extent to which local managers are eventually hired to take their place, are also of strategic importance, particularly when considering the high cost of expatriates, and the possible difficulties in the integration of the foreign managers into the overall management structure of the MNE. There is clearly a great need for cultural sensitivity and acuity on the part of the MNE in managing its entire global workforce, and in ensuring that the lessons learned in the global marketplace are understood and transmitted throughout the firm. This is by no means self-evident, as we have discussed in Chapter 8. While strategic human resource management in MNEs is deserving of its own volume, it falls largely outside of the scope of our investigation, and the reader is advised to consult such monographs and collective volumes as McMahan et al. (1999), Adler (2002), Gannon and Newman (2002) and Harzing and van Ruysseveldt (2004) for a synthesis of recent thinking in this area.

MNEs may exert an impact on employment in the countries in which they operate in two main ways: by affecting the levels and standards of employment, and by affecting the conditions of employment. The effects of MNEs on home countries are naturally the most pronounced in countries that are major outward investors, and where the former account for a large proportion of domestic employment. Conversely, the greatest employment impact on host countries is felt in countries where the level of inward FDI is high in relation to the size of the economy. While this chapter deals with the direct consequences of MNE activity on levels of employment and employment standards, Chapter 16 will address the linkage and spillover effects to the rest of the economy from such activity. These indirect effects influence the level and quality of employment in local firms when MNEs choose to source intermediate inputs from local suppliers, when training received within the MNE is transferred to a local firm by the movement of employees, or when local firms improve their production methods and the quality of their end products upon observing how the MNE approaches the host market.

Chapter 10 has highlighted the growing gap in income levels between the developed and developing countries, and the inequality between countries, and between regions within countries, in terms of their ability to both attract and generate FDI. The growing wage differential between skilled and unskilled labour is another feature of the global economy that is closely tied to the activities of multinationals. Globalisation has also brought with it more outsourcing of lower-skilled manufacturing processes, and a new burst of outsourcing in business services. In so doing it has rekindled fears that MNEs are exporting jobs abroad, and contributing to the cross-border wage gap. At the same time, some multinationals have been found to tolerate sweatshop conditions in their foreign supply chains, and public pressure has been used to bring changes in the labour practices in sectors such as sportswear and sports equipment.
To assess the contribution, both positive and negative, made by MNEs on the issues related to employment, this chapter will proceed in the following way. First, we shall examine the predictions of the OLI paradigm as to the likely consequences of MNE activity for employment, wages and human resource management. Second, we shall give some indication of the quantitative importance of MNEs as employers in the global marketplace in line with the approach adopted in other chapters in this book. Third, we shall review some of the empirical evidence relating to our predictions, and the relevance of industry-, country- and firm-specific factors, from the perspectives of both home and host countries. Fourth, in addition to employment levels, we also discuss the available evidence on the standards adopted by MNEs with respect to training, management methods, industrial relations and other labour matters, and the institutional imperatives underpinning them. Finally, we shall review the policy implications of our findings.

13.2 THEORETICAL UNDERPINNINGS

13.2.1 What Is Distinctive About MNEs? A Reprise

What, if any, is the distinctive impact of the activities of MNEs on the use, location and compensation of human resources and capabilities? The answer must lie essentially in the extent and pattern of the O assets possessed by these companies, and how and where these are utilised to generate employment. In this respect, by their innovating strategies, their incentive systems, their product profiles, the nature of their production processes and their flexibility in siting their production units, MNEs may affect the amount and kind of labour they employ, the extent to which they are willing to upgrade the skills and competences of such labour, the conditions of its employment, and its location.

Chapter 11 demonstrated that MNEs account for most of the innovating capacity in the free market economies, and that, increasingly, they are locating part of this capacity outside their home countries. To the extent that these innovating advantages stem, at least in part, from their foreign activities, MNEs, both by their opportunities to scan and recruit from global labour markets, and by their willingness and ability to better motivate and train labour, are likely to play an extremely influential role in human resource development.

Chapter 11 also suggested that, because of the activities in which they engage and the production techniques they employ, MNEs are likely to affect both the amount and composition of the global labour force and its productivity. Since, as Chapter 2 has shown, MNEs tend to engage in capital- or knowledge-intensive and high value-added activity, it might be expected that not only would their impact on the level of employment in the countries in which they operate be quite small, but in cases where they replace uninationals using more labour-intensive techniques, it might be negative. On the other hand, in so far as, by their access to superior resources, capabilities and incentive systems, MNEs may help to lower production costs and/or raise product quality, they may increase demand for certain kinds of labour, while the indirect or spin-off effects on component and raw material suppliers (which might use more labour-intensive production processes) could be quite positive.

The likely consequences of MNE activity for the skill mix and the quality of the labour they employ are equally ambiguous. Where foreign production helps to improve the
competitive position of the investing companies and promotes a more efficient international division of labour, this may well lead to an upgrading of human resources (especially those associated with R&D and administrative activities) in the home country. From a host country’s viewpoint, depending on the nature of the production processes introduced by MNEs, the skill content of labour might be lowered (for example, where its task is essentially reduced to that of a machine minder or a routine service provider) or raised (for example, in the case of the introduction of a sophisticated multipurpose piece of equipment, which may require the services of a skilled operator or that of an R&D facility). In some cases, the design of end products, components of machinery and equipment and of service-related programmes might have to be modified to meet the availability of local resources and customer needs. Some training of the indigenous labour force may be required to accomplish this task.

It is also a feature of MNE activity – particularly in situations of rapid environmental and technological change – that it is likely to be more locationally footloose than uninational activity. Over the past 40 years there have been substantial relocations of all kinds of value-added activities by MNEs. Sometimes the triggering factor has been the actions of host governments (for example, the imposition of tariffs or import quotas). Sometimes it has been a shift in the comparative advantage of countries in the production of mineral and agricultural products. Such shifts might include those brought about by both pro- and anti-market forces. An example of the latter would be actions by international cartels to raise prices or control production.

In manufacturing, too, rising real wages – themselves a consequence of improving levels of economic prosperity – may affect a country’s ability to produce labour-intensive products. Over recent years, there has been a steady resiting of labour-intensive activities by MNEs away from the more advanced industrialising countries such as Singapore, Hong Kong, Taiwan, South Korea and Brazil to those one or two steps behind in the development path, such as Thailand, Malaysia and the Philippines, or even those three or four steps behind, such as Sri Lanka, Pakistan, Bangladesh and Morocco. On the other hand – and again Chapter 11 gave examples of this – advances in computer, communications and design technologies, together with the introduction of flexible manufacturing processes have caused some reverse resiting of previously labour-intensive subcontracting activities in such industries as textiles, clothing and semiconductors from developing to developed countries.

The extent to which the impact of MNEs on employment levels and patterns is different from that of uninational firms is also likely to vary according to the type of FDI in which they are engaged and the organisational strategies they pursue. Market-seeking affiliates, which are part of a multidomestic-orientated parent company, are less likely to impact dramatically on domestic or international labour markets than those which engage in efficiency-seeking or strategic asset-acquiring investment, and whose recruitment, employment and training programmes are part of a globally integrated human resource management strategy. As Chapter 9 has pointed out, with the relaxation of some labour laws and employment regulations (for example, in the EU) and the falling real cost of air transport, labour – even unskilled labour – is becoming an increasingly mobile resource across national boundaries.

When FDI takes place via M&As, the immediate impact on employment levels may be neutral or negative – no new jobs are created, but at least some cuts are typically made to
improve efficiency. However, in some cases, such as those related to the privatisation of former state-owned monopolies, whether in electric power generation and distribution and telecommunications in Latin America, or the large-scale privatisations in Central and Eastern Europe, the immediate effect has been to induce large job losses (UNCTAD, 2000b:182). In the long run, however, the technological, organisational and managerial resources and institutional measures injected by the inward investors may be expected to lead to an improved competitiveness of the acquired firms, and thus a more secure employment base.

Globally integrated MNEs frequently draw their managerial, professional and technical workforce from a worldwide employment pool – sometimes from within and sometimes from outside their organisations. Some MNEs have even been able to create new advantages by recruiting substantial numbers of unskilled or semi-skilled workers in one country and transporting them for employment in another. Examples include Korean, Turkish, Philippine and Chinese workers employed in construction projects in the Middle East and sub-Saharan Africa. In the petroleum industry, there is regular interchange of skilled technicians between the investing companies, for example, in Russia and Brazil, and their affiliates in other developing countries (Sauvant, 2005). In these and similar ways, MNEs are performing an arbitrage function which the international labour market is apparently unable to do. By so doing, they affect both the international division of labour and the conditions of the labour market in individual countries.

An MNE may also affect cross-border employment conditions and wage bargaining. There are two particular aspects here which deserve attention. The first concerns the greater experience of, and information available to, MNEs about employee compensation, working practices and personnel management in different parts of the world. This means that, as and when appropriate, the MNE can draw upon and implement best practices to stimulate employee motivation and productivity in any one of its subsidiaries. As we shall describe later in this chapter, there are many instances in which MNEs have tried to transfer the incentive structures, work methods and personnel-related procedures of their home countries to their foreign subsidiaries. Some, notably those introduced by Japanese affiliates in Europe and the US, and more recently by US affiliates in Japan, have been outstandingly successful. Others, such as some US and European MNEs operating in developing countries, have failed miserably because of an inability to overcome institutional distance or to reconcile different cultural attitudes to work, rewards, authority and management–labour relations.

Second, the management of an MNE is likely to have greater power and flexibility in negotiating work practices, employment conditions and human resource development with labour unions (and sometimes with governments) in the countries in which its affiliates operate, than its uninational counterpart will have. Some MNEs, of course, may choose to delegate part of this advantage to the management of their affiliates. However, even in these instances, the philosophy and institutional mores of the parent company may permeate the local management’s thinking and actions. An outstanding example here is the insistence, by many Japanese MNEs, that only one union should represent the workers in each of their subsidiaries. Yet, even if decisions are not centrally controlled or influenced, the local labour representatives may still be at a negotiating disadvantage, simply because they lack the necessary information about the real economic
strengths (or weaknesses) of the affiliate and the organisation of which it is part. This asymmetry in bargaining capacity between the management and local workforce of the MNE is one which has caused much unease and dissatisfaction among labour unions. We shall take up this issue later in this chapter.

Finally, the interaction between the foreign affiliates of MNEs and host governments on labour-related issues may be different from that involving indigenous firms. Partly this is because of the differences in labour practices already described, which may affect government policies (for example, towards wage increases, industrial training and collective bargaining). Partly, too, the response of MNEs to the introduction of new labour laws, regulations and incentives may be different from that of national firms. Basically, this reflects the greater options open to MNEs, qua MNEs, to site their value-added activities. It applies particularly to firms whose subsidiaries supply, or are intending to supply, regional or global markets, and who are pursuing efficiency-seeking investment strategies. Throughout most of the 1970s, the poor industrial relations environment in the UK led some UK- and foreign-based MNEs to eschew new production facilities in the UK. By contrast, since that time, improvements in industrial relations, such as fewer days lost in strikes and a more consensual approach to labour-related issues, have encouraged more foreign firms to favour the UK for their EU-based operations. Section 13.7 will give further examples of the interaction between extra-market incentives, government policy and multinational human resource management.

13.2.2 A Methodological Note

Attempts to identify the distinctive features of the strategies of MNEs (or their foreign affiliates) towards the management or deployment of human resources have been only partially successful. This has been especially the case where there are no comparable domestic competitors. In such instances, economists have been forced to fall back on an assumed alternative position or counterfactual situation to measure the effects of MNE activity. Essentially, this seeks to estimate the most probable consequence on such variables as employment, employee compensation, working conditions, training, and health and safety regulations in the absence of such activity. Clearly, these effects are likely to depend as much on the particular alternative situation assumed (as there are likely to be more than one) as on the actual labour-related practices of MNEs. However, in the absence of any comparable data on uninational or indigenous firms, some estimate of this kind has to be made in order to separate the impact of the foreignness or multinationality of firms from that resulting from their other characteristics.

The reader may have observed that in Chapter 10 we identified this problem as one which is common to all attempts to measure the distinctive impact of FDI and MNE-related activity. But, because of the priority attached to minimising unemployment and upgrading human resource capabilities by most countries, it is particularly important that the specific and particular role of MNEs in the attainment of these goals be properly understood. The methodology of propensity score matching, which will be further discussed in Section 13.4, is interesting in that it focuses specifically on establishing an appropriate counterfactual. Studies employing this methodology examine what would have happened if the MNE had not made the investment decision it did, by comparing the performance of the investing firm to a non-investing one. However, since the methodology is
based on relative comparisons, it does not always reveal whether the investing firm performed better or worse in absolute terms.537

13.3 EMPLOYMENT IN MNEs

According to a recent report by the IMF (2007), the world’s effective labour force538 has quadrupled in size since 1980, with the increase coming mainly from the integration of China, India and the former communist countries into the global economy. While this increase consists mostly of unskilled labour, the supply of university graduates has also increased by about 50% over the past 25 years.539 The integration of these workers into the global labour force has helped to lower input prices and improve efficiency, leading to higher labour compensation in the advanced economies, particularly in the skilled sectors. However, at the same time, the labour share in national income (GDP) has fallen by about 7 percentage points in advanced industrialised countries since the 1980s, due to a decline in the unskilled sectors. Countries with more-flexible labour markets, such as the US and the UK, have experienced less of a decline in the labour share, in part due to lower starting levels.

Estimating the relative effects of technological change and labour globalisation (through trade, offshoring540 and immigration) on 18 OECD economies in 1982–2002, the report found that the decline in the labour share was caused by both technological change and labour globalisation, with the latter effect being somewhat less pronounced. In the relatively unskilled sectors, the declining labour share was largely attributable to technological change, while in the more-skilled sectors, there was a relatively greater role played by labour globalisation (outsourcing), but this effect was offset by the shift in employment from unskilled to skilled sectors. We shall return to the effects of outsourcing in a subsequent section.541

Let us then turn to some facts about MNEs as employers of labour. Conservative estimates suggest that worldwide employment by, and within, MNEs was around 65 million in 1986. Of this, 43 million (or 66%) was in the home countries of these companies and 22 million (or 34%) in their foreign affiliates.542 Of this latter figure, seven million (or about one-third) was accounted for by affiliates in developing countries (Bailey and Parisotto, 1991). According to UNCTAD (2001, 2006) by 1990, the employment of foreign affiliates had reached 24 million, 46 million by 2000, and 62 million in 2005.543 In 2004, the world’s 100 largest MNEs had a labour force of 14.9 million (up 4% from 2002), one half of whom were employed by foreign affiliates. In the same year, the top 50 MNEs from developing economies had 3.4 million employees, up from 1.5 million just two years earlier, of whom a third were employed by foreign affiliates (UNCTAD, 2004:11, 2006:31).544

Since, in 1986, the world’s labour force numbered around 2,160 million, it can be seen that the share of MNE employment was very small, namely, about 3%. In 2003, the worldwide labour force numbered around 2,790 million (ILO, 2004b) and assuming roughly the same proportions between the employment at home and in foreign affiliates as before, the total share of MNE employment appears to have remained unchanged.545 However, the gap between the few percent of the labour force that are employed by MNEs and the rest is illustrated by the fact that in 2003, no less than 49.7% of the world’s labour force,
or 1,390 million people, lived on less than $2 a day, which is considered to be a borderline for working poverty (ibid.:24).

As Chapter 2 has shown, since the contribution of MNEs to the output of particular sectors and countries varies a great deal, so, it might be expected, would their participation in labour markets. This, indeed, is the case, as is the relative significance of foreign to domestic employment by MNEs from different countries. Since most of the foreign production still takes place in developed countries, most of the employment of MNEs is also concentrated in developed countries. Some estimates of the contribution of MNE affiliates to their host and home countries are set out in Tables 13.1 and 13.2.

Already in the mid-1980s, in at least seven countries, namely, Brazil, Canada, China, France, the Federal Republic of Germany, the UK, and the US, foreign-owned firms employed more than 1 million. The percentage share of total domestic employment in the manufacturing sector (where data are more complete) at that time exceeded 15% in at least 20 countries (for example, Argentina, Austria, Australia, Belgium, Brazil, Cameroon, Canada, Columbia, Fiji, France, Germany, Greece, Ireland, Liberia, Malaysia, Mexico, Taiwan, Singapore, Spain and Zaire) and 10% or more in at least another eight countries.

Table 13.1 sets out some more recent data on the share of foreign affiliate employment in both host country manufacturing and in all employment, as well as the numbers employed in manufacturing. These suggest that in 2001, the share of foreign affiliates in total employment ranged from a low of 0.6% in Japan, due to very low levels of inward investment, to 9.3% in Ireland, and a high of 26.1% in Hungary. For manufacturing employment, the foreign affiliate share ranged from about a sixth in countries such as Finland, Germany and Spain, to a third in France, Sweden and the Czech Republic, and close to a half in Ireland and Hungary. The most recent available figures for the US indicate that the share of foreign affiliates in total US employment in 2004 was 4.5%, while their share of manufacturing employment was 10.9% (Anderson and Zeile, 2006). In China, employment in foreign-invested enterprises accounted for 6.2% of manufacturing employment in 1995 (Sun, 1998).

The data on the contribution of the domestic employment of home-based MNEs to total domestic employment is even more scarce than that on host country employment. In the mid-1980s, domestic employment by home-based MNEs varied from 3.6% in Italy to 10.3% for the US and 15.7% in Sweden. In 2001, domestic employment by US nonbank MNEs was 23.4 million, a figure equal to over a fifth of the US nonbank workforce (Mataloni, 2004). By contrast, the nearly 10 million employees of US MNE affiliates abroad accounted for 7.6% of total employment in the US in 2003. Table 13.2 indicates the ratio of foreign affiliate employment to total home country employment for the major home countries.

Table 13.3 is largely self-explanatory, and shows the importance of the contribution of MNE affiliates to the value added, employee compensation and gross fixed capital formation of the host countries in which they operate. The economic importance of MNEs in the economies of Ireland and Sweden, as well as in the Czech Republic, Hungary and Poland, is particularly noteworthy.

From a recipient country’s standpoint, in some agribusiness, forestry and mineral sectors in the smaller developing countries, MNEs account for the greater part of the local labour force. Most of the larger forestry, banana, tea, coffee, tobacco and pineapple plantations are foreign owned. Also, despite the nationalisation of many petroleum and hard
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Affiliate employment in manufacturing</td>
<td>Share of manufacturing employment</td>
<td>Share of total employment</td>
<td>Affiliate employment in manufacturing</td>
<td>Share of manufacturing employment</td>
<td>Share of total employment</td>
<td>Affiliate employment in manufacturing</td>
<td>Share of manufacturing employment</td>
<td>Share of total employment</td>
</tr>
<tr>
<td>Developed economies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Union</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>37,892</td>
<td>9.7</td>
<td>7.4</td>
<td>68,327</td>
<td>15.9</td>
<td>12.6</td>
<td>73,450</td>
<td>17.2</td>
<td>14.1</td>
</tr>
<tr>
<td>France</td>
<td>715,932</td>
<td>25.1</td>
<td>1,061,739</td>
<td>30.1</td>
<td>1,097,042</td>
<td>30.8</td>
<td>4.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>494,000</td>
<td>7.2</td>
<td>2.2</td>
<td>390,000</td>
<td>6.0</td>
<td>2.1</td>
<td>1,058,000</td>
<td>16.6</td>
<td>5.2</td>
</tr>
<tr>
<td>Ireland</td>
<td>103,864</td>
<td>47.1</td>
<td>122,978</td>
<td>48.1</td>
<td>123,186</td>
<td>49.2</td>
<td>9.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>421,024</td>
<td>8.6</td>
<td>386,064</td>
<td>6.0</td>
<td>386,064</td>
<td>6.2</td>
<td>3.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>168,401</td>
<td>20.1</td>
<td>9.8</td>
<td>156,464</td>
<td>18.3</td>
<td>10.1</td>
<td>180,409</td>
<td>21.0</td>
<td>9.3</td>
</tr>
<tr>
<td>Portugal</td>
<td>89,755</td>
<td>10.1</td>
<td>32,001</td>
<td>9.5</td>
<td>32,001</td>
<td>9.5</td>
<td>7.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>408,086</td>
<td>16.8</td>
<td>408,086</td>
<td>16.8</td>
<td>408,086</td>
<td>16.8</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>132,054</td>
<td>19.9</td>
<td>12.3</td>
<td>207,527</td>
<td>29.1</td>
<td>18.3</td>
<td>232,579</td>
<td>32.7</td>
<td>22.0</td>
</tr>
<tr>
<td>UK</td>
<td>718,400</td>
<td>16.3</td>
<td>386,064</td>
<td>6.0</td>
<td>386,064</td>
<td>6.2</td>
<td>3.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New EU member states</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>313,106</td>
<td>25.3</td>
<td>17.0</td>
<td>372,105</td>
<td>30.3</td>
<td>21.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>288,294</td>
<td>37.4</td>
<td>24.0</td>
<td>361,257</td>
<td>44.5</td>
<td>27.8</td>
<td>346,773</td>
<td>43.6</td>
<td>26.1</td>
</tr>
<tr>
<td>Poland</td>
<td>226,826</td>
<td>20.9</td>
<td>13.8</td>
<td>413,866</td>
<td>24.1</td>
<td>16.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Western Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>37,237</td>
<td>15.0</td>
<td>60,600</td>
<td>21.4</td>
<td>63,052</td>
<td>23.1</td>
<td>10.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North America</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>2,036,500</td>
<td>11.7</td>
<td>4.5</td>
<td>2,118,800</td>
<td>12.2</td>
<td>4.9</td>
<td>1,574,200</td>
<td>10.9</td>
<td>4.5</td>
</tr>
<tr>
<td>Other developed economies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>214,400</td>
<td>22.7</td>
<td>12.3</td>
<td>148,795</td>
<td>0.6</td>
<td>0.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>86,703</td>
<td>0.7</td>
<td>0.4</td>
<td>149,767</td>
<td>0.6</td>
<td>0.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing economies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>54,358</td>
<td>5.6</td>
<td>72,156</td>
<td>6.4</td>
<td>76,647</td>
<td>7.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

mineral foreign affiliates, MNEs continue to be the leading employers in the diamond mines of the Transvaal, the copper mines in New Guinea and Peru, the bauxite mines of Jamaica and the uranium mines of Namibia. In recent years, an increasing proportion of such employment is in the affiliates of MNEs from developing and transition economies; examples include Chinese and Russian investments in mining petroleum and gas ventures in, for example, Angola, the CIS countries, Ecuador, Nigeria and Sudan (UNCTAD, 2006).

At the same time, there are examples of countries such as Vietnam, where despite considerable growth in FDI in the 1990s – originating primarily from East Asia (Japan, Singapore, Taiwan, South Korea, Hong Kong and Malaysia) – the direct employment created by MNEs has been limited due to their advanced (labour-substituting) technology, and their relatively small size (Jenkins, 2006). Furthermore, the indirect effects on employment in the local economy have been neutral, or even negative, since the foreign investors in Vietnam have had low levels of local sourcing, and linkages to local firms have been limited.

In the service sectors, FDI has increased steadily over the past four decades, and services FDI accounted for 62% of total inward FDI stock in 2004 (UNCTAD, 2006:266). These services range from well-established market-seeking services, such as banking, insurance and tourism, to newer fields, such as infrastructure projects involving telecommunications or water supply. However, the greatest change over the past decade, which is

### Table 13.2 Employment in foreign affiliates of home-based MNEs and their share of total home country employment

<table>
<thead>
<tr>
<th>Home country</th>
<th>2002/2003</th>
<th>Share of total employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Affiliate employment abroad</td>
<td></td>
</tr>
<tr>
<td>Developed economies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Union</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>209,700</td>
<td>6.1</td>
</tr>
<tr>
<td>Finland</td>
<td>333,700</td>
<td>16.1</td>
</tr>
<tr>
<td>Germany</td>
<td>4,496,000</td>
<td>14.0</td>
</tr>
<tr>
<td>Italy</td>
<td>642,500</td>
<td>4.1</td>
</tr>
<tr>
<td>Portugal</td>
<td>24,900</td>
<td>0.7</td>
</tr>
<tr>
<td>Sweden</td>
<td>1,122,800</td>
<td>29.3</td>
</tr>
<tr>
<td>New EU member states</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>16,800</td>
<td>0.4</td>
</tr>
<tr>
<td>Other Western Europe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>1,808,300</td>
<td>58.9</td>
</tr>
<tr>
<td>North America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>9,878,900</td>
<td>7.6</td>
</tr>
<tr>
<td>Canada</td>
<td>919,000</td>
<td>7.1</td>
</tr>
<tr>
<td>Other developed economies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>3,407,900</td>
<td>6.4</td>
</tr>
</tbody>
</table>

Source: UNCTAD database.
Table 13.3  Selected indicators of the importance of MNE affiliates in host economies

<table>
<thead>
<tr>
<th>Host country</th>
<th>Value added</th>
<th>Employee compensation</th>
<th>Gross fixed capital formation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed economies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Union</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>9.7</td>
<td>10.8</td>
<td>10.0</td>
</tr>
<tr>
<td>France</td>
<td>30.0</td>
<td>34.6</td>
<td>33.0</td>
</tr>
<tr>
<td>Ireland</td>
<td>76.9</td>
<td>85.9</td>
<td>53.4</td>
</tr>
<tr>
<td>Italy</td>
<td>27.3</td>
<td>15.5</td>
<td>13.5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>23.8</td>
<td>24.4</td>
<td>13.9</td>
</tr>
<tr>
<td>Portugal</td>
<td>27.3</td>
<td>25.6</td>
<td>25.2</td>
</tr>
<tr>
<td>Spain</td>
<td>14.8</td>
<td>21.6</td>
<td>14.5</td>
</tr>
<tr>
<td>Sweden</td>
<td>25.7</td>
<td>20.4</td>
<td>30.7</td>
</tr>
<tr>
<td>UK</td>
<td>37.9</td>
<td>24.8</td>
<td>30.9</td>
</tr>
<tr>
<td>New EU member states</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>38.6</td>
<td>46.8</td>
<td>32.6</td>
</tr>
<tr>
<td>Hungary</td>
<td>51.4</td>
<td>50.2</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>19.5</td>
<td>17.0</td>
<td>22.2</td>
</tr>
<tr>
<td>Other Western Europe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>34.5</td>
<td>20.8</td>
<td>42.1</td>
</tr>
<tr>
<td>Other developed economies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>1.2</td>
<td>0.6</td>
<td>1.1</td>
</tr>
<tr>
<td>Japan</td>
<td>14.7</td>
<td>12.6</td>
<td>9.8</td>
</tr>
</tbody>
</table>

Note: Percentages for manufacturing sectors and all sectors (in italics).

Source: OECD Measuring Globalisation database.
the direct outcome of advances in communication technologies such as the internet, has been the growth in the range and volume of tradable services that are ‘offshored’ by firms from developed countries. Among the offshored services, it is worth distinguishing between regional headquarters, call centres and IT-related business services (UNCTAD, 2004:161). Regional headquarters represent probably the most established type of offshored services, but they are quite different from the other two types, as their motivation and locational options are not primarily driven by labour cost. By contrast, the availability of high-quality but low-cost call centre employees and computer programmers have been the primary locational attraction drawing services investment to cities such as Bangalore, India, and to a growing number of countries such as the Czech Republic, Bulgaria or Malaysia. Somewhat surprisingly, the report by UNCTAD (ibid.:137) concludes that, so far, the impact of service investment on employment generation has been somewhat smaller than that associated with manufacturing investment. However, this may change should FDI in tradable services, rather than in market-seeking services, become more important.

13.4 THE EMPLOYMENT EFFECTS OF MNE ACTIVITY ON HOME COUNTRIES

Comparative and competitive advantage shift constantly in the global economy as firms and countries restructure their value-adding activities. Whether MNE investment abroad reduces or decreases employment in the home country depends on what kind of investment is undertaken, whether the foreign production is complementary to that at home rather than a substitute for it, whether it uses inputs that can be sourced from the home country, and what the home government’s response is to such outbound FDI. On the one hand, MNE investment abroad can result in an increase in the demand for high-level skills and managerial services, and/or the increased export of intermediate goods from the home country. On the other hand, if it simply acts as a substitute for domestic investment and the exports arising from such investment, at least the immediate effect on home country employment would be expected to be negative. However, to the extent that by investing abroad a domestic MNE improves its competitive position in the long term, the initial negative employment effects may eventually be reversed.

The effects of MNEs on levels of employment have been the focus of considerable debate in recent years owing to the increased use of outsourcing in both manufacturing, and such services as call centres and back-office functions (UNCTAD, 2004). Specifically, the concern in the home country is that multinationals are exporting jobs, and while there is nothing new in the relocation of blue-collar activities, it is only relatively recently that white-collar or university-educated employees have come to face a similar situation. It has been further argued that the increase in contractual outsourcing and vertical FDI, which allows for less skill-intensive stages of production to be moved to lower-cost locations, has contributed to an increasing wage gap between skilled and unskilled labour. Thus, in addition to governments being challenged by the imperatives of structural upgrading in the macro economy, outsourcing is resulting in within-industry upgrading in the demand for skills, which is contributing to greater inequality in the international labour market.
As always, analysing the impact of MNE activity eventually depends on one’s assumptions about what would have happened in its place. Had the MNE of one country not invested abroad, would the benefits from the investment simply have been appropriated by a firm of a different nationality? If the MNE decided to move existing operations from its home country to a host country abroad, what would have happened to its global competitiveness had it not moved? Would it have been able to continue production in the original location, or would another domestic firm have been able to take its place? The MNE may well be the instrument by which particular jobs are lost. However, more often than not, it is the change in world technological and trading conditions, and of the underpinning institutions, which causes this job loss – not the MNE per se.

Studies conducted by US and European economists in the late 1960s identified four possible domestic employment consequences of the foreign activities of home-based MNEs. These consequences are no less relevant in the early 21st century:

- **The production or job displacement effect** This effect attempts to assess the extent to which foreign production from the investing country replaces exports and, where that output is imported back into the investing country, the domestic employment required to supply that output.
- **The export stimulation effect** This follows from the possibility that foreign affiliates will buy some of their raw materials, capital equipment, intermediate products and finished goods and services from their parent companies and/or home countries, thus helping to create new employment opportunities.
- **The home office employment effect** This suggests that, as foreign production is increased, the innovating, management and other white-collar activities, which are usually undertaken by the investing company on behalf of the foreign operating units of the MNE, will also increase.
- **The supporting firm employment effect** This is the indirect employment effect of foreign production. It arises from the change in employment in home country firms (for example, accounting, consultancy, banking and engineering firms) which provide supporting services for the affiliates of home-based MNEs. Of course, it is possible that this effect may be negative if the supporting firms follow their customers overseas.

In turn, these four effects will partly depend on the institutional framework of, and the macroeconomic policies pursued by, home and host governments in response to the foreign activities of home-based MNEs. We shall discuss these in more detail in the next chapter when analysing the balance of payments consequences of outward and inward direct investment. However, the kinds of questions which need to be answered are:

- How successful are home governments in pursuing structural adjustment employment policies? Are their incentive structures conducive to this goal? How far will any labour displaced by the export of value-added activities find alternative work in the home country? Clearly the answers to these questions are partly country specific. For example, in the past any adverse effects of Japanese outward investment on domestic employment were mitigated by the fact that many Japanese MNEs have pursued a policy of lifetime employment, and because the Japanese government worked
together with private employers to ensure that, as far as possible, any labour displaced by outward direct investment was productively redeployed. By contrast, countries without positive and effective structural adjustment policies, and which already have a high unemployment ratio, may find any absorption of the released labour a difficult task.

- In the case of a greenfield export-substituting investment, what would have happened to employment and output in the recipient country had not the investment been made? Would other foreign or domestic firms have filled that lacunae, or would the host economy have continued to import the goods and services from the investing country?

- Assuming that some domestic capacity is released by the transfer of value-added activities to a foreign location, to what extent is the investing firm likely to utilise that capacity by, for example, diversifying its product portfolio, upgrading the skill intensity of its employees, innovating new products and so on? Both historical and recent evidence suggests that domestic and foreign investment are as much likely to be complementary to, as substitutable for, each other – particularly in technology-intensive growth sectors. Again, the Japanese – and more recently the so-called ‘dragon’ multinationals from East Asia – have deliberately used outward direct investment, particularly that of an asset-seeking or -augmenting kind, as a means of upgrading their domestic value-added activities and the quality of work and employment conditions (Ozawa, 1996, 2005; Mathews, 2002b; UNCTAD, 2006). Assuming that outward FDI is designed to produce goods or services more cheaply for export back to the investing country (as in the case of low wage cost investment in developing countries by Triad-based MNEs), what is the policy of home country governments towards these imports? Will they be freely permitted – or will import controls of one kind or another be imposed?

- What will be the international repercussions of actions taken by the government of one country to restrict outward investment to protect domestic jobs? Will similar measures be taken by other countries and, if so, what are the likely consequences for jobs in the first country?

- Assuming the wage bill of the host country is increased as a result of the new foreign investment, what percentage of that increase might be spent on goods and services imported from the investing country?

It is answers to questions like these that will determine the direction and value of the four employment effects identified and, therefore, the consequences of outward direct investment for the domestic labour force. At the same time, while it may be difficult to generalise on these effects, it is possible to identify the situations in which, relative to some assumed alternative use of resources, MNE activity is likely to protect, generate, restructure or diminish domestic employment. Consider, for example, the most favourable scenario from the viewpoint of the home country. This is likely to include the following conditions:

- The investing company wishes to release domestic capacity to expand or upgrade its activities in the domestic market.
- There is full (or nearly full) employment; and domestic institutions are geared to implement an effective structural adjustment programme.
The outward investment is likely to advance the competitiveness of the home firm or economy, for example, by providing access to cheaper or better-quality intermediate products, gaining a window to the latest technological developments, helping to promote a more effective regional or global product and/or marketing strategy of the investing firms, and by generating additional exports (for example, of intermediate products or finished goods) from the home country.

The home government does not restrict the import of goods and services by the investing company from its foreign affiliates.

In the absence of receiving the outward investment, the host country would have reduced its purchases from the home country in any event; for example, by imposing import restrictions of one kind or another.

The advantages of the home country as an export base are declining.

Most investments in trade and distribution, in resource exploitation, in manufacturing sectors in which the home country’s competitive advantage is declining, as well as those designed to protect, sustain or advance a global competitive position, fall into this category.

By contrast, where the pressures of oligopolistic competition cause firms to engage in or increase their foreign output of products in which the home country has a comparative locational advantage; where a merger or acquisition results in a restructuring of a firm’s global activities (including R&D) in favour of a host country or countries; where there is high domestic unemployment; or where there are inadequate provisions or incentives for structural adjustment and retraining, then – at least in the short run – both the level and skill content of domestic employment could be adversely affected by outward investment. At the same time, some of these effects may be as much the outcome of structural market distortions, inadequate institutions, or inappropriate macroeconomic policies by home or host governments as any misallocation of resources on the part of MNEs.

13.4.1 Earlier Empirical Evidence on Home Country Employment Effects

The most comprehensive studies on the employment implications of outbound direct investment were carried out in the US beginning in the 1970s. They yielded very different results according to the counterfactual positions assumed. In a survey of 74 manufacturing MNEs carried out by the Emergency Committee for American Trade (ECAT, 1972), the authors estimated that US outward direct investment in the 1960s led to an increase of 550,000 American jobs, mainly, it seemed, because of its beneficial effects on exports and home office activity in the investing companies. A similar conclusion was reached by Stobaugh and Hayes (1976). Based on case study data, and taking (in their opinion) the most plausible counterfactual situation, the researchers put the net (domestic) employment gain of US MNE activity at 600,000 (including 100,000 for support firm employment).

However, about the same time, a contrasting view was expressed by Stanley Ruttenberg (1971) who, in an investigation for the AFL-CIO, calculated that US FDI in the 1960s had cost the US economy 500,000 jobs. But, not only did Ruttenberg assume a counterfactual situation of no alternative domestic investment, he also ignored both the home office and supporting firm employment effects. Most early academic studies (US Tariff Commission, 1970; Hawkins, 1972; Frank and Freeman, 1978; Magee, 1979) emphasised the differential
employment consequences of outward direct investment according to the ability of other firms to supply the market, which is (or might have been) serviced by US firms. Again, the estimates of these scholars ranged from a net job loss of over 1 million to a net job gain of 629,000.

With all these estimates in mind together with those of his own study, which was based on US Department of Commerce data for 1966 and 1970, Hawkins concluded that, apart from the job displacement effects, US outward investment created between 469,000 and 534,000 extra US jobs. According to the assumed counterfactual position, the job displacement effects varied from 190,000 to 1.2 million. Thus, the net employment effect ranged from +279,000 to –666,000.

In a later study – but for the same time period – Hawkins, in making a comparison between the employment effects of foreign production and those of US exports, sales by non-US producers and imports from third countries (both to foreign and US markets), concluded that foreign production led to a gain of about 260,000 US jobs (Hawkins, 1976). However, he also found that the employment effects of US outward investment were likely to be highly industry specific. While the main gains were recorded by the drug, cosmetic, soap, office machinery, electrical equipment and other manufacturing firms, the industries suffering the largest loss of jobs were industrial and other chemicals, lumber, wood and furniture, and textile and apparel. Finally, the industrial structure of the gains and losses revealed that the main job beneficiaries were more highly paid, more-skilled workers, while the main losers were the lower-paid and less-skilled workers. Hawkins concluded that because of this, not only should MNEs be required to give as much advance warning as possible about their foreign investment intentions, but that governments should offer more, and more effective, adjustment assistance to displaced workers.

The ‘neutral’ to ‘marginally favourable’ employment effects of US foreign investment were confirmed by some later studies which have compared the domestic job performance of US MNEs with those of uninational firms. For example, Kujawa (1980) found that in the 1973–78 period, US MNEs expanded their employment by an average of 4.8% per annum, while in the latter employment fell by 2.6% per annum. Over a slightly longer period, namely, 1970–78, the export growth rates of US MNEs were found to be nearly 50% above the average for all manufacturing industry (Enderwick, 1985). Similar conclusions were reached in a study of 118 large UK MNEs by Stopford (1979), who discovered that in the early 1970s, except in the auto industry, these firms had either increased their domestic employment by more, or reduced it by less, than uninational UK firms. Later research into the effects of foreign investment by 22 of the largest UK MNEs on the British economy concluded that while, in the short run, such investment probably led to a fall in UK exports, in the long run, FDI and domestic employment were likely to be complementary (Shepherd et al., 1985).

A different kind of analysis, which will be discussed in more detail in Chapter 14, reveals that US export sales (and, by implication, domestic employment) tend to be positively related to the sales of US foreign affiliates (and, by implication, foreign employment). However, Kravis and Lipsey (1988) concluded that, given the size of its parent operations in the US, a firm that produces abroad tends to have fewer employees in the US and pays slightly higher wages to them. The authors suggested that this was because foreign production frequently displaces the more labour-intensive activities in the home country. One exception to this apparent negative effect (which was found to be most
pronounced in the labour-intensive sectors) was the case of minority-owned manufacturing affiliates. Often, this kind of investment appeared to lead to strong positive effects on the exports of the parent company.\(^553\)

The US and UK findings are broadly corroborated by European and Japanese studies. Van den Bulcke and Halsberghe (1979) concluded that in the 1970s, Belgian outward direct investment had a positive effect on employment in Belgium, in spite of some loss of jobs arising from the production displacement effect. In Sweden, a detailed examination of two large MNEs concluded that while, in the short run, their foreign activities had replaced products which might otherwise have been domestically made and exported, in the long term, the global competitive position of the investing firms had been advanced and, with it, the employment security of the domestic labour force (Jordan and Vahlne, 1981). In a review of German firms abroad, Bailey (1979) observed that, since a substantial amount of their FDI occurred by way of acquisition or merger, or was specifically designed to overcome trade barriers, it was unlikely to have caused an adverse effect on home employment.

In Japan, a study by Koshiro (1982) found that the reaction of Japanese producers to the switch of production of 875,000 colour television sets from Japan to the US in the 1977–80 period under the orderly marketing agreement was to ‘absorb the shock without direct personnel reductions’. They did so by ‘boosting production and exports of newly innovated high value added products, increased exports of parts and components and switching their (displaced) export markets to other areas’ (p. 35). The author concluded that, while the relocation of production by Japanese MNEs had probably led to some loss of jobs, this was more than outweighed by an increase in the exports of parts, components and capital goods, and extra expenditure by US workers on Japanese imports. Koshiro also found that, as a result of (or parallel with) Japanese investment in the US, the quality of employment in Japan had been upgraded.

13.4.2 Recent Empirical Evidence on Home Country Employment Effects

It was the rapid growth of foreign production and foreign employment from the 1950s to the 1970s that prompted fears about the exporting of US jobs abroad. However, employment in foreign affiliates of US firms outside of banking peaked in 1977, and did not regain its previous levels until 1995. Using aggregate data from the BEA, Lipsey (2002a) demonstrated that the gross product of US majority-owned affiliates as a percentage of the total gross product of their parent companies remained stable between 1977 and 1997 (at 24.7 and 24.8%, respectively), indicating no substantial shift to outside the US in terms of production.

Employment data tell a very similar story. Employment in US affiliates abroad as a percentage of the global employment in nonbank MNEs was 27.6% in 1977 and 28.8% in 1997. Relative to total US employment, that of US affiliates has fluctuated a little more, from a low of 5.2% in 1957 to a high of 8.0% in 1977 and back to 6.2% in 1997 (ibid.). By 2003, the share had risen back to 7.6% (see Table 13.2). Since the petroleum and manufacturing sectors account for a disproportionate share of international production, the share of foreign affiliates in employment is also higher in these sectors. But even here it is true that the level of manufacturing employment in foreign affiliates as a percentage of total manufacturing employment in the US has changed little from 26% in 1977 to 26.9% in 1997 (ibid.).
While these data indicate little in the way of a shift from domestic to foreign employment by US MNEs, there has been an increase in the share of US domestic employment accounted for by foreign-owned MNE affiliates (Mataloni, 2004). As indicated earlier, although some of this change could be due to a reduction in domestic employment by US parents, it is more likely to be influenced by M&A activity, reflecting a change in ownership, rather than a change in the attractiveness of the US as a production location. It is also the case that data from just two years later (1999) show that the affiliate employment as a share of total US employment had jumped to 35%, with a large part of the increase accounted for by employment in affiliates in developing countries (Harrison et al., 2007).

Using firm-level data drawn from the BEA benchmark surveys from 1982 to 1999, Desai et al. (2005b) found that US MNEs that expanded their activities abroad, also tended to increase their activities domestically. Since foreign and domestic economic activity may be at least partly determined by the same factors, the authors devised an instrument that relates to investment abroad, but has no connection to domestic investment. To create this instrument, the authors used the differences in GDP growth rates in the firm-specific geographic distribution of foreign investment to predict changes in foreign investment. They found that outward FDI was complementary to domestic investment, and that foreign employee compensation, sales, assets and number of employees were also positively associated with their domestic counterparts.

By contrast, using the same data from the BEA benchmark surveys, Harrison et al. (Harrison and McMillan, 2006; Harrison et al., 2007) discovered that whether one found a substitutionary or complementary relationship depended on whether the affiliates were located in low- or high-income countries. For affiliates in high-income countries, the relationship between affiliate employment and home country employment was generally complementary. However, for affiliates in low-income countries, the relationship was likely to be substitutionary, although the overall negative effect on domestic employment was not very large.554 In contrast to the previous study, Harrison et al. examined not just the within-firm effects, that is, whether within one MNE jobs at home are displaced due to jobs created in the foreign affiliates, but also employment shifts across firms within industrial sectors.555

Using a sample of 1,272 European MNE parents and their affiliates in the EU-15 and in Central and Eastern Europe in the 1994–98 period, Konings and Murphy (2001, 2006) unearthed some evidence of a substitution relationship between parent and affiliate employment. However, for manufacturing affiliates, this effect was only apparent for affiliates in the EU-15, while for other affiliates, there was a substitution effect only between parents and affiliates in wholesale trade and construction in Central and Eastern Europe.

In addition to examining the extent to which employment abroad has substituted for employment at home, it is also helpful to explore whether the labour intensity between home and host operations has changed, and particularly the extent to which lower-skill activities have been relocated.

There have been relatively few studies that have directly related the foreign production of MNEs to changes in the levels of employment or the skill composition of home country firms. An interesting attempt to assess the counterfactual scenario related to the home country employment effects of outward FDI was made by van den Berghe and van Tulder (2007), who used firm-level data on the Core 200 firms drawn from the Fortune
500 list to examine the changes in their share of foreign employment and production over the 1990–99 period. They defined three groups of firms, that is, domestic firms, intermediate MNEs and established MNEs, and examined the relationship between the employment effects of international production with respect to the scale and geographical pattern of internationalisation (regional and extra-regional expansion), and the level of vertical integration of the firm. They found that for all firms, domestic employment levels declined over the period, while foreign employment levels showed a mixed pattern. The latter results differed greatly between the three groups, and between firms pursuing different patterns of internationalisation.556

In the US, a study by Brainard and Riker (1997) found that while, overall, employment in the foreign affiliates of US multinationals has a very modest substituting effect for the employment of parent companies, there was some substitution among workers in affiliates located in different developing countries. In other words, while investment abroad is generally complementary to that undertaken in the home country of the MNE, changes in the configuration of global activities may result in shifts in employment from one foreign affiliate to another. In terms of the wages paid, some evidence discussed later in this chapter (Section 13.5) indicates a mostly positive correlation between outward foreign investment and home country wage levels. This effect is likely to reflect a combination of the loss of some lower-skilled jobs, particularly to developing countries, together with an increase in the demand for managerial services performed in the home country to support the foreign investment.

Using a methodology similar to the previous study, Braconier and Ekholm (2000), using firm-level data from six surveys on Swedish MNEs in 1970–94, found some evidence of a substitutionary relationship between employment in Sweden and other high-income locations, but no evidence of substitution between the home country and low-income locations.

Analysing the firm-level disaggregated data collected by the BEA in a benchmark survey in 1989, Lipsey (2002a) found that higher levels of affiliate production by US MNEs in developing countries were associated with lower levels of parent employment. While he discovered that the allocation of more labour-intensive segments of production from the US to developing countries was likely to reduce the labour intensity of home production, there was only weak evidence for a wage or skill effect. Moreover, where this was the case, it was primarily because the foreign activities of MNEs in general were associated with higher wages at home.

Comparing US and Swedish multinationals, and using the 1989 BEA data and the Swedish data for 1970–94, Blomström et al. (1997) also found that the investment of US multinationals abroad, particularly in developing countries, affected parent production by decreasing labour intensity at home. In particular, they discovered that the production of Swedish affiliates in other high-income countries was associated with more employment – and particularly lower-skilled employment – in the parent companies. However, they also discovered that the small amount of affiliate production in developing countries was associated with more higher-skilled employment at home. The authors explain this by observing that Swedish multinationals produce relatively less in developing countries, and where they do, their output is more likely to be intended for sale in the host country rather than manufactured for export. These differences also reflect the concentration of outbound FDI from Sweden and the US in different sectors, with US FDI
being more prevalent in sectors where foreign production is most likely to displace domestic production.

Similar to the Swedish results, using firm-level data from MITI for 1986, 1989 and 1992, Lipsey et al. (2000) found that there was a complementary relationship between Japanese MNEs production abroad and their employment at home. In Italy, using regional-level data on Italian manufacturing firms in 1985–95, Mariotti et al. (2003) examined whether production abroad increased or decreased the labour intensity of home country production. They found that outward FDI in lower-income countries reduced the labour intensity of home country production, particularly by smaller firms, while the relationship was a complementary one in respect of investment in high-income countries.

Finally, we would mention two recent studies that employ the propensity scoring method discussed in Section 13.2.2: the first on Italy and France by Barba Navaretti et al. (2007) and the second on South Korea by Debaere et al. (2006). The former study builds on the earlier work of the authors (Barba Navaretti and Castellani, 2004), which looked at the effects of engaging in foreign investment on productivity, output growth and employment in the home country, without considering heterogeneity among the destination countries. Their new model looks at the choice of a firm which has not previously invested abroad to continue to stay at home, to invest in a low-income country, or to invest in an industrialised country, and compares the outcomes for an investing firm with a non-investing firm. Using a panel of 269 manufacturing firms in Italy and 171 in France from 1993 to 2000, they found that in the case of investment directed to low-income countries, for Italy the results indicate positive effects, both in terms of productivity and the growth in output and employment at home. For the French firms, there is a positive effect on the growth of output and employment, but no effect on productivity. Investments in industrialised economies had similar effects on both countries, with increases in employment and output, and higher long-term productivity at home.

Using a similar model and a sample of up to 452 manufacturing firms listed on the Korean stock exchange between 1980 and 1995, Debaere et al. (2006) found that investment in low-income countries (mainly China), either as an initial foray into foreign investment, or as a shift from previous investments in more developed countries, decreased the employment growth of the MNE at home. By contrast, investments directed at high-income countries (mainly the US), had no effect on employment growth at home.

13.4.3 The Effects of Outsourcing

Increased inequality in wages between high- and lower-skilled workers has manifested itself in several industrialised countries, such as the US, the UK, Australia and New Zealand, since the 1970s. In continental Europe, the relative wage decline for lower-skilled employees has been tempered by different labour market policies and institutions, such as collective bargaining agreements and the active participation of workers in managerial decision making, but there has been increased unemployment, particularly for the unskilled (Shelburne, 2004). A popular explanation for the wage gap has been the introduction of new technologies that favour the more-skilled workers – so-called, ‘skill-biased’ technological change. However, the emergence of this effect at a time when trade and FDI have grown particularly rapidly, has also invited questions about the degree to which the two factors are linked.557
Trade and foreign investment can induce changes in demand patterns, and facilitate technological change and the adoption of new institutions, such as legislation regarding minimum wages or unionisation. Since FDI allows intermediate goods to be traded within the firm that otherwise might not be tradable, it expands the range and volume of goods that can be traded between countries. However, as we have demonstrated in Chapter 9, the extent to which MNEs coordinate their network of value-added activities through ownership or contractual means has changed considerably over the past two decades. At the same time, the practice of outsourcing the production of intermediate goods and services on an arm’s-length basis has increased dramatically (UNCTAD, 2004).

In manufacturing as well as in services, globalisation is fostering the separation of the higher- from the lower-skilled activities. The existence of considerable differences in wage levels, particularly in the lower-skill-intensive sectors, results in reduced demand for the lower-skilled activities in the home country of the MNE, and a shift to contractual outsourcing or foreign investment to other countries. However, in this instance, increased productivity in the home country would not be due to new technology demanding higher skills, but rather to the elimination of the lower-skilled activities from the calculation. Furthermore, Shelburne (2004) argues that the changes in the skill mix taking place in the home country may equally occur in the host economy as a result of inward direct investment, as well as that of contractual outsourcing. If firms in developing economies become producers for developed country outsourcing, the technology employed in the production of such goods and services is likely to be similar to that employed in the developed home countries before outsourcing took place. Such technology would require relatively higher skills in the developing economy, and would therefore be likely to increase the wage gap between the skilled and unskilled employees in that economy. Indeed, this is what was found in Mexico by Feenstra and Hanson (1997).

In the US, Feenstra and Hanson (1996) used data on manufacturing imports and input purchases between 1972 and 1990 to estimate the level of outsourcing by industry, and to assess its impact on the demand for skilled labour. They found that increased outsourcing had contributed substantially to the increase in the relative demand for non-production labour in the US. In other words, a higher level of outsourcing by US MNEs was associated with increased employment of skilled labour. It should be noted, however, that the measure of outsourcing used by the authors was a broad one, and included two kinds of intermediate inputs, namely parts and components and contract work performed by others. The second category consisted of goods made entirely by others and sold by the MNE under its own name, as well as the use of contract work for foreign assembly. There was, however, no distinction made between components that were sourced from own affiliates and those purchased from independent suppliers.

As we have already seen in the previous subsection, the level of aggregation in the data has an impact on the likelihood of finding a complementary or a substitutionary relationship. At the level of the firm, the test of the complementarity between foreign and domestic activities is quite strict. However, to the extent that a person losing a job in one firm is likely to find another one created within the same sector, it might be easier to find a complementary relationship at a higher level of aggregation.

This is demonstrated in a recent study by Amiti and Wei (2005b) for the 1992–2000 period, which showed that, if the US manufacturing economy was decomposed into 450
sectors, growth in outsourcing was associated with a small negative effect on employment growth at the sectoral level. However, if the US economy was decomposed into 96 sectors, there was no correlation between domestic employment growth and the growth of outsourcing. In a subsequent study on the UK economy from 1995 to 2001 (Amiti and Wei, 2005a), including 69 manufacturing and nine service sectors, the authors did not find a negative effect on employment from service outsourcing at the sectoral level, although the effect on the service sectors was negative in some specifications. Overall, their results suggested that the jobs displaced by service outsourcing were likely to be offset by new ones created in the same sector.

Indeed it is entirely possible, as the authors suggest, that the net effect from outsourcing for the economy as a whole may well be neutral. More new jobs are created, particularly in those firms investing in affiliates in other developed countries, while jobs are likely to be lost within those firms and in those industries where investments are made in low-income countries. Overall, the picture is one of the restructuring of employment across sectors, rather than large shifts in aggregate employment. This is also the conclusion reached by Mankiw and Swagel (2006), following a review of the empirical evidence to date. They found that, in spite of the political sensitivity of the issue of outsourcing in the US, there was little evidence to suggest that outsourcing by US MNEs is leading to substantial job losses at home; indeed, if anything, the evidence seems to point to the contrary.

Nonetheless, we would concur with Harrison et al. (2007), who emphasise that although the aggregate effect on employment may be neutral or even beneficial, there are likely to be considerable job losses in some sectors, and the economic and social costs of adjustment should not be ignored when evaluating the overall impact on the home country. This is not to suggest that the ability of MNEs to locate their activities where they are carried out in the most efficient manner should be curtailed, but that in allowing or encouraging such relocation to take place, governments must acknowledge and accept the costs that arise from facilitating the economic restructuring in the domestic economy.

Finally, we would simply note that any outsourcing of the labour-intensive segments of production of goods and services from a developed to a developing country is likely to increase the inequality of the wage distribution in both the originating country, as well as that of the host country producing the goods or services. This pattern of growing inequality as a result of increasing trade and FDI is similar to what one would observe as a result of skill-biased technological change, but it is notable that the same pattern would be observed even with a modest degree of technological change in a globalising economy.

### 13.4.4 Conclusions

Whatever the uncertainties or approximations attached to the results just described, the balance of evidence seems to suggest that the overall consequences of outward MNE activity on the level of employment in the home country are likely to be marginally positive. At an economy-wide level, this requires aggregating the effects of different kinds of FDI, some of which is job creating in the home country and some of which is job displacing. Moreover, there is evidence from both Swedish and US research to suggest that outbound internationalisation is likely to lead to a change in the skill mix within the investing industry. The jobs lost in the source country tend to be production related, while
those gained are primarily of a skilled, professional and managerial kind. At the same time, the kinds of job losses experienced by MNEs are rarely very different from those experienced by non-multinationals. Fundamentally, each arises from the declining competitiveness of the exporting firms in international markets, and/or an overvalued exchange rate.

Of course, much of the interpretation of the results depends on the type of foreign investment being considered, and on what the counterfactual situation is assumed to be. Depending on whether the investment abroad is a defensive response to protect existing market share, or a proactive response to tap into new markets, or if it is simply intended to improve efficiency throughout the MNE network, it is likely to have a different impact on the home country. Inevitably, any aggregate data will mask considerable variation across firms in their motivations, and the employment effects of affiliate production.

Here, in so far as the case for a restriction of direct capital exports has any merit at all, it is that the resources and capabilities invested overseas would have been better allocated to improving domestic competitiveness. Porter (1990) cites the case of the US-based semiconductor companies who responded to their loss of markets to Japanese competitors by going offshore to produce the same products. By contrast, when faced with the same problem, Japanese producers chose to upgrade their domestic technological capacities. Porter argues that US firms would have achieved greater long-term success had they adopted the latter strategy. At the same time, there is no denying the imperative for some firms to become regional or global producers. Assuming that they are successful, their foreign activities are likely to improve the security of jobs in the home country, especially in supervisory and white-collar occupations.

MNEs act as a vehicle for facilitating the process of shifting competitive advantages of firms and the comparative advantage of countries. National governments have an important role to play in coordinating the movement from ‘sunset’ to ‘sunrise’ industries in their own countries. At the same time, it is clear that relatively wealthy and institutionally sophisticated countries are better placed to handle such transition. Take, for instance, the final phasing out of the multi-fibre agreement in 2005. Thanks to the safeguards negotiated by the EU, the flood of textile imports from China was halted by the imposition of temporary quotas. Of course, such quotas only offer a short reprieve for the affected industries, and in the long run, the competitive advantage of European producers will have to shift towards design and coordination, and away from manufacturing in the price-sensitive segments of the industry. However, the ability of the EU to ensure that such a reprieve is granted, is a privilege arguably enjoyed by the members of the Triad, and not by developing countries that have often been encouraged to liberalise their markets and to absorb the consequences almost overnight.

13.5 THE EMPLOYMENT EFFECTS OF MNE ACTIVITY ON HOST COUNTRIES

Much of what has been written about evaluating the domestic employment effects of out-bound MNE activity also applies to assessing the employment consequences of inward investment on the recipient country. Once again, it is necessary, first, to estimate the direct and indirect employment associated with the operation of the foreign affiliates, and
second, to identify the next best alternative to such investment, and to estimate the employment associated with this alternative. The difference between the two is the employment effect of inward investment.

For example, in the case of a takeover of an existing firm, the immediate effects on employment levels are likely to be negligible. In the longer period, however, the restructuring of the operations and rationalisation of production within an MNE network may lead to job losses further down the line. The direct effects related to levels of employment are the result of a greenfield investment that is either wholly owned or a joint venture. Since a new enterprise is created where none had existed before, the resulting new jobs are easy to document. However, whether domestic firms could have, or would have, engaged in a similar investment had the MNE not entered the market is a much more difficult question to answer.

The indirect effects on levels of employment arise when the new venture sources intermediate inputs locally, and thus increases demand in other sectors of the host economy. Such effects are small in the case of an MNE that relies heavily on the import of intermediate goods from its home country or from another efficiency-seeking production base in a third country. Conversely the consequences will be more pronounced for firms that are open to sourcing more inputs locally by cooperating in long-term agreements with local suppliers.

Depending on the extent of the local innovating and production capacity, the policies of host governments, the kind of inward direct investment (whether it is market seeking, efficiency seeking or asset acquiring), the form of the investment (whether it is a greenfield venture or the acquisition of an existing firm), and the age, experience and the kinds of strategies of the MNEs themselves, the domestic employment effects may vary from being strongly positive to strongly negative. What, then, is the evidence on this score?

First, for reasons documented in Chapter 2, it is likely that the employment impact of inward direct investment on host countries will generally be greater than that of outward investment on home countries. In view of this, it is surprising that remarkably few studies have used the alternative position approach to assess the job consequences of MNE activity on host countries. In most resource-based sectors, the question is not so much whether MNEs have or have not created jobs, but how many and what kinds of jobs have they created? Exceptions are in some agribusiness sectors where the displacement of small-scale peasant farming by large-scale capital-intensive farming techniques has led to some reduction in the agricultural labour force. In manufacturing industries, spurred on by import barriers and/or tax incentives, foreign-owned firms have often led the way in creating new jobs.

In developing countries, in particular, both import-substituting and export-orientated value-added activities have been founded by foreign affiliates, simply because the local firms did not have the necessary O-specific advantages. In some cases, of course, these assets have been obtained by other routes. In South Korea, for example, in the 1970s and 1980s foreign-owned firms have played only a limited role in domestic economic development as, following the strategy of its Japanese counterpart, the Korean government encouraged the import of technological and managerial skills through licensing arrangements, while promoting an extensive programme of indigenous R&D, education and training. In the early 2000s, FDI is playing a more important role in both countries, particularly in the technology-intensive sectors.
In the service sectors, too, foreign-owned banks, insurance companies, business and engineering consultancies, trading houses, hotels and construction have often helped create or upgrade the quality of local employment. This reflects the fact that either these firms serve more sophisticated and demanding groups of customers than do their indigenous competitors, or they have opened up new market opportunities for both themselves and indigenous firms.

Closely related to the employment effects of MNE investment is the issue of wages, and whether these exceed or fall below the wages paid by indigenous firms in the host economy. The evidence assembled over the last four decades suggests that on the whole, MNEs and their affiliates pay higher wages than domestic firms, but such findings deserve careful qualification. As we have indicated several times, an assessment of the impact of inbound FDI has to consider the type and range of products supplied by the investing MNEs and their motive for foreign investment, as well as controlling for both country- and industry-specific characteristics. As we discussed in Chapter 2, MNEs are disproportionately prevalent in value-added activities that are knowledge and/or advertising intensive, and it is therefore not surprising that MNE affiliates in those industries pay higher wages than their indigenous competitors. However, even studies that have controlled for the industry of the MNE and its choice of inputs have found that MNEs tend to pay higher wages than domestic firms in the same industry. We review this evidence in the following subsection.

There are several explanations for the MNE wage premium. One is that the affiliates of MNEs tend to be larger than the domestic firms in the host country, and the kinds of skills demanded by the former are more advanced than those needed by domestic firms. Related to this is a second argument, which suggests that in order to attract suitably qualified local labour, which, particularly in developing countries, may be in short supply, MNE affiliates need to pay attractive wages in order to recruit and retain the kinds of employees they need. However, in essence, the O advantages that the MNEs possess over indigenous firms are reflected in the wages they pay. Apart from differences in the distribution of their activities between (relatively high- and low-) wage sectors, the higher employee compensation paid by MNEs and their affiliates predominantly reflects their superior labour productivities and capital intensities as compared with their uninational or local counterparts. In some cases, these higher levels of productivity reflect a higher capital/labour ratio and/or a larger proportion of high-wage employees. There has also been some suggestion that MNE affiliates are compelled to pay above-average wages to overcome their foreignness or adverse perceptions by local employees, but this is understandably difficult to demonstrate empirically.

13.5.1 Earlier Empirical Evidence on Host Country Effects on Employment and Wages

In their study of the likely employment impact of some 19 foreign firms investing in the chemicals, engineering and auto sectors of Spain, Portugal and Greece, Buckley and Artisien (1987) found that, in all instances, except where pan-European rationalisation had taken place, inward investment had resulted in positive employment gains. The authors concluded that, in most sectors, the extent of output displacement by indigenous firms was small, mainly because there were so few indigenous competitors. The indirect effects on employment were judged to be variable and strongly industry specific: ‘In the case of
greenfield investment they tended to be highest in the period of construction of the plant where a ratio of one external job for each internal job was observed' (ibid.:125).563

At the same time, the authors found that the 19 investing firms had helped to upgrade indigenous skill levels through the injection of new technology and the provision of training programmes. In each of the affiliates, the participation of local management 'was very close to 100%' (p. 125). In Germany, Bailey (1979) suggested that the impact of MNEs on job creation was largely dependent on the competitiveness and market structure of the industry in which the investment was made prior to the entry of the foreign firms. In particular, he contrasted the situation in the chemicals industry where, in the absence of inward investment, German producers would, in his words, 'probably have been capable, sooner or later, of stepping into the market', with that in the computer industry where, without the investment of IBM and other US producers, the products supplied by them would have had to have been imported.

Most of the early studies of the consequences of foreign MNE activity in the US on domestic employment were directed at assessing whether new jobs have been created or simply transferred into foreign ownership. Glickman and Woodward (1989), for example, estimated that although the net employment of foreign-owned firms in the US increased by 548,000 between 1982 and 1986, there was a net loss of jobs actually created by foreign investors of 56,000. On the other hand, Little (1986), while accepting that foreign-owned employment fell in the recession years of the 1980s, argued that since domestic firms cut back their labour by a proportionately greater amount, the net employment effect of inbound investment was positive. Neither of these studies, however, made any real attempt to assess the employment consequences of the next best alternative to inbound foreign investment.

A rather different approach is to compare the growth of employment of foreign affiliates with that of indigenous firms. Unfortunately, this procedure is also fraught with difficulties, as demonstrated by Ray (1990) in his examination of the effects of inward investment on the growth of Canadian employment between 1978 and 1986. Ray found that when the crude rates of growth were examined, foreign firms grew at a slower rate than Canadian firms in eight of nine industrial sectors. Indeed, in aggregate, their crude growth rate was −1.1% compared with the equivalent growth rate for Canadian firms of +18.4%. However, when these data were recalculated by region, industry and size of Canadian and foreign firms, very different results were obtained. In short, normalising for inter-firm structural differences, the employment performance of foreign-owned firms was found to be broadly comparable to that of domestic-owned firms.

Many problems arise in any attempt to make accurate comparisons of employee compensation between different groups of firms. Ideally, one would wish to compare the total real remuneration (including fringe benefits) made to workers performing the same tasks in an identical working environment. However, difficulties occur both in evaluating the comparability of jobs in particular occupations and in calculating the value of non-monetary benefits received in addition to, or as a substitute for, wages. When payments to workers in different countries are considered, a further problem arises in converting them into a common unit of measurement. Although (nominal) exchange rates are often used for this purpose, such rates may not always accurately reflect the real value of money in different countries; nor might they fully take into account variations in working conditions or consumption patterns.
As might be expected, differences in employee compensation paid by foreign and indigenous firms in the 1970s and 1980s varied both between countries and sectors, according inter alia to the relative O advantages and the skill composition of the two groups of firms, and to the market structure of the industries in question. In these years, there was some suggestion that MNEs, relative to their competitors, tended to pay the highest wages in technology-intensive sectors and those producing consumer goods with a high income elasticity of demand. By contrast, they paid the lowest wages in industries in which their representation was the least (Dunning, 1976; Dunning and Morgan, 1980). Additionally, MNEs that were tempted into a country to circumvent import barriers were more likely to pay similar wages to those paid by their indigenous competitors, than those producing goods and services for international markets. Foreign firms were likely to pay relatively higher wages for skilled professional and managerial labour than for semi-skilled and unskilled workers (Chen, 1983). However, this may partly reflect the greater inelasticity of supply of the former kind of manpower. In 1972, US MNEs also paid higher wages in their domestic plants than did their unnational competitors in similar industries (Dunning and Morgan, 1980).

In the past, several studies have attempted to establish the differences in employee compensation paid by MNEs or their affiliates and other firms. For example, an analysis of a sample of 500 US affiliates in Britain in 1973 (Dunning, 1976) found that US affiliates paid higher than average wages in 17 of 21 industries. Later data for all foreign firms, derived from Censuses of Production for 1984 and 1988, confirmed this conclusion, but also discovered that, in the majority of industries, the differences were within 10%. In their analysis of FDI in the US, Graham and Krugman (1989) concluded that in most sectors, apart from mining, finance and insurance, the average compensation per employee in foreign-owned affiliates was about the same or less than that of their indigenous competitors.

In developing countries, a study by Mason (1973) established that in most industrial sectors, foreign affiliates paid more than local firms in the Philippines and Mexico, a finding also reached by Langdon (1975) for Kenya, Sourrouville (1976) for Argentina, Jo (1976) for South Korea, Gershenberg and Ryan (1978) for Uganda, Iyanda and Bello (1979) for Nigeria, Yong (1988) for Malaysia and Kumar (1990) for India. On the other hand, Cohen (1975) discovered that local firms paid higher wages in Singapore than did foreign firms, while no clear pattern emerged in Taiwan. In Latin America, while researchers found that the average wage and salary payments in the 1970s ranged from 42% above those of indigenous firms in Brazil (Possas, 1979) to 70% in Mexico (Fajnzylber and Martinez, 1976), by far the greater part of this difference was explained by the MNEs’ larger size, their concentration in high-wage sectors and their propensity to employ a higher ratio of skilled workers (Jenkins, 1984). In Greek manufacturing industry, Papandreou (1980) estimated that while foreign affiliates paid higher salaries than domestic employers in 1973, differences in average wages per head between the two groups of firms were not statistically significant.

Perhaps the most detailed comparative studies of wage payments of MNEs and non-MNEs in the 1970s was that conducted by the US Tariff Commission (1973). The data embraced the total yearly payroll costs (that is, earnings) per employee of a sample of 298 firms and their 5,237 majority-owned foreign affiliates in 1966 and 1970. Comparisons of domestic payroll costs per employee of the MNEs and of all US firms for all industries
showed that the average payroll costs of MNEs were significantly above the national averages; however, this was mainly because of the heavier weight of manufacturing in the MNE sample, where payroll costs per capita tended to be relatively high. Mixed results were shown for the different industries; partly, it was suggested, this reflected differences in the types of activity within the industrial groupings, and partly it was because of other influences affecting wages, including technical efficiency, profitability and the rate of company expansion.

Most of the above studies did not attempt to verify the statistical significance of their findings. One such study that did was that by Kumar (1990), who used multivariate analysis to discriminate between the wage payments made by foreign and indigenous firms in India. Kumar’s findings supported those established by Balasubramanyam (1984) for Indonesia and Willmore (1986) for Brazil, that, although the proportion of high-income employees was a significant discriminant between the two groups of firms, the greater part of the difference lay in the fact that the MNE affiliates employed a relatively higher proportion of qualitatively superior personnel (Kumar, 1990:74).

Few of the earlier studies compared the employee compensation paid by foreign affiliates according to nationality. However, from casual evidence obtained from those on Japanese investment in Europe (Dunning, 1986b; JETRO, 1989, 1990), the US (Graham and Krugman, 1989) and Asia (Kuwahara et al., 1979), it would seem that US and European foreign affiliates are more likely to offer higher employee compensation than their Japanese counterparts who, in turn, are likely to pay marginally (that is, 10 to 20%) above their local companies.

13.5.2 Wages, Productivity and Skills: Recent Evidence

Excellent reviews of the recent evidence on the wages, productivity and skills of MNE affiliates are provided by Lipsey (2002a) and Brown et al. (2003). In this subsection we wish to review some of the notable contributions in this literature, as well as some of the most recent empirical findings.

Using data from official manufacturing surveys, Aitken et al. (1996) found that foreign ownership raised wages in the region or industry of employment in Mexico (1984–90), Venezuela (1977–89) and the US (1987). However, with the analysis restricted to domestically owned firms, the results were insignificant, and suggested that while the presence of multinationals increased wages on the average, that increase only occurred in foreign-owned firms in Mexico and Venezuela. Firms under foreign ownership paid wages that were 30% higher in all three countries, and this differential was the same for skilled and unskilled workers. Controlling for industrial sector, the authors found that foreign firms tended to locate in the higher-paying sectors of the economy. For the US, the industry effects accounted for about half the premium, in Mexico two-thirds, and in Venezuela one-third. In the US, the authors discovered that foreign firms tended to locate in low-wage regions, which made the FDI wage premium larger. In Mexico and Venezuela, foreign affiliates were located in high-wage regions, but even then foreign-owned firms paid more than domestic firms. The authors also controlled for plant size and capital intensity, since MNEs tend to have a higher scale of production. In Mexico, Feenstra and Hanson (1997) found that the fraction of establishments that were foreign owned significantly raised the relative return to skilled labour between 1975 and
1988. Since it was also found that FDI could account for over half of the increase in the wage share of non-production workers in the border region, this suggested that it also contributed to growing wage disparity.

Using industry-level BEA and Census data for 1987 and 1992, Feliciano and Lipsey (1999) found that foreign affiliates in the US paid higher wages than local firms, even when industry composition was taken into account. While the differences within manufacturing industries could be explained by the larger size of foreign-owned establishments and additional state characteristics, in other industries, substantial differences still remained.

In Indonesia, a study by Lipsey and Sjöholm (2001) arrived at an initial wage premium of about two-thirds for blue-collar workers and 90% for white-collar workers over locally owned firms. Controlling for the workers’ educational level reduced the premium to 33 and 70% for blue- and white-collar workers, respectively. Incorporating region and sector dummies, the wage premium fell to 25% for blue-collar workers and 50% for white-collar workers. Incorporating further differences in the choice of inputs and plant size, lowered the premium further to 12% for blue-collar workers and 22% for white-collar workers for employees of a given level of education. In the case of Indonesia, once controlling for industry differences, the presence of foreign firms also positively affected the wages paid by domestic firms.

However, as argued earlier, while foreign capital may raise wages on average, it is also likely to contribute to a worsening of the distribution of income between skilled and unskilled workers. These results were confirmed for Indonesia in a later study based on panel data, which showed that both foreign ownership and foreign M&As resulted in higher wages relative to those paid by domestic-owned plants (Sjöholm and Lipsey, 2006). The plants taken over were not paying particularly high wages prior to takeover, and similar wage increases were not observed for domestic takeovers of foreign-owned firms.

Earlier we saw that FDI is likely to have an impact on the host country labour market in respect of levels of employment, employee compensation, and the demand for skills. Specifically, if foreign-owned firms were more productive than indigenous firms, this would directly affect wages in the sectors in which they operate. While the higher productivity of foreign affiliates is normally the result of their superior O-specific advantages, it can also be the outcome of selective hiring, or the employment of the relatively highly skilled in the host economy. Evidence presented by Driffield and Taylor (2000) for the UK shows that foreign affiliates employ higher levels of skilled workers than domestic firms within a given industry, as well as across industries. This suggests that the incidence of higher O-specific skills and higher wages in multinational affiliates is not merely due to such activities being concentrated in a handful of relatively scale-intensive sectors. The general effect is that average skill intensity increases due to an enlarged demand by foreign affiliates for higher skills in the host economy. As a result, the wage gap between higher- and lower-skilled employees is likely to rise. Controlling for technology (for example, R&D intensity) and trade, both of which could influence a relative shift in demand in favour of skilled labour, Driffield and Taylor also found that the increasing amount of inward FDI in the UK led to technology spillovers in the domestic sector, which, in turn, further increased the demand for skilled labour.

In a related study, Driffield and Girma (2003) also revealed that domestic firms in the UK electronics industry, which has a high degree of foreign involvement, have benefited
from wage spillovers, but that the benefit was mostly enjoyed by skilled labour within a given region. This is similar to the findings for the Irish economy (Figini and Görg, 1999). Employing industry-level panel data for UK manufacturing sectors in 1983–92, Taylor and Driffield (2005) also found that inward FDI had made a significant contribution to the growing inequality in the wages for skilled and unskilled labour. However, in the US, research suggests that inward FDI in the 1990s has had an insignificant effect upon the demand for skilled labour, and consequently on wage dispersion within industries (Blonigen and Slaughter, 2001).

If the demand for higher-skilled labour in the domestic economy is met by people hired away from other firms, the gap between the high and low skilled is likely to become persistent, unless appropriate training programmes are undertaken. In the absence of such training, rather than improving productivity in the domestic sector, the consequence of inbound direct investment would be limited to a shift of high-skilled employment from domestic- to foreign-owned firms. This might still be desirable, if the MNE transfers superior technology to the host economy, but as Driffield and Taylor (2000) point out, it will do nothing to alleviate the structural unemployment in areas where foreign investment has sometimes been sought to address problems of regional underdevelopment.

A different dynamic is at play in countries with segmented labour markets, where skilled labour is concentrated in the privileged sector of the economy, as is the case in many developing countries. Evidence from a 1996 household survey comparing employees in the SOEs and foreign affiliates in China confirms that, in countries with segmented labour markets and limited employee mobility, the skill premium attached to skilled workers is likely to increase even faster than would otherwise have been the case (Zhao, 2001). Another recent study by Barry et al. (2005) found that over the 1990–98 period, an increase in foreign affiliate activity in Ireland had an overall negative impact on the wages for indigenous exporting firms, but no effect on those of their non-exporting counterparts. This they suggested, was the result of labour market crowding-out, or the poaching of skilled labour from the export sector, which had pushed up wages.

Using data on 11 European countries in 1993–2000, Barba Navaretti et al. (2003) showed that MNE affiliates were generally quicker than their indigenous competitors in responding to shocks in technology, output and factor prices by adjusting their labour demand. However, the extent of the adjustment was typically more limited, as the price elasticity of the affiliates with respect to factor prices was less than that of domestic firms, suggesting that in this sense, jobs in MNEs were ‘safer’ than those in domestic firms. These results are also consistent with those of Görg and Strobl (2003a), who in using plant-level data from Forfás found that in Ireland, new jobs created by MNE affiliates were more likely to be sustainable than those of domestic firms.

13.5.3 Conclusions

Although there has been no definitive or fully satisfactory study on the effects of MNE activity on the level and structure of employment in either home or host countries, and it is by no means clear whether such a study would even be possible to conduct, the assembled evidence does, at least, point to a few conclusions. Perhaps the most important impact of both inward and outward direct investment on employment is on its industrial composition, its skill mix, its quality and its productivity, rather than on its amount
The last variable is, in any case, determined by macroeconomic and general micro-management policies. MNEs affect the structure and usage of human resources mainly as a result of their unique and sustainable O-specific advantages, and by the distinctive way in which they respond to the locational attractions offered by countries. The extent to which these actions are in accord with the employment needs and objectives of home or host countries will largely depend on the market structure and international competitiveness of the sectors in which the foreign firms or their affiliates participate. It will also depend on the content and quality of the key labour-related institutions which affect the quantity, quality, motivation and behaviour of the human resources available, and the ease and speed with which such resources can be upgraded and/or reconfigured.

We would make one further observation. For obvious reasons, it is tempting to take a very partial view on employment issues, but in the contemporary global economy, such a view is likely to lead to erroneous conclusions and inappropriate policies. Technological and other forces of change are continually requiring a reallocation of human and other resources and capabilities, and the remodelling of labour-related institutions, for example, flexibility in hiring and firing, immigration control and minimum wage legislation. To resist or impede such changes is a luxury which no country can afford because, while in the short run jobs might be protected, in the longer term they will be lost to more entrepreneurial and aggressive competitors. It is here that MNEs can play a major role in helping both home and host countries in the restructuring and enhancing of their indigenous human capabilities. We say ‘can’. Whether they actually do or not, depends on whether they can be induced to act in a way which best suits the economic and social objectives of the countries in which they operate, and whether they possess the institutional and organisational means to pursue these objectives effectively.

13.6 EMPLOYMENT CONDITIONS

What kinds of standards and principles do MNEs apply at home and abroad, and what are the consequences for the local workers? In addition to issues concerned with workers’ rights, MNEs may engage in the transfer of a range of practices and standards that may affect how people live and work in the host countries. This section will review evidence on the training practices of MNEs, the intra-firm transfer of management practices and other standards, as well as on industrial relations within MNEs.

13.6.1 The Training Practices of MNEs

One of the key O-specific advantages which MNEs enjoy, and can utilise in the countries in which they produce, is their ability to train and upgrade human resources, and to motivate their employees. They derive this advantage, in part at least, from their access to different labour market institutions and to their cross-border experiences in human resource management. This is particularly likely to be the case where labour is in short supply in the country where it is needed, and it cannot easily be acquired on the open market. If an MNE, or any other firm for that matter, is to be competitive, it must be able to recruit the labour it requires and/or undertake its own training programmes. Of course,
if there are no suitable locally trained resources and no likelihood of these being available, the MNE will simply not engage in activities that require these resources. This is one of the reasons why, as Chapter 2 has shown, most high value-added activity by MNEs is undertaken in the advanced industrial countries. However, in most cases, it is a question of incremental training or education that is required for new products to be efficiently produced, as well as for new production, organisational or marketing techniques to be mastered. Frequently, the rewards for the training firm can be considerable.

There is now a substantial body of literature, including that assembled by such organisations as the ILO, which documents the array of formal and informal training programmes undertaken by MNEs and their affiliates in both developed and developing countries. The accumulated evidence suggests that, while the amount and character of training varies considerably between firms, as a general rule it is fairly narrowly focused on the specific needs of the investing enterprises, rather than on the wider economic and social goals of the countries in which they operate. This sometimes results in uneven and suboptimal human resource development. It follows then that if foreign firms deploy their O advantages in a way that is acceptable to host countries, they may require extra-market incentives to do so (for example, vocational and other training grants, structural adjustment assistance, tax rebates and so on). As long as the resulting social benefits exceed the social costs involved, this is a perfectly legitimate use of resources.

The extent and pattern of human resource management by MNEs in a particular country is likely to depend upon its philosophy and general strategy towards its foreign operations; the nature of its long-term resource commitments and the length of its involvement in that country; the kind of activities in which it is engaged; the availability and quality of local support and training facilities; the attitude and competence of the investing firms to in-house training; its market (or expected market) share; and the role played by governments in fostering educational advancement and the upgrading of workplace competences.

Each of these variables is, in part at least, country, industry and firm specific. Each will also depend upon the role of the affiliate in the global strategy of the investing enterprise. Such enterprises are likely to contribute most to the training (or retraining) requirements of the host country where there is a synergy of interests between their own goals and those of the host countries; where there is an effective domestic human resource base and sympathetic labour market institutions on which to build; and where there are incentives for the MNE to bear the training costs, and for individual workers to undergo such training. The extent to which such conditions are met will depend on both the type of instruction required and the work ethos and the learning capabilities of the labour force. Some countries (for example, India, Japan, South Korea, Taiwan, Israel, Kenya, Singapore and more recently Estonia and Slovenia) provide an excellent institutional environment for human resource development. Others, such as some sub-Saharan African, Latin American and Middle Eastern countries, much less so.

In what way is the training offered by MNEs different from that of uninational firms? First, and perhaps most important, because they operate in different cultural and institutional environments, MNEs are able to draw upon and utilise, as and where appropriate, a range of value systems, attitudinal perspectives and training systems relevant to the enhancement of human competences. At the same time, the form and focus of training may depend on the nationality of the trainer. The inclination of US MNEs for technical,
yet individualistic, training programmes, spurred on by promotion and monetary rewards, contrasts sharply with the emphasis of Japanese – and to some extent the emerging Chinese – MNEs on group training and peer pressure on individual workers to continually upgrade their talents and skills. Each, when introduced into a foreign (for example, European) culture, brings its own slant to training methods and goals. The more globally orientated a company is, the wider the experience it can bring to bear on training practices.

Second, an MNE is likely to impart its experience of training techniques in different countries. In many cases, learning by example and doing is one of the best forms of instruction. The participation of MNEs in various alliances, networks and industrial clusters throughout the world is greatly adding to and facilitating this process (Enright, 2000c). Lessons derived from such experiences and contacts, and the direct tutelage of workers and staff at all levels, may provide an important O advantage in its own right.

Third, because of the economies of scope and scale in personnel management, large and geographically diversified firms can often afford to engage in more systematic and specialised training programmes than can their smaller uninational competitors. Large MNEs typically offer a wide variety of training programmes – particularly for senior executives, management and professional staff. Such programmes are sometimes offered in collaboration with local universities, or within corporate institutions specifically dedicated for this purpose.

Fourth, MNEs can provide face-to-face training by in-house expatriates. Although such training is likely to be most critical at a general or line management level, it frequently extends to the factory (or office) floor – particularly in technology- and information-intensive sectors. In their efforts to indigenise or localise senior staff and workers, host (and particularly host developing) countries are often anxious for MNEs to complete such training as soon as possible. In general, MNEs are sensitive to these needs and aspirations, not least because of the high costs of maintaining expatriates abroad, and because, operating a local value-added facility frequently enables them to access or tap into useful knowledge and experience of the country’s business culture and institutions, and of negotiating practices with labour unions and government.

Training may take different forms and it may be formal or informal. Information, knowledge and ideas may be transmitted by the printed word, lectures and seminars; by formal or informal consultations; by quality-control circles, intra-firm visits and inspections; and network-related learning experiences. It may be focused on the improvement of professional and technical skills or on worker cognition and motivation. It may be geared to raising the productivity of the least-skilled workers or the senior management of the company. It may be orientated towards enhancing the quality of services (for example, in hotels, business services or advertising), raising the level of professional competence, improving testing and inspection procedures or upgrading incentive structures. Training may spread beyond the boundaries of the MNEs and their affiliates to their suppliers and customers, and may include that offered by local educational and training organisations. According to the industry and type of firm undertaking the training, its form and substance will differ. Likewise, so will the particular role of inbound foreign investment in the training programmes of other firms in the host countries.

How might MNEs contribute the most to local training needs and aspirations of the countries in which they operate? We have already suggested that such enterprises will only
spend money on training if they expect to recoup the costs of that training, or, should host governments insist upon their undertaking certain training, as long as the net costs involved do not reduce a firm’s profits below its opportunity costs. If, however, governments are prepared to subsidise these costs, either directly or indirectly, then both foreign and domestic firms may be prepared to invest more resources in in-house training.

The issues in question are, first, to identify the extent and form of market failure in the supply of training or retraining facilities and, second, to decide on the best way to overcome that failure. As regards the former, there seems to be general agreement that the social net benefits of upgrading the general skills and competences of a country’s human resources are likely to exceed the private net benefits. There is, however, much less consensus on how market failure in the labour market may be overcome and how much and what kind of non-market intervention is required. In some economies (for example, the US, the UK and Hong Kong) the onus for training is firmly delegated to the private sector – albeit with some encouragement and support from the public authorities. In others (for example, Japan, France and Brazil) the government accepts a larger share of direct responsibility, even though the actions taken to implement its training programmes may be entrusted to private corporations.

Such institutional differences result in different priorities being given to education and training, as well as to the incentives to firms to undertake training programmes. The attitudes towards, and the amounts spent on, vocational training and the role of government varies greatly between countries and between sectors within countries. In 2005, Germany, Denmark, Japan, the US and Sweden, among the developed countries, and Singapore, Taiwan and South Korea, among the developing countries, invested the most on training as a proportion of GDP (World Economic Forum, 2006). By contrast, the UK and Australia, among the developed countries and many of the poorest developing countries were perceived by business executives either to invest the least in human resource development, or to allocate the lowest proportion of their GDP to education (UNDP, 2004).

Empirical research aimed at identifying the unique contributions of inward direct investment to the upgrading of human skills has yielded mixed results. In a well-known study of 41 foreign-owned and national manufacturing processing firms in Kenya, the author concluded that only those foreign affiliates in which there was some equity participation by the host government had made ‘a truly significant contribution to the training of indigenous management’ (Gershenberg, 1987). This view was confirmed in a comparison of the training programmes of MNE affiliates and indigenous Brazilian firms, except that the former were found to be more active in their external training and assistance activities (Goncalves, 1986). This latter caveat is an important one, as part of the training of employees of foreign affiliates is undertaken outside the host economy and is frequently paid for by the parent company.

In addition, MNE-financed training may well be of a higher quality than that provided by indigenous firms – particularly in developing countries (Enderwick, 1985). In a comparison between the annual total training expenditure per employee in a group of Nigerian enterprises, Iyanda and Bello (1979) concluded that MNEs spent six times as much as their local competitors. In the 1980s, in both Thailand and Malaysia, foreign MNEs were reported as undertaking more extensive training programmes than their domestic counterparts (Sibunruang and Brimble, 1988; Yong, 1988). In Turkey, a 1988 study concluded that in a paired sample of 30 MNE affiliates and local firms, the former
spent twice as much (as a percentage of payroll) on executive training of their employees as did the latter (Erden, 1988). A study on skill upgrading in the Indian auto component industry, comparing a Japanese–Indian joint venture and the domestic firm Teleco, found the former to have played a particularly important role in restructuring the sector in response to global competition (Okada, 2004).

Examples from Costa Rica from the early 2000s provided by Jenkins (2005) include that of Intel, which collaborated with a local university to develop special programmes in the fields of electrical engineering and computer science for their employees. Another example given by the author is that of Procter & Gamble’s Global Business Services unit (for example, finance, accounts payable, payroll), which employs mainly people with a university degree. The company currently provides its employees with corporate training to develop managerial skills, and technical training in topics such as accounting and taxation. Every employee receives a minimum of 40 hours of corporate training per year, while the amount of technical training is discretionary. Costa Rican employees were also sent to the US to learn more about Procter & Gamble’s business processes.

In the Zhongguancun ICT cluster in Beijing, which is home to 39 universities and 213 research institutes, the affiliates of foreign MNEs have been at the high end of product development, while the Chinese partners have occupied the lower end, while also engaging in marketing services and system integration, and peripheral software development (Zhou and Xin, 2003). Examples presented by the authors included those of MNEs such as Intel, Microsoft, Cisco and Sun, which have encouraged Chinese firms to develop applications that are based on their platforms, and provided training to local engineers and users towards this end. Some MNEs have also established R&D centres in Beijing, although so far, these have had little contact with local firms. A study by Rasiah (2002), comparing the development of human resource capabilities in two electronics clusters in Malaysia, also provides many examples of the local training activities undertaken by foreign technology-intensive MNEs such as Intel, Motorola and AMD in Penang, and Texas Instruments, Sony, JVC and Hitachi in Klang Valley.

In Namibia and Zimbabwe, evidence from the mid-1990s suggests that MNEs have not only been a source of vocational and management training: they have also contributed to the development of basic literacy and numeracy skills. MNEs have also made contributions to local educational institutions, and have provided apprenticeships and bursary awards for selected employees (Iyanda, 1999). In Egypt, employees of the manufacturing facility of HJ Heinz training in Egypt regularly receive technical training at Heinz facilities in Italy, while their sales and marketing employees benefit from the same training as other Heinz employees globally (El-Shinnawy and Handoussa, 2004:121).

Revisiting the question of why foreign firms pay higher wages, Görg et al. (2002) argue that although the foreign-owned firms are often larger, more profitable and more capital intensive than domestic firms, this may not account for all of the wage premium over domestic firms. They suggest that an additional reason might be that employees receive compensation for the accumulation of skills, and that such training is more productive in foreign firms. Their empirical evidence on 144 manufacturing firms and 1,365 workers in Ghana in 1998 confirms that the foreign wage premium is acquired over time, and accrues only to those employees that receive on-the-job training. They found no differences in starting wages once individual and firm characteristics were taken into account, but training in foreign firms led to more wage growth than that in domestic firms. Correspondingly,
there was no difference between foreign and domestic firms in the wage growth of employees not receiving training.

A rather different way of approaching the issue of training, and of human resource development in general, is to see it as emerging from the institutional context of corporate governance, and particularly the difference between the Anglo-American, European and Japanese conceptions of the firm. Lazonick and O’Sullivan (2000), for example, have presented an analysis of the emergence of shareholder value maximisation as a model of corporate governance in the US, and also (what they consider to be) a move from the principle of ‘retain and reinvest’ to a principle of ‘downsize and distribute’. Throughout the early post-Second World War period, US firms tended to focus on the retention of corporate earnings and reinvestment. At the same time, while shop-floor training by these firms was never a world beater, improvements in their managerial and organisational competence were sufficient to ensure their continued prosperity both at home and abroad.

However, in the 1970s and 1980s, the lack of investment in skills at the shop-floor level came into sharp contrast with the emergence of Japanese firms as serious competitors. This prompted a period of downsizing and increased outsourcing by US firms, and an increased distribution of earnings to shareholders through dividends and stock repurchases in the 1980s and 1990s. At the same time, top management compensation grew explosively, with stock options playing an increasing role in executive compensation. US firms continue to invest in, and reward only, the most highly skilled and highly educated personnel, to which they enjoyed privileged access due to world-class universities and a supply of internationally mobile well-educated labour.

The ‘rules of the game’, or the institutions that govern the relationships among owners, managers and labour, may also affect the time horizon for investment, and in consequence lead to different patterns of investment behaviour. For example, since the Anglo-American system of corporate governance is predisposed towards labour flexibility, one would expect Americans to be successful in industries that require a rapid response to new markets, and a relatively short-term horizon for return on investment (Christopherson, 2002). Indeed, analyses of US metropolitan labour markets indicate that intellectual capital- and innovation-based employment has made a significant contribution to the US economy. Christopherson argues that the advantages that American firms have gained in many service sectors since the 1990s might be due to the inherent advantages of the American system of labour market organisation and corporate governance, while manufacturing industries that require a long time horizon for return on investment, are better suited for German or Japanese firms.

In terms of job training and skills, US employers have, for many years, tended to rely on external skills and educational preparation, and not on-the-job training. According to the figures cited by Christopherson, in the mid-1990s, new hires in Japanese firms received 300 hours of training, while their counterparts in American firms received only 48 hours. Furthermore, German firms spent from 1.5 to 10 times more on technical training than comparable US firms. In the Anglo-American system, managers are brought in for their personal skills and abilities, and are expected to make several important switches from company to company in the course of their career. Since they are not tied to a particular employer, extremely high levels of management compensation are needed to align the incentives of managers with those of the owners. Moreover, in contrast to the German
and Japanese systems, networks in the US are more likely to be based on personal relationships rather than institutionalised relationships reinforced by mutual shareholding.

The reliance of US MNEs and other firms on markets and the acquisition of external skills provide flexibility as long as there is sufficient supply of skills in the labour force. By contrast, investment in firm-specific skills and training within companies reduces the flexibility of firms with respect to their hiring and firing practices. The US labour market is characterised by short tenure and high rates of job turnover, with the consequence that the use of ‘exit’ rather than ‘voice’ as a primary mechanism for solving disputes may result in employees taking valuable information with them. Indeed, the movement of key individuals is increasingly seen as an important means of technology transfer between firms, particularly in high-technology sectors such as biotechnology (Zucker et al., 1998). Not surprisingly, the decade of the 1990s also saw a substantial increase in the use of covenants not to compete as part of the employment contract in the US (Christopherson, 2002).

In one of the few recent empirical studies of developed countries, Barry et al. (2004) discovered no evidence that foreign manufacturing affiliates in Ireland spent more on training their employees than domestic firms; indeed they spent less. However, a higher than average proportion of the foreign firms provided training, and training, whether done by foreign or domestic firms, increased training in other domestic firms. The authors also found little evidence that grants (often given to those least likely to train) had increased training. In general, older and smaller plants were less likely to provide training, while exporters and R&D-intensive plants were more likely to provide it.

Another study by Figlio and Blonigen (2000) on the effects of inward FDI between 1980 and 1995 at the county level in the state of South Carolina found that FDI raised wages much more than did domestic investment. However, in a unique contribution of the study, the authors also found that the activities of foreign affiliates had different effects on the local government budgets from those of local firms. Specifically, inward foreign investment lowered the per capita expenditures of county-level governments, particularly that directed to public schools. The effect was particularly strong in low-income communities, possibly because the employees of foreign-owned plants were more likely to send their children to private schools.

13.6.2 Working Practices and Standards

Most researchers agree that working conditions in MNEs and their affiliates compare favourably with those of the industry of which they are part, and of other local firms. How far this is a result of their multinationality per se is difficult to say. However, part of it undoubtedly is – particularly where companies follow common production methods and working procedures throughout the world, or where the range and quality of their products is geared to the demands of the international marketplace. Examples range from the bottling operations of the major multinational drinks producers, and many food processing and pharmaceutical plants, to internationally owned and operated hotels and car rental companies. Here MNEs may act as trailblazers for upgrading not only working practices and conditions, but also the institutions and belief systems underpinning them.

In Chapter 5, we introduced the concept of institutionally related O advantages of MNEs, which impinge in large part on its human resource practices. These consist of the
myriad regulations, incentives and enforcement mechanisms devised and implemented by MNEs to improve working practices and efficiency. Such practices may be transferred by MNEs to host countries as part of the bundle of financial, technological and organisational resources and competences that make up FDI; and, on occasion, they may also be transferred from foreign affiliates back to the parent company.

While there are few examples of the ‘reverse transfer’ of standards from affiliates to MNE parents in the literature, whether deliberate or incidental, examples of cross-border transfer of standards and management methods from the home to host countries are abundant. Such practices include new methods of organising work, such as the well-known examples of just-in-time production and quality management and Japanese-style supplier relations (Cusumano and Takeishi, 1991; Kenney and Florida, 1995; Chung et al., 2003). Such practices have involved the transfer not only of standards within the firm, but also of institutional forms and methods of organisation that may extend to the entire network system of the multinational, including its suppliers and customers.

Indeed, long before the Japanese began internationalising their operations, US and European MNEs were spearheading new working and social practices across national boundaries. In the mid-1950s, several US subsidiaries in the UK were renowned ‘for the attention given to working conditions in the office as well as the factory, canteen facilities and social amenities’ (Dunning, 1958:260). A higher proportion of US subsidiaries than the average for UK industry operated social security and non-contributory pension schemes. In its report on the social practices of MNEs in the textile, clothing and footwear industries in developing countries, the ILO (1984) observed that, in the 1970s, welfare and recreational facilities appeared to be more extensive in foreign subsidiaries than in local companies, although they had not reached the standards of their home country (p. 151). Furthermore, the ILO reported that ‘some multinational subsidiaries granted social security schemes over and above the legal requirements’ (p. 152).

Other forms of transfer include standards for quality management processes, such as ISO 9000 (Guler et al., 2002), or environmental management processes, such as EMAS and ISO 14000 (Christmann and Taylor, 2001). The global product and talent markets acted as drivers for Infosys to become a benchmark of good corporate governance in India, although the spread of these standards to other Indian firms has been limited (Khanna and Palepu, 2004). Transfer can also involve the cross-border transfer of employment practices, such as in the adoption of workforce diversity policies (Ferner et al., 2005). Nonetheless, even in the cases where the transfer of technology and management processes within the MNE might be expected to result in the upgrading of standards in the host country, the process of intra-firm transfer is not without its problems, as documented by Jensen and Szulanski (2004). Indeed, while globalisation is increasing the awareness of labour-related best practices, it is also exposing some of the firm- and country-specific institutional constraints in the cross-border transfer of these, both within MNEs and between them and other firms.

Almost certainly, some working practices in foreign affiliates reflect the institutions and cultures of their parent companies and/or their home countries. This is particularly likely in areas perceived to be critical to the success of the company. Japanese-owned companies, for example, operate within a very distinctive work philosophy. On the one hand, their employees are expected to identify completely with the company’s goals and aspirations and accept that they are part of a team whose sole task is to help achieve these goals...
and aspirations. On the other, the company has a strong sense of commitment to the economic and social welfare of its workers, which extends well beyond the wages they are paid. Most of the distinctive characteristics of Japanese industrial relations are liked by Western personnel managers and workers, but there are some which are not (Dunning, 1986b). These latter include strict timekeeping, meticulous attention to detail, the highest standards of cleanliness and little or no socialising on the shop floor.

At the same time, it is clear from various ILO studies, notwithstanding the convergence of some production techniques, that there remain considerable differences between the working conditions and practices of MNE affiliates across national boundaries. For example, a report by the ILO (2001) contains the results of a survey embracing 100 countries which gave the opinions of employers’ and workers’ organisations on a wide variety of labour-related issues. Most respondents thought that the effect of MNEs on employment creation was broadly positive, though in most cases, quite marginal. Within the workplace, MNE were seen to raise productivity, conduct vocational training, introduce new technologies, and with respect particularly to transition economies ‘instil a new industrial relations culture with high standards for work and quality of work’ (p. 24). In general, the business practices and occupational health and safety standards of MNEs and their affiliates were considered similar to, or more favourable than, their domestic counterparts. However, many respondents also highlighted the importance of extramarket institutions in helping to shape industrial relations. In identifying these views we would emphasise that there were always exceptions to them, and that exactly how, to what extent, and in what form, differences between the strategy and impact of MNEs affiliates and their indigenous competitors took place, was likely to be highly contextual.

Indeed, these differences – particularly between developed and developing countries – are almost certainly greater than between MNE affiliates and local firms in any particular country. To the extent that there are pressures within MNEs to harmonise compensation practices across borders, there might even be fewer cross-border differences in employee compensation and working conditions within a particular MNE network than there are between indigenous firms operating in the same group of countries. However, it is worth emphasising that it is not normally in the interest of MNEs to provide better working conditions than those necessary to ensure its economic success. Consequently, they will usually be fairly close to the norm for the particular country or industry. This is understandable as non-pecuniary fringe benefits are as much a production cost as the wages and salaries paid.

### 13.6.3 Labour-Management Relations

Chapter 8 has shown that decisions on many labour-related matters tend to be left to the personnel managers of the individual affiliates of MNEs. Nowhere is this localisation policy more in evidence than in the area of labour recruitment and industrial relations. In a survey of the locus of decision making in foreign affiliates in the UK in 1984, Young et al. (1985) found that in only 10–15% of cases did the parent company exercise any strong influence on hiring policy, and only between 1 and 4% in the area of collective bargaining. But even here the philosophy of the parent company is often much in evidence. In the early 2000s, for example, US-owned companies continue to be noted for their aggressive recruitment strategies, while most East Asian companies are likely to pay more
attention to the personal qualities of the applicants. American and European companies are more prone to hire experienced or trained labour from other firms than are the Japanese, who seem to prefer to recruit younger and less-experienced workers who they can train in the ‘Japanese’ way. Head office influence is most prevalent in cases of state-owned MNEs and those pursuing globally or regionally integrated product, production and marketing strategies. Such guidelines are also followed by companies who believe that one of their distinctive O advantages is the way in which they can obtain the maximum cooperation and output from their labour force. This is already the case in respect of Singaporean, Taiwanese and Korean MNEs. In future years, it will be particularly interesting to see how far, and in what ways, the distinctive industrial relations and networking practices of the Chinese MNEs are pursued (or modified) in their bid to become global players.573

In part, of course, the impact of foreign-owned companies on industrial relations depends on the nature of existing practices in the countries in which they operate, and these vary widely between countries. So, indeed, do the policies and strategies pursued by individual MNEs. Clearly, the most pronounced impact of inbound direct investment on the industrial relations of a host country is likely to occur when the practices of the foreign firm are considered superior to those of indigenous firms, and the labour unions are receptive to the adoption of these practices. Indeed, both conditions were met in the UK in the 1980s, which allowed the Japanese auto and consumer electronics MNEs to insist that all labour negotiating rights should rest in a single union. The example set by the Japanese employers had a profound impact on UK industrial relations, where multiple craft unions were still the norm rather than the exception (Strange, 1993). On the other hand, European and US industrial relations procedures do not seem to translate as readily or as well into the Japanese work environment.

There are also differences in the attitudes of Japanese and Western multinationals to worker participation in decision making. The Japanese tend to adopt a more open and consultative style of industrial relations. They place a great deal of store on good intra-firm communications. They insist upon work flexibility and discourage craft or status demarcations. They encourage participation in decision making, and the setting up of consultative groups and quality-control circles. They engage in compulsory redundancies only as a last resort, and they dislike any kind of confrontation with their workers. The British are more hierarchical in their industrial relations, and labour–management relations have often been dogged by craft unions. The Germans are used to worker participation on their management boards, while the Americans, though adopting a friendly and status-free policy towards their employees, often prefer not to deal with unions at all! In the case of the major state-owned MNEs from China and other developing countries, the affiliates are normally expected to abide by the industrial relations practices of the home country – though this is likely to change as they tap into, and become more embedded in, those of the foreign countries in which they operate (UNCTAD, 2006).

Of course, the relationship between organised labour and MNEs has not always been a good one. In order to explain how organised labour adjusted to the presence of foreign multinationals in Argentina, South Korea and Spain, Guillén (2000b) relates the dominance of modernising versus populist mentalities within the labour unions to the presence of democratic versus authoritarian political regimes. All three countries experienced periods in which unions perceived MNEs as agents of capitalist imperialism, supporting
dictatorships and failing to observe basic labour rights. However, union views have shifted in different ways across time and across countries. In Argentina, the movement has been from regarding multinationals as villains to regarding them as necessary evils, while in Korea, past repression has led the unions to fight against foreign involvement, preferring an arm’s-length relationship with MNEs. By contrast, in Spain, the transition to democracy enabled a transformation in the mentality of the unions with respect to MNEs, which they came to accept as partners in development.

Quite apart from the impact of MNE activity, the role of labour unions in developed countries has been undergoing considerable change since the late 1970s (Lane, 1989). (The role of unions in developing countries is touched on in the following section.) The movement away from collective bargaining and towards individually determined compensation has resulted in the decline of the traditional importance of unions, and increased outsourcing and other forms of cost competition have facilitated this process. Indeed, Gaston (2002) suggests that a move away from centralised wage bargaining is likely on its own to have increased the wage gap between skilled and unskilled labour. Other researchers have expressed concerns regarding the consequences resulting from the fragmentation of production, and the ability of the MNE to reduce the power of unions by separating workers geographically (Peoples and Sugden, 2000; Ietto-Gillies, 2005). However, while union activity in the post-war era has largely been concerned with national-level issues, and has only paid lip-service to the issue of solidarity between organised workers across borders, the creation of European works councils, which bring together employees from different parts of the MNE on an annual basis, might be an emerging institutional mechanism which enables them to form an international network (Wills, 1998).

The emergence of a legal status for a European company (SE or Societas Europea), and the legislation on information and consultation leading to the establishment of the European works councils, are both evidence of how the social role of corporations is currently seen in Europe, and how such a view differs from that of a shareholder maximisation perspective (Reberioux, 2002). Archibugi and Lundvall (2001) have suggested that the ‘learning economy’ might not be able to prosper under conditions of social polarisation. It follows, then, that to the extent that workplace democracy might also promote social cohesion, the competitiveness of European firms in the knowledge-based economy may be enhanced. Some empirical evidence provided by Cooke (1997), which details the efforts of MNEs to control the terms and conditions of employment in high-wage locations within the OECD, suggests that outward investment by US MNEs is attracted to locations with lower rates of unionisation and decentralised collective bargaining, but positively influenced by the presence of works councils, once wages (but not productivity) are taken into account.

13.7 ILO CORE LABOUR STANDARDS

Apart from the concerns about job losses, MNEs have come under considerable scrutiny in recent years over employment conditions, and in particular the labour standards applied in developing countries. Protests against sweatshop conditions in companies making sportswear, for example, have resulted in a widespread recognition of the problem of child labour. Campaigning by several labour rights organisations has led leading retailers and
manufacturers to adopt codes of conduct that try to ensure that no child labour is used. We shall deal with the issue of sweatshops and child labour in separate subsections.

The ILO core labour standards consist of the elimination of exploitative use of child labour, prohibition of forced labour, elimination of discrimination in employment, freedom of association, and provision of the right to organise and bargain collectively. These core standards also form the basis of the Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy (ILO, 2002), which brings together three institutional initiatives: the ILO standards, the OECD Guidelines on Multinational Enterprises, and the UN Global Compact.

While the standards prohibiting forced labour and child labour are relatively uncontroversial, issues concerning collective bargaining are not widely agreed upon. While there is a general consensus on the unacceptability of gender and racial discrimination, policies which accept or endorse positive discrimination or affirmative action as practised, for example, in the US, South Africa, India and Malaysia, continue to be a cause of controversy. The US has not ratified parts of the ILO convention that deal with union organisation, and conditions differ on a state-by-state basis between pro- and anti-union, so-called ‘right to work’, states. On the other hand, the role of unions in promoting workers’ rights and workplace democracy is strongly rooted in most European systems of corporate governance. Even more controversial, and not part of the ILO core labour standards, is the discussion concerning the obligation of firms to pay a living wage whether at home or abroad. However, the calculation of such a minimum wage is beset with difficulties, and consequently we do not consider such proposals in this section.

There are several possibilities for improving working conditions in developing countries without compromising economic growth. While developing country governments might believe that, for economic or political reasons, they have to compromise on labour standards to be competitive, the evidence suggests otherwise (Elliott, 2004). An analysis of a large sample of countries (127 in some model specifications) shows that FDI flows in the aggregate are not deterred by high labour standards (Kucera, 2002). Furthermore, raising labour standards is not merely an issue of cost; equally important, they both affect and are affected by the rest of the institutional infrastructure of which they are part, by promoting social cohesion and political and social stability. They also raise a series of moral issues, which in a globalising world economy neither private nor public organisations can afford to ignore. Rodrik (1999) finds that once productivity is taken into account, democratic institutions on their own raise wages, in addition to measures such as the unionisation rate or the number of ILO conventions ratified.

While wages and specific health and safety regulations have to evolve in line with improvements in productivity and overall economic growth, this is not the case with core labour standards. Core labour standards are perhaps best seen as framework standards that are comparable, for example, to the general rules governing property rights. Because of this, there is no requirement that core labour standards be applied using the same institutional structure in all countries (Elliott, 2004). While effective employee representation may take different forms in different countries, increased workplace democracy is likely to result in greater equality and more economic growth. The fact that countries such as Pakistan and Bangladesh explicitly flout core labour standards in EPZs, particularly in respect of freedom of association and bargaining rights, demands further investigation into the working conditions in these areas. Gender-based discrimination, such
as disproportionate numbers of women in the lowest-skilled and most poorly paid occupations, can also be government sanctioned; here too the prevailing labour standards need examining. However, in general, Elliott argues that globalisation and better labour standards are likely to be mutually enforcing, rather than mutually exclusive processes.

There seems to be a general consensus among scholars that trade sanctions are unlikely to improve labour standards, and instead, they are likely to penalise the workers they are intended to help (Martin and Maskus, 2001; Moran, 2002; Busse, 2004; Elliott, 2004). On the other hand, there is considerable support for the use of product labelling and stakeholder codes and as a monitoring tool (Rodrik, 1996). Compared to the issue of industrial pollution, abuses of labour standards are likely to be much more clandestine. In the case of industrial pollution, there are a variety of indirect means to assess what methods of control have been instituted. In addition to being able to identify the specific technologies employed, there is the possibility of monitoring air and water quality in the vicinity of industrial facilities. Such measures of course cannot be pursued in respect of the outsourcing relationships in a multinational network. Here, unless full disclosure of reported incidents identifying the firms concerned is provided, third-party monitoring is unlikely to be effective.

We concur with Elliott (2004) that what is needed is more resources for training and certifying, mutual recognition among a small number of labour standards initiatives, and increased transparency about conditions in the workplace. Mutual recognition of standards, and an agreement of minimum standards reduce the costs of compliance for supplier firms. This is important, since supplier firms faced with numerous requests for different forms of compliance, have in some cases resorted to the falsification of certification reports, at least according to anecdotal evidence from China. MNEs have shown themselves able to enforce uniform standards on a wide range of issues within their sphere of operations, and it is this capability that lies at the heart of successful outsourcing. In a technical sense at least, it should be possible to extend this capability to more rigorous monitoring of labour standards as well (Doh, 2005).

### 13.7.1 Sweatshops and EPZs

While most FDI is directed at developed countries, of the share that goes into developing countries, the majority is in the relatively more capital- and skill-intensive sectors such as chemicals, electronics and electric machinery, transportation equipment and industrial equipment, rather than in relatively low-skilled, labour-intensive sectors such as textiles, leather and footwear. Measured by the global stock of foreign investment, the more advanced sectors exceed the lowest-wage sectors by a ratio of ten to one (Moran, 2002:6), although there are considerable differences between countries. Much of the low-wage investment takes place in EPZs, where the technology employed by the MNE is relatively standard, and the kind of labour required is moderately skilled.

EPZs are special economic zones with the purpose of boosting the export competitiveness of host countries. Generally materials can be imported duty free for the purposes of being transformed for export, and EPZs may also offer incentives such as tax holidays or training grants. Geographically such zones can involve individual factories, industrial parks, or even entire countries such as in the case of Singapore. Although there are EPZs
in developed countries, the majority of them are located in developing countries for the purposes of exploiting the availability of low-cost labour (UNCTAD, 1999:237).

Experience from successful and unsuccessful EPZs suggests that the former have developed when the MNEs are not only able to attract some of the best employees to work in the EPZs, but when government policy is effective in ensuring that domestic firms are able to upgrade their skills, technologies and managerial competences (absorptive capacity) so as to benefit from the presence of the MNE. Unsuccessful EPZs become enclaves when they poach some of the best employees from the local economy, and when there are no spillover benefits to local firms. Indeed, in such cases local firms may have been made worse off, if the higher wages offered by the MNE tempted the relatively scarce skilled employees to leave the domestic sector.

Early experiences with EPZs in Mauritius and Madagascar, and detailed cases of investment in the Philippines, the Dominican Republic and Costa Rica reviewed by Moran (2002), essentially demonstrate that better working conditions have led to improvements in efficiency, and not to a loss of competitiveness. While there are plenty of examples of employee mistreatment and different kinds of efforts to restrict union organising, economic growth has occurred alongside an improvement in labour standards. The ability of foreign investors, even in the least-skilled groups, to build a path to higher-skilled operations has generally been associated with an improvement in the working condition of the labour force.

In the case of Costa Rica, a recent study by Jenkins (2005) indicates that, in 1989, traditional exports, such as coffee, bananas, sugar and beef, comprised almost 40% of total exports. By 2001, however, these products represented only about 15% of the total. EPZ exports (all non-traditional) accounted for less than 8% of total Costa Rican exports in 1989, but almost 47% in 2001. However, Jenkins also finds that while the EPZs have been successful in attracting foreign investment, and in inducing domestic firms to provide about 15% of the total investment, the EPZs have mainly benefited the central region of the country, near the capital of San José. Furthermore, the locally owned firms located in the EPZs were found to be more likely to source their intermediate inputs locally.

The study by Jenkins also provides some preliminary evidence that workers in the EPZs were on average better paid than their counterparts outside of the zones in similar occupations, and that the working conditions in the EPZs were similar or better than those in the rest of the economy. As in many EPZs, firms in Costa Rica tended to hire relatively more young and uneducated women than the rest of the economy, which reinforces the need to closely monitor employment conditions to prevent exploitation.579

While then it is possible – indeed likely – that labour standards will improve as a result of increased openness brought by globalisation, this does not mean that there is no role for the international community in overseeing this process. As regards an appropriate institutional response, Moran (2002) argues that using the WTO to counter an alleged hidden subsidy induced by low labour standards is not a viable proposition. He suggests, instead, that voluntary codes of conduct and other certification mechanisms offer more promise, providing that a credible system for identifying plants that meet the certified standard is in place. To be effective, such certification schemes need to reconcile the demands of industry with those of civil society, and be simple enough to convey their message effectively to consumers.
Provided that some established standards are in place, the ‘naming and shaming’ of any transgressors can be an effective enforcement mechanism. Indeed, in all likelihood, such techniques are likely to be more effective than relying on dispute resolution procedures within multilateral bodies. The accumulated knowledge of the ILO has increased its capacity to identify and publicise abuses of labour standards, and, almost certainly, more could be done to foster voluntary efforts to monitor and remedy violations of standards. However, in common with other multilateral bodies, the ability of the ILO to take independent enforcement action has been hampered by the difficulty of gaining uniform support among its members.

13.7.2 Child Labour

Poverty is the root cause of the use of child labour. From a technical point of view, there is generally no reason to prefer the labour of children to adults, but rather the preference is due to the lower wages payable to children. Additionally, sending children to work is conditioned by social pressure and the stigma attached to child labour (Basu and Tzannatos, 2003). Social norms can be compatible with multiple equilibria, so a situation of no child labour, once established, tends to become embedded, while a situation that initially allows for child labour also tends to persist, as child labour becomes an accepted part of the social economy. The children of labourers are also more likely to become labourers themselves, which is evidence of a kind of a dynastic trap.

There are empirical problems with both under- and overcounting the numbers of children at work, but in 2002 the ILO put the figure of child workers to be around 186 million. Other than forgoing the opportunity to partake in education, the consequences of child labour may include damage to the child’s health, the adoption of self-defeating attitudes, and, perhaps most important, loss of the joy and freedom of childhood per se. However, efforts to reward children for going to school instead of working, for example, by offering them free meals, has been found to be effective in reducing the incidence of child labour.

The work of children is primarily carried out in the non-traded and informal sectors of developing economies, and it is largely absent in the EPZs (Shelburne, 2001). However, children might participate in some kinds of putting out work to a domestic supplier, or even be employed by a lower-level subcontractor. Research suggests that countries that are more open to trade, and have attracted higher stocks of FDI, have a lower incidence of child labour (Neumayer and De Soysa, 2005). It is thus a problem of those left out, rather than those who are part of the global economy. As in the case of industrial pollution discussed in Chapter 18, the problem of child labour stems largely from domestic sources, and requires coordinated action by national governments to address. MNEs clearly have a role to play, and should be encouraged to improve the standards in the export-orientated parts of the economy, but by themselves, such efforts alone can make only a marginal contribution to resolving the issue.

Shelburne (2001) provides an explanation for the variation in the prevalence of child labour between developing countries that rests on a somewhat different argument. While child labour is principally perceived as a moral issue in the developed world, in much of the developing world it is first and foremost an economic issue. It is therefore reasonable to ask under what circumstances does the rest of the economy benefit from the use of child labour. He both presents a theoretical argument, and offers some empirical evidence,
which shows that countries that are relatively closed, small and with low GDPs per capita, are likely to employ a higher proportion of child labour than those that are larger, more open and wealthier. The reason for this, he suggests, is that in autocratic and closed countries, there are likely to be positive returns to capital from the use of child labour, and little incentive for the ruling classes to change the status quo. In more democratic regimes, there is increasing demand for the economic benefits derived from trade openness, which in turn render the use of child labour comparatively less attractive.

The suggestion that increased openness and democratisation, facilitated by globalisation, is itself a mechanism that reduces the gains to other members of society from employing child labour, also implies that trade sanctions on an economy-wide scale would be counterproductive in addressing the problem. This is a view also held by Martin and Maskus (2001), who argue that using trade sanctions such as tariffs against countries that have failed to adopt the appropriate core labour standards, risks injuring the group harmed by the weak standards in the first place. Like antidumping and countervailing duty procedures, such proceedings also risk being captured by influential home country producers, to say nothing of the difficulty of calculating the extent of the damage.

### 13.8 MNEs AND HUMAN RESOURCE DEVELOPMENT: SOME POLICY CONSIDERATIONS

This chapter has sought to demonstrate some of the more important employment-related consequences of the activities of MNEs for the utilisation and upgrading of human resources. Although local laws, customs and macroeconomic policies may appear to determine the conduct of such companies more than in some other operational spheres, there is enough evidence to suggest that such companies can and do make a distinctive impact on the level and structure of employment training, wages and working conditions, labour recruitment, the work ethic and industrial relations. Indeed, with their cross-border experiences of attitudes to work, wealth and authority, MNEs should be in a unique position to employ the best labour-related practices – that is, providing they interpret the local response to unfamiliar practices correctly!

The impact of MNEs on the level and structure of domestic employment basically arises from the output they produce and the methods they choose to produce that output. Because of their unique O-specific advantages, this impact is likely to be different from that of uninational or indigenous firms. Whether it is in some sense ‘better’ depends largely on the **raison d’être** for the investment, the culture and institutional infrastructure of the source and recipient countries, the market structure in which the MNE competes, the economic conditions in the country in which it operates and the human resource management strategies it utilises.

Government action may extend from facilitating an educational and technological infrastructure and a cultural ethos favourable to development, to instigating a wide range of specific economic measures and institutions designed, for example, to encourage the production of high-skill products and production processes, to steer firms to set up factories in regions of high unemployment, to foster more in-house management training, to discourage inflationary pay settlements, to promote more consultation between management and workers over corporate planning, to spend more on vocational training in
colleges, to fund more R&D in universities, and to lessen the transaction costs of structural adjustment.

But it is one thing to describe what might be done, and quite another to prescribe what should be done. In this respect we might offer six ingredients which, in our opinion, are essential for a successful human resource development strategy. First, any government must be clear on the priority it assigns to such a strategy vis-à-vis other actions designed to advance its other economic and non-economic goals. This priority is likely to vary between countries and in the same country over time, according to, for example, the overall economic climate, the current state of the domestic labour market, the perceived need for upgrading human resources, and the other claims on its resources.

Second, the government needs to consider whether its employment problems can be solved by appropriate macroeconomic (that is, fiscal, monetary or exchange rate) policies and the cost of doing so. As Graham and Krugman (1989) correctly point out, inward direct investment in the US has had very little net effect on the level of overall domestic employment, simply because, at the end of the day, this variable is ‘essentially determined by supply, not demand, except in the short run’ (p. 48).

Third, the government needs to identify the extent and pattern of imperfections in the labour market, including those that arise from endemic market failure. It then has to decide, from a whole range of possible policies and incentive structures, which are most likely to be the most cost effective in meeting both its manpower and human resource development and its broader economic and social goals.

Fourth, the government must seek to ensure that its domestic absorptive capacity is sufficient for it both to attract foreign firms and to benefit fully from the unique technologies, skills and experience they have to offer. Such an absorptive capacity not only requires a healthy, literate and skilled labour force (itself a tall order for some developing countries) but also a well-motivated and upwardly mobile one. For, if foreign affiliates are not simply to redirect skills and talents away from indigenous firms or, even worse, contribute to the international brain drain by relocating domestic high-value activities to one of the foreign investors’ other plants, the government has to provide them, and, for that matter, its own MNEs, with the necessary incentives to embed themselves firmly in the local economy.

Fifth, it is essential that any policy on human resource development is fully and efficiently integrated with the rest of government economic strategy. Inter alia this implies that governments should facilitate, not restrict, the restructuring of their economic activities to meet changing market conditions. Where possible, they should foster the movement of labour into more-productive activities.

Sixth, governments need to acknowledge that, in promoting their human resource strategies, they are in competition with other governments seeking to do the same thing. At the same time they also need to recognise that many of the MNEs they would like to help them in this task are pursuing global strategies. As Chapter 20 will describe in more detail, there are inherent conflicts of interest between the legitimate goals of MNEs, and the equally legitimate goals of host country governments. However, the onus to resolve these conflicts rests primarily with national governments – sometimes unilaterally and sometimes multilaterally. This is because it is governments that bear the ultimate responsibility for the fashioning and implementation of the institutional framework and economic policies which will determine the extent to which, and the ways in which, the
O-specific advantages of MNEs are localised to fit their particular needs and aspirations for economic growth.

At the same time, in the formulation of their human resource development strategies, governments need to examine the extent to which any of their existing institutional initiatives and policies might be causing the problems they are seeking to cure. For example, import protection policies may inhibit MNEs from engaging in job-creating export-orientated activities because they cannot (or are not permitted to) obtain the materials, parts and components of the quality they need to compete effectively in foreign markets. Subsidised interest rates or overgenerous capital grants (or depreciation allowances) may discourage firms from seeking new and efficient labour-intensive production methods. A poorly designed educational system, a dated innovation system, or a retrenchment in university or technical college research budgets may reduce the supply (and possibly raise the price) of scientific, engineering and professional personnel, thereby lessening the attraction of the country in question as a location for high-wage activities – to both domestic and foreign MNEs. An inability for wealth holders to convert dormant capital into productive assets, and so improving the employment prospects of the poorer strata of society, is a real handicap in several developing countries.581

Lax sourcing standards by government purchasing agencies may give little incentive for foreign or domestic firms to upgrade the quality of their products – and hence their international competitiveness. Subsidisation of ‘lame duck’ or inefficient industrial sectors may impede resource reallocation, manpower retraining and improved labour productivity. A penal tax system may encourage emigration or give individuals little incentive to upgrade their skills and talents. Too-high interest rates and poor rewards for risk-taking entrepreneurship and innovation may discourage the setting up of small firms, which often provide the venues for new initiatives and ideas, as well as opportunities for new employment. An ineffectual or unduly rigorous set of anti-monopoly measures might dissuade firms from concluding the kinds of domestic or cross-border alliances and mergers necessary to sustain or promote competitiveness and, hence, profits and employment.

Lastly, as globalisation proceeds there is increasing pressure for labour standards to be included in the legal structure of international organisations. However, there is little consensus on this issue. While the EU is in favour of linking investment and trade to the enforcement of fundamental workers rights, neither the US nor many developing countries (for somewhat different reasons) support this view. The breakdown of the Multilateral Agreement on Investment (MAI) negotiations referred to in Chapter 20 is another example of the difficulties in obtaining a global consensus on this issue. On the other hand, the ILO is taking upon itself the responsibility of assisting governments that are willing but not able to enforce labour standards. MNEs can, and to some extent, act as trailblazers in raising standards. We believe that both national and supranational policy should do all that it can to facilitate this role, without compromising other goals of developing countries.582 Some of the policy-related issues touched upon above will be explored in more detail in Part IV.

Several chapters in this volume have highlighted the growing inequality between countries (and between regions within countries) in terms of their ability to attract FDI, and to derive long-term benefits from MNE investment. This chapter, in particular, has highlighted the growing gap between skilled and unskilled labour, that is, in many cases, made wider by trade and FDI. The increase in part-time and temporary employment, a growing
wage and income gap, and a significant move towards less-progressive systems of taxation in a large number of countries during the 1990s have deepened concerns about the social effects of globalisation. The four pillars of education and training, a social safety net, labour law and industrial relations and core labour standards are all necessary to ensure decent work in the global economy (Torres, 2001).

While firms can make mistakes and wrong moves in the process of their internationalisation, on average we can assume that firms are better off as a result of the investments they have made. However, for geographically bound citizens, their ability to respond in an equally flexible manner is much more constrained, although the migration of Indian, Chinese, Irish and Israeli entrepreneurs to the US and back is a striking example to the contrary. Increased investment in tertiary education in developed countries, and the prospect of lifelong learning after graduation, is meant to ensure that people are able to respond to the challenges of the global economy, wherever they live. Appropriate and robust host country institutions not only enable the indigenous labour force to attain a suitable level of training and skills in order to be able to participate in the global economy; they also help to ensure that the restructuring of the quality and use of human resources that is inevitable as a country moves up its development path, occurs with the least transaction costs and disruption to the lives of ordinary people.

At the same time, institutions matter inside the MNE as well. As we have seen, the standards and practices transferred by MNEs are shaping the way in which people work and live around the world. A sustainable global economy requires an institutional framework that is robust, relevant and effective, on the part of both the national governments and large MNEs. Codes of conduct are one step in this direction, but unless such codes influence actual behaviour within the firms that is consistent at all levels of the organisation, they will have limited impact. For example, while a simple ban on child labour is easy enough to institute, it requires the cooperation and resources of national governments to ensure that children move from work to education, and not to worse forms of poverty. We are not suggesting that MNEs should take onto themselves the burden that falls heavily on host governments, but that they need to employ some of their formidable resources to ensure that their activities are sustainable, and contribute to a better form of globalisation. This and other points are taken up by the ILO (2004a) in its report entitled *A Fair Globalisation: Creating Opportunities for All*. In it, the authors plea for a better and more effective partnership between national governments – the leading fashioners and executors of institutions and policies – and firms, particularly MNEs, as the main creators of wealth, in the design and implementation of labour-related incentive structures which will best promote their shared objectives.
14. The balance of payments and the structure of trade

14.1 INTRODUCTION

As part of their wider economic strategy, governments of most countries keep a watching brief over their external trade and balance of payments position. This is for two reasons. The first is to make certain that the exchange rate and other macroeconomic variables which may impinge upon the terms on which a country trades with the rest of the world are compatible with the attainment of its broader economic and social objectives. The second is to ensure that the structure of the cross-border transactions of its citizens and firms is consistent with the internal allocation (or reallocation) of resources and capabilities which the governments wish to promote. The structural impact of MNE activity is examined more closely in the following chapter.

To a certain extent at least, both these concerns are likely to be country specific, although, as the globalisation of the world economy increases, the latitude open to national governments for unilateral trade and balance of payments adjustment policies is becoming much reduced. The OECD countries, for example, accept that it is necessary to adopt broadly similar external economic mechanisms in order to minimise the shocks of unexpected international, political, financial and monetary events. As more nations are caught up in the web of international commerce, it might be expected that their external economic policies will be increasingly exogenously determined. Nevertheless, there are still a gamut of domestic incentive structures and regulations which, directly or indirectly, may affect the economic and social objectives of countries as a result of their impact on the balance of payments, and where the strategies and behaviour of MNEs affects the external trade balance of countries differently from those of domestic companies. This might induce a different response on the part of governments. Generally speaking, however, the macroeconomic effects of FDI are (or should be) only of concern to governments where, first, there is a persistent imbalance of trade flows which is proving a constraint on the policies designed to upgrade the quality and improve the allocation of indigenous resources, or to promote growth and development; and second, where such investment accounts for a major part of all value-added activities in the home or host economy.

Policies directed towards creating an optimum structure of domestic economic activity are likely to be even more country specific, partly because of the widely different attitudes of countries (or, more correctly, governments of countries) to being part of the international division of labour; and, given these attitudes, because of differences in their policies and institutional mechanisms to achieve these goals. For example, countries that wish to be as self-sufficient as possible in the production of goods and services (for example, India and China at different times) will judge the contribution of firms (domestic or foreign
owned) to the composition of their exports and imports very differently from those which see their prosperity being inextricably linked to promoting their dynamic comparative advantage (for example, Singapore, Taiwan, the Netherlands, Costa Rica). In so far as MNEs do promote a different sectoral distribution of economic activity and a different pattern of imports and exports from indigenous firms, then it might be expected that they might induce distinctive proactive and reactive strategies by governments.

This chapter, then, will be concerned with evaluating the impact of the activities of MNEs on the balance of payments and on the structure of trade of both home and host countries. It will argue that this impact will depend on the interaction between the configuration of OLI advantages of firms and the policy profiles and institutional characteristics of countries. It is the extent and nature of this interaction – and particularly how it varies as countries move along their investment development paths – which will be the subject of our analysis.

We begin by looking at some methodological problems associated with identifying and measuring the impact of one particular group of enterprises on the external trading position of a country. We then review the evidence of the impact of MNEs on the balance of payments of their home and host countries, and particularly their role as cross-border traders. We shall also present some evidence on the prevalence of intra-firm trade and discuss some of its implications. This is followed by a review of the effects of MNE activity on the structure of host country exports and imports, and of how this differs from that of unnational firms. We conclude with a note on policy and institutional effectiveness that touches on the present weaknesses in the international financial system.

14.2 A METHODOLOGICAL NOTE

14.2.1 Measuring the Direct Effects of MNE Activity

Earlier chapters (especially Chapters 11 and 13) have described the difficulty of attributing certain actions which are associated with the activities of MNEs to their multinationality per se. Nowhere is the problem of attribution more clearly seen than in the context of trade patterns and the balance of payments. For, in assessing the effects of inward and outward direct investment on the external accounts of a particular home or host country, some assumption needs to be made as to what might have happened had that investment not been made. In other words, what are the benefits which might have been obtained by allocating the domestic real resources deployed by inward or outward direct investors in some alternative way? If the answer to this question is ‘nothing’, then their impact will be measured by the transactions identified with their activities. However, this is unlikely to be the case.

It is, of course, perfectly possible to identify scenarios which would generate positive, negative or neutral balance of payments effects arising from MNE activity. Much depends on the types of FDI being considered and whether one is taking a home or a host country perspective. Resource-based and export-processing investment, for example, is undertaken primarily to obtain inputs more economically than would have been the case under different ownership. Compared with this alternative position, they may improve the
balance of payments position of both the host and home countries (but worsen the balance of payments position of a third country). By contrast, market-seeking investment is aimed at substituting exports (or potential exports) from the home production unit (or, possibly, production units in other countries). This will probably improve the balance of payments of the host country, while the effect on the home country is likely to be ambiguous. For example, by reducing exports of the home country, the balance of payments could be adversely affected. On the other hand, if the investment results in higher efficiency and/or additional purchasing power in the host country, it could benefit the home country, both by additional expenditure on imports by the former, and by increased exports of materials, parts and components from the parent company. Asset-acquiring FDI may either improve or worsen the balance of payments of the investing country depending on (a) the trading position of the acquiring firm prior to its FDI and (b) how the acquiring company integrates the foreign purchases and sales of the acquired company with the rest of its global operations.

Some scholars eschew the alternative position or counterfactual approach to assessing the impact of MNEs on the balance of payments, precisely because of the difficulty in identifying and assessing its appropriate opportunity cost. They also believe that such exercises do not, and cannot, properly take account of the macroeconomic consequences of these activities.

These scholars fall into three groups. The first looks at the differences in performance (as it affects the balance of payments) of the foreign affiliates of MNEs and that of indigenous firms. It is assumed that the secondary repercussions, including those sparked off by changes in government policy, of both kinds of activity will be the same. Examples of such comparative studies include those of Dunning (1969) and Cohen for the UK (1975), Ruane (2004) for Ireland, Lecraw (1983) for various countries in Asia, Rasiah and Rasagam (2004) for Malaysia, Jenkins (1979) and Rasiah (2004c) for Brazil, Biersteker (1978) for Nigeria, Rasiah and Gachino (2005) for Kenya, and Lall and Streeten (1977) for a group of developing countries. The attractions of such an approach are obvious. Actual data are available, and a comparison of past and current performance and of changes in performance can be made. But the pitfalls are many. Not least among these are isolating the effects of foreign ownership and/or multinationality from other differences between the two groups of firms. Moreover, to draw any policy conclusions from these data, for example, with respect to encouraging or discouraging inward or outward direct investment, one has to assume that the marginal and average impacts are the same and that the real opportunity cost lies in the ownership of activity rather than in its other characteristics. Finally, this approach implicitly assumes that, in the absence of FDI, the investment would be undertaken by other firms.

The second, and related, approach by scholars has been to compare the external transactions of MNEs or their affiliates, with those of non-MNEs or indigenous firms prior to the investment being made. This approach is most likely to be useful at a micro (project) level and was, in fact, used by Reuber and his colleagues and by Lall and Streeten in their study on FDI in developing countries in the early 1970s (Reuber, 1973; Reuber et al., 1973; Lall and Streeten, 1977). More recently, Ramstetter (1997) has compared the export propensity of local and foreign firms in Thailand and Singapore.

The third group of scholars takes a very different tack. They seek to estimate – usually by means of regression analysis – the direct relationship between outward or inward direct
investment and one or more of the components of the balance of payments. An early use of this methodology was that made by Bergsten et al. (1978) who, in their study of the effects of US overseas direct investment on the US balance of payments, related the external trade performance of a number of US manufacturing sectors to a variety of industry characteristics, each of which they cross-tabulated with the degree of outward foreign investment. The authors then went on to construct and test a series of cross-sectional multiple regression equations which attempted to relate the investment behaviour of US firms to US exports and imports. They concluded that, in sectors with a minimal foreign investment, an expansion of outward investment was likely to be matched by an expansion of American exports. However, at modest to high levels of foreign investment, this kind of complementarity was less evident. As we shall see in the following section, this particular approach is favoured by scholars investigating how FDI affects the trade composition of particular countries, for example, Wei and Liu (2001) for China, Rasiah (2004b) for Indonesia, Rasiah and Gachino (2005) for Kenya, Ruane (2004) for Ireland, and Fontagné and Pajot (2001) for the UK, France and the US.

One final methodological point relates to the measurement of the balance of payments effects. We have stated that, in the last resort, it is the macroeconomic policies of governments rather than any actions taken by one group of firms which determine the trade balance of a country. By definition, the current account deficit is equal to the difference between domestic investment and savings. It follows, then, that any deficit can be cured only by increasing either domestic or foreign savings. The principal mechanism through which the savings and investment identity is reconciled with the microeconomic decisions about trade is the exchange rate (Graham and Krugman, 1989). Thus, it is quite possible that the effects of FDI will be shown as much in a country’s exchange rate as in its balance of payments position. This does not mean that the latter effect is unimportant. A weaker exchange rate associated with the financing of a greater tendency for foreign firms to source their inputs from abroad may make it more difficult for a country (especially a developing country) to grow or restructure its activities in the way it wishes.

The macroeconomic approach to evaluating FDI should then also attempt to look at the dynamics or second-order effects of the activities of MNEs, as they may be reflected in a change in the value of the exchange rate as well as the structure of exports and imports.

14.2.2 Assessing the Opportunity Cost of External Transactions by MNEs

It is a great temptation to identify and aggregate the external transactions of MNEs or their affiliates and to conclude that the resulting figure – be it a net improvement or deterioration on the balance of payments account – is the full measure of their activities. Indeed, some writers have gone as far as to argue that the balance of payments consequences of inward or outward direct investment are best measured by the ratio between the profits and interest earned on FDI, and the capital outflow which generated the investment in the first place. They further argue that a ‘balance of payments’ return on capital may be computed, which *inter alia* identifies the number of years it might take to ‘pay back’ any given amount of capital exported.

Other analysts, such as Hufbauer and Adler (1968), Reddaway et al. (1968), Steuer et al. (1973), Lall and Streeter (1977), Caves (1982 [1996]), Stopford and Turner (1985), Brainard (1993), Ethier and Markusen (1996) and Markusen (2002a), while accepting...
that the inflow (or outflow) of capital and outflow (or inflow) of earnings on that capital are among the more distinctive characteristics of foreign (direct) investment, argue that some of the secondary consequences, for example, on trade costs, factor prices and the transfer of knowledge capital, may also be very different from those arising from the activities of uninalational firms and that, indeed, in some circumstances, they may have more important consequences for the balance of payments than the earnings/capital equation.

In this subsection we are concerned with some of the conceptual questions which have puzzled researchers since the 1960s. At that time, several developed economies, including the UK and the US, were faced with (what was perceived to be) a fragile balance of payments situation. At that time, too, it was observed that outbound MNE activity was increasing and exerting a more pronounced influence on both trade and capital movements.

In the mid-1960s, two major enquiries were commissioned by the US and UK governments to identify and evaluate the main consequences of outward direct investment on the structure of trade and the balance of payments of their respective economies. Both sought to identify and measure the external transactions of home-based MNEs arising from their foreign activities, and to calculate what might have occurred in the absence of such investment. The US enquiry, undertaken by Gary Hufbauer and Michael Adler (1968), considered three possible counterfactual situations. These were called the ‘classical’, the ‘anti-classical’ and the ‘reverse classical’ substitution models. In describing these models we are aware that they are now 40 years old. Yet we believe that they still provide a useful analytical approach to evaluating the trade and balance of payments effects of MNE activity in our contemporary global economy.

The classical substitution model postulates that a unit of capital invested abroad will cause a unit net addition to capital formation in the host country but a net decline in capital formation at home. In other words, FDI is assumed to replace investment in the exporting but not in the importing country. Under the reverse classical assumption, FDI fully substitutes for other investment in the recipient country, but causes no net decline in capital formation in the home economy. In both these models, MNE activity is assumed not to affect the global volume of investment – only its geographical composition. By contrast, a third model considered by the American economists – the anti-classical model – postulates that FDI increases world capital formation. Under this formulation, no substitution takes place at home or abroad; foreign investment increases plant capacity abroad but has no effect on domestic capital formation at home.

Which of the above scenarios is, de facto, likely to be most appropriate will depend on the further assumptions one makes about the aims and achievements of macroeconomic policy in both the capital-exporting and -importing countries, the state of the global economy, and the strategic behaviour of the investing firms. If both countries are successful in maintaining full productive employment and an equilibrium exists between planned savings and investment, it follows that a change in the capital formation by an MNE must be offset by a fall in domestic expenditure elsewhere – be this investment or consumption. In this event, the reverse classical assumption seems to fit. If the investing country achieves this goal but there is unemployment in the host country, the anti-classical model would appear the more realistic. If it is assumed that MNE activity evokes no response on the part of either home or host governments, then the classical model would seem to be the most appropriate.
The assumptions made about the strategies of firms will also influence the effects of FDI. Take, for example, the reverse classical substitution model. The hypothesis is that, in the absence of investment by one company, the same investment would have been undertaken by a competitor. For example, if Goodyear had not set up a plant in (say) Australia to produce rubber tyres, Michelin would have done so. Thus the direct effect on the US balance of payments of Goodyear’s investment is given by the external transactions associated with that investment less the transactions associated with the Michelin investment. Now, it is not too difficult to think of situations where this assumption is an eminently plausible one, particularly where competing firms are of comparable size and efficiency. But this is not always the case. Much obviously depends on the amount and structure of the investment concerned. Moreover, we have seen in Chapters 3 and 4 that some investments may encourage others and that, far from being competitive, these ‘follow my leader’ investments are likely to be complementary. Finally, the response of one MNE to the actions of another may have more to do with the quality of its investment, and/or its product differentiation and innovatory strategies, rather than the quantity of output it produces.

What, then, is the most realistic alternative model to assume? Any model which postulates that all output generated by FDI is additional to that which would have been produced in its absence is unlikely to be generally applicable. In the post-war years, for example, with a few notable exceptions (for example, Singapore, and more recently China and several Central and Eastern European economies), there appears to be little correlation between the rate of growth of GDP in particular countries and their import of foreign direct capital (see Chapter 10). Japan is the classic case of an economy which until the 1990s at least has managed very well without much investment from abroad. At the same time, in the 1970s and 1980s, the Japanese government positively encouraged outbound direct investment in certain sectors. Similarly in the early 2000s the Chinese and Korean governments are pursuing an active policy in assisting the globalisation of some of their larger firms (Zhang, 1995; Van den Bulcke and Zhang, 2005). Much seems to depend on the macroeconomic stability and openness of particular host countries, and whether or not it is perceived that the employment- and growth-stimulating effects of MNE activity can be achieved through alternative routes (Blomström et al., 2000). Nor must one neglect the secondary consequences of both inbound and outbound FDI on resource allocation and restructuring, skill upgrading and on the content and quality of domestic institutions.

It is doubtful if any one model can adequately explain the effects of not investing – unless it contains the ingredients of each of the models discussed. In most cases, a reduction in outbound foreign investment by one country is likely to lead to some additional imports of competitive products from the investing country as well as some reduction in the rate of capital formation in the host country. No generalisation on the precise combination of these variables seems possible. It will vary inter alia according to the institutional configuration and state of development of the host country, the character of the investment and the nature of competition between the investing (or prospective investing) firms. It may also depend on the time period being considered.

One possible way out of this seemingly intractable problem is to adopt an approach which is a hybrid of the reverse and anti-classical models. This is, in fact, what Jack Behrman sought to do many years ago (1969), and his solution is no less relevant today – at least for
firms engaging in greenfield asset-exploiting FDI. Behrman argued that in conditions of international oligopoly, FDI by one enterprise, instead of replacing an alternative investment, may actually trigger off an investment by a competitor, as oligopolists are more likely to enter than stay out of markets in which their competitors are operating. For the *initiating* firm, then, the balance of payments effects of not investing becomes the difference between the transactions involved when *both* the initiating firm and its competitors are producing in the market in question, and those which would have occurred had *neither* company invested. To the *following* firm, it is the difference between the transactions involved when both groups of firm invest and those involved when only the initiating firm invests. Both these models can be formulated on the assumption that FDI either does or does not affect the level of market activity in the host country. When this constraint is removed, we have a situation in which the impact of MNE activity is to *add* to the capital formation and output of the host country, but, at the same time, is accompanied by a similar amount of investment by a competitor.

14.3 MEASURING THE TRANSACTIONS OF MNEs

14.3.1 Identifying and Evaluating the Transactions in the Home and Host Countries: Some Analytical Issues

The external transactions associated with the activities of MNEs have an impact on the capital and current balance of payments accounts of both home and host countries. These transactions embrace both those undertaken directly by MNEs or their affiliates, and indirectly by other domestic enterprises with whom they have dealings (for example, suppliers and customers).586

Take, for example, the external transactions associated with an MNE’s outward investment. First there are the initial capital transactions. Normally, outward FDI is likely to lead to a purchase of foreign currency, a minus on the capital account. However, in the case of some M&As there may be an exchange of shareholdings between the parties to the exchange, as a result of which an outflow of foreign currency is immediately matched by an inflow. In the case of greenfield investments, for example, most market-seeking Japanese FDI in Europe, much of US export-processing investment in South-East Asia and Mexico, and the greater part of European-owned natural resource-based activity in sub-Saharan Africa, a substantial part of the foreign currency loss is likely to be clawed back through the purchase of machinery and capital equipment from the home country, which is a plus on the capital account.587 Subsequently, there may be additional capital outflows or, in the case of a sale of foreign investments, a capital inflow. These outflows may be financed out of reinvested earnings from existing investments, or by new capital provided by the parent company. They could also be financed by funds supplied by other foreign affiliates of the MNE, but, in the last resort, these also represent a drain on the foreign currency reserves of home countries. Of course, MNEs have other means of financing their foreign operations, which may not immediately affect the capital account of the investing country. These include short- or long-term loans secured from institutions in the host country of the affiliates, or from the international capital market or, in the case of joint equity ventures, from additional equity capital from local or other foreign partners.
Second, there are the current account transactions of an outward investor. Operating a foreign affiliate may affect the current account of the home country in four main ways. First, the affiliate may buy intermediate goods (for example, materials, components, semi-finished goods) for further processing or fabrication from its parent company, or from other enterprises in the home country. Second, it may import finished goods for local distribution or re-sale. Third, the parent company is likely to provide its foreign affiliates with a range of intermediate services (for example, technical know-how, marketing information, and administrative, managerial and accounting expertise), for which it charges royalties and management and other fees. Fourth, and this may especially be the case where the FDI is an efficiency- or strategic asset-seeking kind, it may increase its visible or invisible imports. Each of these transactions affects the balance of payments of the home country, in one way or another.

For example, according to some estimates made by UNCTAD (2006:179), in 1992, 1997 and 2002, the net balance of payments impact of outward FDI to the US was consistently positive for Brazil, Mexico, Hong Kong, Singapore, Malaysia and Taiwan, and strongly positive for South Korea. This was calculated by subtracting the FDI outflows from all the positive flows associated with the outflow, namely repatriated profits, exports less imports between parent firms and their affiliates, and net receipts of royalty and licence payments.

In addition to the impact on the external transactions of the investing firms, there are likely to be second-order or spillover impacts on other firms in the home economy. For example, if as a result of a foreign acquisition, an electronics MNE finds its exports reduced by 10%, then this will reduce the import component of such exports, including that contained in any subcontracted materials, components and parts. Likewise, any increase in indirect exports associated with efficiency-seeking FDI, for example, by suppliers to the investing firms, is likely to lead to an increase in indirect imports as well. The limited evidence available on home country spillover effects will be reviewed in Chapter 16.

A similar assessment may be made of the external transactions of the host country associated with inbound investment. Broadly speaking, these are the reverse of those just identified for home countries. FDI has a direct impact on the host country’s balance of payments as an inflow on the capital account. In addition to this, FDI has indirect effects by contributing to the appreciation of the real exchange rate of the recipient country, by changing the balance of exports and imports (including the licensing of technology), and through eventual profit repatriation.

The most apparent effect of an appreciation of the host country currency due to increasing flows of FDI would be to make its exports less competitive, other things being equal. (Of course, whether exchange rates adjust fully, or at all, is affected by many other factors, including large volumes of speculative flows.) Independent of any exchange rate-induced changes on the current account, inward FDI itself is also likely to result in changes in the balance of exports and imports, depending on the motivation for, and the type of investment. An export-orientated investment by, for example, resource-based and rationalised subsidiaries, would be expected to contribute towards a positive trade balance by increasing exports, but this effect naturally should be calculated as a net increase, after deducting the imports of intermediate products. An investment primarily designed to supply a product to a foreign market, which is prompted by the imposition of tariffs or other import controls on final goods, might, depending on the sourcing
policies of the MNE, induce considerable increases in the imports of intermediate goods or services to the host country. As we have seen, the trading consequences of strategic asset-seeking investment are likely to be ambiguous, depending on the type and raison d'être for the investment. Finally, any payments for the inward transfer of technology in the form of royalties and licence fees will also increase the demand for foreign exchange.

Further demand for foreign exchange will arise in connection with any eventual repatriation of the profits of the MNE affiliate, that is, those that are not reinvested in it. Indeed, one benefit of FDI (or portfolio investment) over foreign debt financing is that while debt requires a steady stream of repayments, profit repatriation occurs only when the affiliate is making a profit, and is thus more likely to occur at a period of relative economic prosperity. Additionally, it might be assumed that the terms of repayment of an intra-company debt might be more easily negotiable than those agreed with arm’s-length financial intermediaries, although we are not aware of any empirical studies comparing the payment conditions of intra-firm and external debt.

Thus, in order for FDI to have a neutral direct impact on the balance of payments in the years following the initial investment, a foreign affiliate should generate enough foreign exchange to cover not only its imports, but also the payment of any royalties and licence fees, as well as the repatriation of profits and interest paid to the foreign parent.

Other than the effects related to the MNE per se, there may also be important spillover effects to the host economy that continue to influence the balance of payments (Blomström et al., 2000; Rasiah, 2004b). Increased production by domestic firms may induce more imports, or result in more exports. Additionally, to the extent that an inbound foreign investment may induce domestic investment in supplier firms, or in competing domestic firms, the financing of such investment may involve increasing levels of international debt, thus raising the demand for foreign funds. The latter is frequently of concern to developing countries, particularly in cases where domestic capital markets are unable to provide sufficient funds to finance expansion. (The extensive literature on these and other kinds of spillover effects will be discussed in Chapter 16.)

From a macroeconomic viewpoint, it also matters whether the host country is seeking borrowed growth or borrowed consumption, that is, whether inflows of foreign capital are used to finance high levels of imports, or to boost domestic investment. An investment boom is more likely to increase exports, even allowing for some profit repatriation, whereas a consumption boom is likely to induce larger current account deficits. Borrowing from abroad (running deficits on current account) brings the risk of financial instability. Since the real economy adapts more slowly than the financial markets to changes in external conditions, the greater the ratio of foreign-owned assets to international reserves, the larger the potential problem (Gray and Dilyard, 2005).

For illustrative purposes, Table 14.1 shows the US balance of payments at five-year intervals between 1980 and 2004. The balance of payments consists of two sets of accounts: those involving current account transactions and those involving capital account transactions. If current expenditures exceed current receipts (exports of goods and services exceed imports, for instance), the dissaving must be financed by corresponding inflows on the capital account. These inflows can be in the form of FDI, or portfolio investment to acquire equities and debt instruments. Imbalances can be driven by transactions on either the current account or the capital account.
Table 14.1  The US balance of payments (millions of US dollars)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Exports of goods and services and income receipts</td>
<td>344,440</td>
<td>387,612</td>
<td>706,975</td>
<td>1,004,631</td>
<td>1,422,402</td>
<td>1,530,975</td>
</tr>
<tr>
<td>2 Exports of goods and services</td>
<td>271,834</td>
<td>289,070</td>
<td>535,233</td>
<td>794,387</td>
<td>1,071,484</td>
<td>1,151,448</td>
</tr>
<tr>
<td>3 Goods, balance of payments basis</td>
<td>224,250</td>
<td>215,915</td>
<td>387,401</td>
<td>575,204</td>
<td>711,994</td>
<td>807,536</td>
</tr>
<tr>
<td>4 Services</td>
<td>47,584</td>
<td>73,155</td>
<td>147,832</td>
<td>219,183</td>
<td>299,490</td>
<td>343,912</td>
</tr>
<tr>
<td>5 Royalties and licence fees</td>
<td>7,085</td>
<td>6,678</td>
<td>16,634</td>
<td>30,289</td>
<td>43,233</td>
<td>52,643</td>
</tr>
<tr>
<td>6 Other private services</td>
<td>6,276</td>
<td>20,035</td>
<td>40,251</td>
<td>65,048</td>
<td>108,791</td>
<td>145,433</td>
</tr>
<tr>
<td>7 Income receipts</td>
<td>72,606</td>
<td>98,542</td>
<td>171,742</td>
<td>210,244</td>
<td>350,918</td>
<td>379,527</td>
</tr>
<tr>
<td>8 Direct investment receipts on US-owned assets abroad</td>
<td>37,146</td>
<td>35,410</td>
<td>65,973</td>
<td>95,260</td>
<td>151,839</td>
<td>233,067</td>
</tr>
<tr>
<td>9 Imports of goods and services and income payments</td>
<td>-333,774</td>
<td>-483,769</td>
<td>-759,290</td>
<td>-1,080,124</td>
<td>-1,779,620</td>
<td>-2,118,119</td>
</tr>
<tr>
<td>10 Imports of goods and services</td>
<td>-291,241</td>
<td>-410,950</td>
<td>-616,097</td>
<td>-890,771</td>
<td>-1,449,756</td>
<td>-1,769,031</td>
</tr>
<tr>
<td>11 Goods, balance of payments basis</td>
<td>-249,750</td>
<td>-338,088</td>
<td>-498,438</td>
<td>-749,374</td>
<td>-1,224,408</td>
<td>-1,472,926</td>
</tr>
<tr>
<td>12 Services</td>
<td>-41,491</td>
<td>-72,662</td>
<td>-117,659</td>
<td>-141,397</td>
<td>-225,348</td>
<td>-296,105</td>
</tr>
<tr>
<td>13 Royalties and licence fees</td>
<td>-724</td>
<td>-1,170</td>
<td>-3,135</td>
<td>-6,919</td>
<td>-16,468</td>
<td>-23,901</td>
</tr>
<tr>
<td>14 Other private services</td>
<td>-2,909</td>
<td>-10,203</td>
<td>-22,229</td>
<td>-35,199</td>
<td>-62,120</td>
<td>-95,666</td>
</tr>
<tr>
<td>15 Income payments</td>
<td>-42,532</td>
<td>-72,862</td>
<td>-143,192</td>
<td>-189,353</td>
<td>-329,864</td>
<td>-439,088</td>
</tr>
<tr>
<td>16 Direct investment payments on foreign-owned assets in the US</td>
<td>-8,635</td>
<td>-6,945</td>
<td>-3,450</td>
<td>-30,318</td>
<td>-56,910</td>
<td>-105,146</td>
</tr>
<tr>
<td>17 Unilateral current transfers, net</td>
<td>-8,349</td>
<td>-21,998</td>
<td>-26,654</td>
<td>-38,177</td>
<td>-58,781</td>
<td>-80,930</td>
</tr>
</tbody>
</table>

Capital and financial account

<p>| Capital account transactions, net | -44,752  | -81,234  | -352,264 | -560,523 | -855,509 |
| Financial account                 | -7,003   | -3,858   | -2,158   | -9,742   | -290     | 2,805    |
| 19 US-owned assets abroad, net (increase/financial outflow (-)) | -5,162   | -2,821   | 2,317    | -984     | -941     | 1,215    |
| 20 US official reserve assets, net | -73,651  | -38,074  | -81,393  | -341,538 | -559,292 | -859,529 |</p>
<table>
<thead>
<tr>
<th>21 US government assets, other than official reserve assets, net</th>
<th>-19,222</th>
<th>-18,927</th>
<th>-37,183</th>
<th>-98,750</th>
<th>-159,212</th>
<th>-252,012</th>
</tr>
</thead>
<tbody>
<tr>
<td>US claims on unaff. foreigners reported by US nonbanking concerns</td>
<td>-4,023</td>
<td>-10,342</td>
<td>-27,824</td>
<td>-45,286</td>
<td>-138,790</td>
<td>-149,001</td>
</tr>
<tr>
<td>US claims reported by US banks, not included elsewhere</td>
<td>-46,838</td>
<td>-1,323</td>
<td>12,379</td>
<td>-75,108</td>
<td>-133,382</td>
<td>-356,133</td>
</tr>
<tr>
<td>Foreign-owned assets in the US, net (increase/financial inflow (+))</td>
<td>62,612</td>
<td>146,115</td>
<td>141,571</td>
<td>438,562</td>
<td>1,046,896</td>
<td>1,440,105</td>
</tr>
<tr>
<td>Foreign official assets in the US, net</td>
<td>15,497</td>
<td>-1,119</td>
<td>33,910</td>
<td>109,880</td>
<td>42,758</td>
<td>394,710</td>
</tr>
<tr>
<td>Other foreign assets in the US, net</td>
<td>47,115</td>
<td>147,233</td>
<td>107,661</td>
<td>328,682</td>
<td>1,004,138</td>
<td>1,045,395</td>
</tr>
<tr>
<td>Direct investment</td>
<td>16,918</td>
<td>19,742</td>
<td>48,494</td>
<td>57,776</td>
<td>321,274</td>
<td>106,832</td>
</tr>
<tr>
<td>US Treasury securities</td>
<td>2,645</td>
<td>20,433</td>
<td>-2,534</td>
<td>91,544</td>
<td>-69,983</td>
<td>106,958</td>
</tr>
<tr>
<td>US securities other than US Treasury securities</td>
<td>5,457</td>
<td>50,962</td>
<td>1,592</td>
<td>77,249</td>
<td>459,889</td>
<td>369,793</td>
</tr>
<tr>
<td>US liabilities to unaff. foreigners reported by US nonbanking concerns</td>
<td>6,852</td>
<td>9,851</td>
<td>45,133</td>
<td>59,637</td>
<td>170,672</td>
<td>124,358</td>
</tr>
<tr>
<td>US liabilities reported by US banks, not included elsewhere</td>
<td>10,743</td>
<td>41,045</td>
<td>-3,824</td>
<td>30,176</td>
<td>116,971</td>
<td>322,627</td>
</tr>
<tr>
<td>Statistical discrepancy (sum of above items with sign reversed)</td>
<td>20,886</td>
<td>16,478</td>
<td>25,211</td>
<td>28,299</td>
<td>-69,445</td>
<td>85,126</td>
</tr>
</tbody>
</table>

**Memoranda**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance on goods (rows 3 and 11)</td>
<td>-25,500</td>
<td>-122,173</td>
<td>-111,037</td>
<td>-174,170</td>
<td>-452,414</td>
<td>-665,390</td>
</tr>
<tr>
<td>Balance on services (rows 4 and 12)</td>
<td>6,093</td>
<td>294</td>
<td>30,173</td>
<td>77,786</td>
<td>74,142</td>
<td>47,807</td>
</tr>
<tr>
<td>Balance on goods and services (rows 2 and 10)</td>
<td>-19,407</td>
<td>-121,880</td>
<td>-80,864</td>
<td>-96,384</td>
<td>-378,272</td>
<td>-617,583</td>
</tr>
<tr>
<td>Balance on income (rows 7 and 15)</td>
<td>30,073</td>
<td>25,723</td>
<td>28,550</td>
<td>20,891</td>
<td>21,054</td>
<td>30,439</td>
</tr>
<tr>
<td>Unilateral current transfers, net (row 17)</td>
<td>-8,349</td>
<td>-21,998</td>
<td>-26,654</td>
<td>-38,177</td>
<td>-58,781</td>
<td>-80,930</td>
</tr>
<tr>
<td>Balance on current account (rows 1 9 and 17 or rows 38 39 and 40)</td>
<td>2,317</td>
<td>-118,155</td>
<td>-78,968</td>
<td>-113,670</td>
<td>-415,999</td>
<td>-668,074</td>
</tr>
</tbody>
</table>

**Source:** BEA International Accounts Data.
From Table 14.1 we can see the increasing current account deficits of the US, and the change in the external position of the US into a large net debtor. However, it is also apparent that the performance of US MNEs has played an important role in reducing the size of the deficit. The continued surplus on capital income (row 39 in Table 14.1), which represents the receipts of income by US parents from their foreign affiliates less the payments of income to the foreign parents of their affiliates in the US, has compensated in part for the deficit in goods, and thus reduced the burden of external debt liabilities. The positive balance on services (row 37), particularly on royalties and licence fees (rows 5 and 13) and other private services (rows 6 and 14), have also helped to offset the deficit in goods. We return to the consequences of persistent current account imbalances at the end of this chapter.

Let us now briefly review some of the empirical studies which have sought to examine the impact of MNE activity on the level of exports and imports of home and host countries, respectively.

**14.3.2 Some Empirical Results: Home Countries**

Here most studies have focused on outbound FDI and home country exports, with the main question being whether outward foreign investment is a substitute or a complement for home country exports. While in the case of final goods, the shifting of production to the foreign host country would, in all likelihood, imply a reduction in the exports of the good from the home country, much of FDI involves the internalisation of intermediate product markets, and consequently trade in such goods and services on an intra-firm basis. For example, according to the BEA benchmark survey in 1999, 68% of US exports shipped to majority-owned foreign affiliates were goods intended for further processing (Mataloni and Yorgason, 2002).

A foreign affiliate set up in a given host country might stimulate exports of intermediate products from the home country, although increased exports of intermediate inputs from a third country are also a possibility. It is also conceivable that while, in the initial stages following FDI, a large proportion of intermediate inputs are still sourced from the home country, local sourcing might increase over time. This is particularly the case if technology and managerial capabilities spill over into the local economy, and help to develop the competences of local supplier firms, possibly increasing their propensity to export as well. As foreign production matures, foreign affiliates might also displace exports by the parent company to a third country. Some evidence of this was found in the Swedish case by Svensson (1996), who demonstrated that while foreign production increased exports of intermediate goods, it reduced home country exports to a third country. Another possibility, suggested by Kokko (2006), is that international expansion by M&As may make foreign production less dependent on home country exports of intermediate goods.

The impact of outward FDI on increased imports to the home country has not been examined widely, but it might involve a scenario in which the final stage of the production of a manufactured good is carried out in a foreign location, after which the finished product is exported to a number of markets, including the home country. In such a case, the net effect on the home country would consist of the value of the imports of the finished good, net of any exports of intermediate goods to the foreign affiliate, minus any reduction in direct exports to third countries.
Evidence of complementarity between foreign production and exports

We now turn to the more extensive empirical evidence on home country exports. We first consider four studies undertaken in the 1970s and 1980s. The first was a study conducted by Bergsten et al. (1978), which concluded that the production of affiliates of US MNEs abroad over the 1966–72 period had a positive and significant impact on the exports of the US parents to these affiliates. In addition, foreign-controlled value-added activities were found to be positively and significantly correlated with the exports of other US firms in the same industry to that market, so that both the direct effects (exports of the parent company) and the indirect effects were favourable to the host country. In estimating these effects, the authors took account of other variables which affected US exports, including industry and host country characteristics.

The second study, by Lipsey and Weiss (1981), was even more conclusive about the favourable impact of US FDI on US exports. Based on US Department of Commerce data, and using an OLS (ordinary least squares) multiple regression model, the authors found that US outbound MNE activity (whether measured by net fixed assets of affiliates, by affiliates’ total sales, by affiliates’ sales in the host country, or by the number of affiliates) had a favourable impact on the parent company’s exports, on US industry exports and on total US exports. The effects on the exports of US industry and for total US exports included a variety of indirect effects over and above those attributed to the parent company. The study further demonstrated that production by US affiliates abroad appeared to substitute for exports from 13 other major industrial countries, and especially in developing countries’ markets (that is, it had a negative impact on the exports of countries other than the US). It also showed that the activities of US-owned manufacturing affiliates were most pronounced in countries which were host to many other foreign-owned affiliates. The authors concluded that their results lent support to the proposition that FDI is a method by which oligopolistic firms compete for a share in host country markets. They found this to be particularly true of trade and investment in industrial products between developed countries.

A third study, also by Lipsey and Weiss (1984), supplemented their earlier research by examining data at an individual firm level on the exports and foreign production of US MNEs in 1970. More particularly, they related the value of the manufacturing exports of some 200 US firms in 14 industries in each of five areas of the world to the characteristics of the parent firms, the value of production of their foreign affiliates, and the GDP of these areas (ibid.:305). They discovered that, in all but three sectors, namely, drugs, electronic components and non-auto transport equipment, there was a positive, and for the most part, significant correlation between exports and foreign production. The relationship was generally stronger between the two variables in the case of exports of intermediate goods for further processing than it was for the export of final products.

A fourth study, by Blomström et al. (1988), attempted to estimate the effect of foreign production on the home country’s exports of manufactured goods using data supplied by the US Department of Commerce for 1982 and the Industriens Utredninginstitut (IUI) of Stockholm for 1965, 1970, 1974 and 1978. In both instances, the authors used trade equations which related exports from the home countries to the GDP and GDP per capita of the host country, and a foreign production proxy (usually net sales of the foreign affiliate, that is, sales minus imports from the home country). They used both OLS and two-stage least-squares equations to estimate the significance of the foreign production
variable, and found the predominant relationship ‘somewhere between neutrality and complementarity’, that is, the foreign production induced either some increase or no change in exports.

The relationship was most clear for Sweden, for which increases in foreign production appeared positively related to exports, that is, the two variables were complementary for seven industries. The study also showed that there was no evidence to suggest that the complementarity between exports and foreign production declined as the latter became a more important modality of servicing foreign markets. However, the results for the US were mixed. At the most disaggregated level, there was a predominance of either a positive or no relationship between affiliate net sales and US exports for four-fifths of the 34 industrial sectors. However, in five sectors, namely, other foods, drugs, industrial chemicals, primary and nonferrous metals and lumber, wood, and furniture and fixtures, exports and foreign production were found to be substitutable for each other.

More recent studies essentially confirm the findings of the earlier studies. Brainard (1997) demonstrated that there was an overall complementarity in the US between FDI and exports in a cross-section of countries and industries in 1989. Clausing (2000) also found a parallel relationship between exports and FDI using two panels of BEA industry-level data between 1977 and 1994. Specifically, she found that US exports were positively related to foreign production by US MNEs (measured as local affiliate sales net of intra-firm imports), while the sales of foreign affiliates in the US were positively related to US imports, although the latter relationship was not as robust. Using firm-level panel data on US MNEs drawn from the BEA benchmark surveys in 1982–99, Desai et al. (2005a) revealed that the MNEs that expanded their activities abroad, also tended to increase their activities domestically, and that increases in outward FDI were associated with additional domestic exports.

In Austria, Pfaffermayr (1996), using panel data for the early 1980s and early 1990s, found a significant complementary relationship between outward FDI and manufacturing exports. Drawing on their previous work which employed a gravity framework, Lipsey et al. (2000) discovered that at the firm level, increased production by Japanese affiliates in a given region was either unrelated or related to larger parent exports. However, using a panel of 11 OECD countries from 1971 to 1992, Pain and Wakelin (1998) could not establish a consistent relationship between either outward or inward FDI and exports. Narrowing the analysis to the UK, Germany, France and Sweden, Barrel and Pain (1997) established a negative relationship between net outward FDI and exports.

A few studies have examined the effect of foreign production on both home country exports and imports. Wei and Liu (2001), using data on inward FDI and trade linkages in China, found that the positive impact of FDI intensity on import intensity was shown to be almost twice as large as that on export intensity. Using data on 27 countries and 13 manufacturing sectors for 1987–96, Fontagné and Pajot (2001) concluded that, for the UK, each additional dollar of outward FDI stock was associated with a 2-cent increase in UK exports and a 6-cent increase in imports. The results for France pointed to weak complementarity, while the results for the US showed large complementary effects with a one-to-one complementarity between FDI stocks and exports, and a 1.7 times increase in imports. Similar results were obtained by Camarero and Tamarit (2004) for 13 OECD countries. Using quarterly data for 1981–98, they found that in the majority of cases, the stocks of inward and outward FDI were positively related to both exports and imports.
However, considering all four possible scenarios combining manufacturing exports and imports and inward and outward FDI, a number of countries experiencing one or more cases involving substitution could also be identified.

Overall, the empirical evidence, much of it at the country or industry level, suggests that FDI and home country exports tend to complement rather than substitute for each other. At the same time, some evidence of substitution has been found in studies employing panel data that is disaggregated at the firm or product level. Indeed, it is only at the firm level that one is able to conclusively test hypotheses of complementarity and substitution, since only then can one assess whether the investment abroad has resulted in more intermediate exports by the same firm, or more broadly by the same firm and its group of suppliers in the home country. The next subsection will review a few recent studies that examine the evidence at the firm (and product) level, and contrast these findings with the aggregate results.

**Recent studies employing firm- or product-level evidence**

It is possible that the positive association or correlation between FDI to a given host country, and exports to the same country, may be the result of aggregation across firms. As we discussed in Chapter 8, the mode of entry by a firm into a foreign country is endogenously determined, since, in addition to being influenced by the characteristics of the host country, it depends on the firm’s unique institutional and other O-specific advantages that enable it to coordinate economic activity either at arm’s length, or within a hierarchy. In any group of companies, individual firms will make different decisions about whether and how to enter a particular market. Some will prefer the export mode; others a licensing contract with a foreign firm, or to engage in FDI. Therefore, even in the absence of any genuine complementarity caused by increased demand for intermediate inputs, it would not be unusual to find a positive association between exports and outward FDI, as long as one choice did not completely overwhelm the other.

Evidence of this contention was presented in a study by Swenson (2004), using data on foreign investment in the US over the 1974–94 period. This revealed that, while complementary linkages between US imports and inbound FDI flows were apparent at the level of all FDI and manufacturing investment, at the industry and product level, a substitution relationship was prominent. Furthermore, considerable differences between investor countries were present, which were likely to have been caused, at least in part, by a composition effect, which reflected the dominance of different industries and products for a given investor country.

In addition to the US case, the connection between foreign production and home country exports at the firm or product level has been most extensively studied with respect to the activities of Japanese MNEs. Using Toyo Keizai data on publicly listed Japanese manufacturers from 1966 to 1989, Head and Ries (2001) found that manufacturing investment abroad was associated with increased exports from the home country. They also discovered that a measure of vertical integration was associated with increased intra-firm exports, which suggested that the source of complementarity was the promotion of sales of intermediate goods. The firms that were not vertically integrated, which included the leading firms at the centre of keiretsus in the automotive and electronics sectors, demonstrated a substitution relationship within the firm. However, for the leading firms in the automotive industry, outbound MNE activity tended to increase the
exports of the suppliers of parts and components, while this was not the case for the electronics firms.

These results are consistent with those of Blonigen (2001), who examined product-level data on foreign production and exports. The first part of the study examined the relationship between the foreign production of Japanese automotive firms in the US and the exports of automotive parts from Japan. While there was a complementary relationship between Japanese production in the US and the exports of various automotive parts from Japan at the product level, the data showed a net substitution effect for the automotive parts suppliers. However, in this case, exports from Japan were being displaced by the increasing production of Japanese automotive parts affiliates in the US, rather than by indigenous US firms. In the second part of the study, Blonigen examined a different group of final products, where there was no vertical relationship, and where there was little pressure to increase local content in the host country. Again, the evidence at the product level provided strong evidence for a substitution rather than a complementary relationship between foreign production and exports. Furthermore, the evidence indicated that the substitution effects tended to be large one-time changes, rather than a gradual decline over time.

Indeed, in some cases, a substitution relationship between FDI and trade can be induced by a host country’s policies and their institutional implementation. Belderbos and Sleuwaegen (1998) used firm-level evidence of Japanese manufacturing investment in the EC in the late 1980s to analyse the extent to which voluntary export restraints (VERs), tariffs and other restraints on trade induced Japanese manufacturers to engage in FDI, rather than relying on exports from the home country. The evidence for 35 products in the electronics sector suggested that Japanese firms were much more likely to set up a manufacturing facility in the EC for those products which were the targets of VERs, quotas or antidumping actions. They also tested whether at the firm level, outbound FDI substituted for home country exports. Their conclusions were that tariff-jumping investment over the 1986–88 period did substitute for exports, but this was less likely to be so in the case of firms that had invested in distribution subsidiaries or had acquired a European firm. They also found that supplier firms who were members of a vertical keiretsu exported relatively more to Europe to supply their core partners. Thus while manufacturing investment was shown to have substituted for exports of final and intermediate goods by the investing firms, the total effect of export substitution was reduced by the enlarged exports of the supplier firms within the vertical keiretsus.

14.3.3 Some Empirical Results: Host Countries

As a counterpart to the work on the effects on the home country’s balance of payments of outward direct investment, there has been some research on the consequences of inward MNE activity for the host country’s balance of payments. Perhaps the first detailed study was that undertaken by Lall and Streeten (1977) who collected data from 159 MNEs with investments in six developing countries between 1970 and 1973. They examined the direct (or associated) balance of payments effect for each firm which they defined as:

\[ Bd = [X + K - (Ck + Cr + R + D)], \]  \quad (14.1)
where:

\[ Bd = \] net surplus or deficit on balance of payments account of the foreign affiliate;
\[ X = \] value of its exports;
\[ K = \] inflows of its capital;
\[ Ck = \] value of capital goods imported;
\[ Cr = \] value of recurrent goods imported;
\[ R = \] royalties and technical and managerial fees paid to foreign countries; and
\[ D = \] dividends plus interest accruing to investing countries.

Using this measurement, the authors found that, except in one country (Kenya), MNE affiliates recorded a net deficit on their external transactions which (as a percentage of their net sales) ranged from –55% for Iran to –11.7% for India. The authors concluded that, given the fact that almost all the foreign affiliates were engaged in import-substituting activities, this result was to be expected. They then went on to compare the external transactions of foreign affiliates with those of their indigenous counterparts. They discovered that each group of firms had similar propensities to import. Also, on balance (although this varied between countries) they exported about the same, or rather less, than locally owned firms. They found that the main reason for any negative effect on the balance of payments was that the remission of profits, dividends and royalties from the affiliates exceeded that of new capital inflows. Indeed, according to the authors, these servicing costs may well have been understated (and in the one country, Colombia, for which data were available, by transfer pricing manipulation, a subject which we shall take up in some detail in Chapter 17).

At the same time, Lall and Streeten clearly recognised that a proper assessment of the contribution of inward direct investment to the external trade account of the host country required some assumptions as to what might have happened in its absence. In their research, they offered a number of alternative scenarios. The first – the ‘import-substitution’ scenario – assumed that the product would have been imported instead of being produced by the foreign firm in the host country. In this case, the appropriate comparison was between the foreign exchange which would have been spent on importing the product and that actually spent by the foreign affiliate in producing it locally. The second – the ‘financial replacement’ scenario – assumed that the investment by the MNEs would have been undertaken by a locally owned firm. In this case, the relevant comparison was between the different costs of the alternative sources of capital. The third was the ‘most likely local replacement’ scenario, where an attempt was made to calculate that part of inward direct investment which could be replaced by domestic investment and that part which could not.

In determining the most appropriate of these scenarios, the authors devised a composite index of the technological and entrepreneurial capabilities of the host countries. A degree of local replacement was proposed for each of the firms analysed, with a higher degree of replacement occurring in industries with older or more easily available technology, or with greater local entrepreneurial potential. In ideal conditions, this alternative would provide an estimate of all the non-financial contributions of inward direct investment. In practice, however, no such estimate was found to be reliable, simply because the sample firms differed from each other for reasons other than ownership.

Using this method of evaluation, Lall and Streeten found that 40% of the 159 foreign-owned firms had negative net social income effects on the host countries. However – and
this is a crucial point – the main determinant of these effects was the effective rate of protection imposed by the respective host governments, the consequences of which were unrelated to the nationality of ownership of the firms. In the case of Kenya, for example, inward investment was found to be beneficial to both the direct balance of payments and GDP, no matter which of the three scenarios was assumed. However, Kenya was not considered to be a typical host developing country, since an above-average number of foreign firms there were export orientated.

Using the alternative of the ‘most likely’ replacement and on the basis of crude estimates obtained by utilising the ‘degree of local replacement’, Lall and Streeten estimated that the presence of one-third of the foreign affiliates had negative income effects on the countries in which they operated, and were replaceable by local firms. About one-half were thought to be partly replaceable and the remainder irreplaceable. However, these results were obtained on the basis of a number of simplified assumptions regarding the technological and entrepreneurial capabilities of local enterprises. Other relevant factors, such as managerial efficiency and economies of scale, were not considered.

In general, the Lall and Streeten study confirmed the findings of Reuber and his colleagues some years earlier (Reuber et al., 1973). The latter study found that although the net trade (net payments) transactions of foreign affiliates in developing countries were positive to the tune of $80.8 million (that is, the exports of affiliates exceeded their imports by this amount), this would have translated into a negative balance of $1.7 million if it had been assumed that in the absence of FDI domestic companies would have supplied the output in question.

A number of other early empirical studies underscored the critical nature of the assumptions to the counterfactual situation. Dunning (1969) estimated that while the net contribution of US manufacturing subsidiaries in the UK to the UK balance of payments was £284 million in 1965, the most likely counterfactual situation would give a positive figure of £272 million. However, this calculation excluded the secondary or spillover effects arising from the presence of the US affiliates. In his estimate of the change in the UK balance of payments brought about by all foreign affiliates in the UK in the 1960s, Steuer et al. (1973) used the following equation:

\[
\Delta B = \Delta P[x^1 - x(1 - f)] + yf - \Pi \frac{m^1}{1 + m^1} - ud YD,
\]

where:

- \(\Delta B\) = change in balance of payments;
- \(P\) = output attributable to foreign affiliates;
- \(x^1 - x(1 - f)\) = change in exports attributable to new foreign investment;
- \(\Pi\) = pre-tax earnings of foreign affiliates;
- \(u\) = multiplier term;
- \(Y\) = term showing the proportion of output of foreign affiliates which supplements domestic output;
- \(f\) = proportion of output of foreign affiliate which substitutes for imports; and
- \(m\) = imports.
After the addition of some tax variables and plugging in some estimates for the UK consumption and import propensities, Steuer estimated that, given the government policies at the time, inward direct investment had improved the UK balance of payments by about 10%.

Around the same time, other scholars attempted to measure the balance of payments impact of foreign affiliates operating in developing economies. In Latin America, Vernon (1971) found a positive impact of US inward direct investment on the balance of payments in the early 1960s, if it is assumed that the goods and services arising from the investment would otherwise be imported. However, the impact becomes negative if the assumption is that such production had replaced that by indigenous firms. Biersteker (1978) obtained the same results for a sample of foreign firms in Nigeria.

Turning to more recent studies, evidence of one possible kind of development sequence was presented by Liu et al. (2002), who applied Granger causality tests to FDI and trade in China based on a panel covering 19 investing home countries from 1984 to 1998. They found a one-way complementary link between the growth of China’s imports and the growth of the inward FDI stock from the home country. They also revealed a one-way complementary link from the growth of inward FDI in China to that of Chinese exports to the home country. Finally, they found a one-way complementary link between the growth of Chinese exports to imports, although, in their assessment, this final link lacked a clear theoretical basis.

Examining the balance of exports and imports by foreign-invested enterprises (FIEs) in China between 1980 and 1996 in more detail, Sun (1998) found that although, from 1990 onwards, the overall balance of Chinese trade was increasingly positive, that of the FIEs was consistently negative over the entire period. This he attributes to their imports of machinery and equipment, which is supported by the fact that if such imports are excluded from the calculations, the balance of trade of the FIEs was balanced or had a modest surplus since 1990, in spite of their considerable imports of intermediate goods. Additionally, he suggests that transfer pricing, particularly between China and Hong Kong, is likely to have played a role.

In the case of Thailand, Jansen (1995) estimated that both inbound direct and portfolio investment boosted indigenous private investment and growth in the late 1980s. However, while direct investment, which was strongly export orientated, contributed to a sharp increase in export earnings, it led to an even sharper increase in imports, which resulted in a deterioration on the current account, and an increase in the external debt burden. Thus, while the direct investment itself did not constitute a debt obligation, its indirect effects led to adjustments that resulted in increased borrowing. Since portfolio investment did not induce similar adjustments, it appeared relatively more benign, notwithstanding the fact that in general flows of FDI tend to be more stable than those of portfolio investment.601

A similar development was evident in most of the transition countries in Central and Eastern Europe, which received considerable flows of inward FDI in the 1990s, and yet recorded increasing current account deficits, caused largely by imports exceeding exports. However, as Pöschl (2000) points out, if a net inflow of FDI coincides with increased deficits on the current account, these deficits might be the result of upgrading and capital imports, and consequently a sign of increasing, rather than declining, competitiveness. Furthermore, the capital inflow can offset some of the current account deficit, increase reserves and decrease vulnerability to financial crises. On the other hand, if countries with
underdeveloped financial institutions, significant levels of government borrowing, high inflation and current account deficits liberalise their capital account, high interest rates may induce speculative inflows of capital, and push up the value of the local currency. In his analysis of the transition economies, Pöschl found that, in the Czech Republic, Hungary and Slovenia, the current account deficit was partly offset by a surplus in services, while the balance of income was generally negative due to foreign debt. In Hungary, FDI covered up to a third of imports, in Poland less than a tenth, and a negligible share in Slovakia and Slovenia. In the case of Hungary, by 1998, the net FDI inflows and related outflows in the income and service balances were approximately equal due to a strong increase in the FDI-related outflows in the mid-1990s, reflecting the maturation of the stock of investment.

Finally, an Irish study by Barry and Bradley (1997) found that profit remissions by MNEs had been extensive in 1990–95, and continued to exert a notable impact on the country’s balance of payments. Additionally, in the authors’ view, the fact that 86% of the output of all foreign affiliates was exported in this period, coupled with low rates of Irish taxation, suggested considerable opportunities for transfer pricing. Indeed these facts led them to question whether the Irish economy had earned a sufficiently high return on the inward foreign investment to compensate for the increased vulnerability it now bears owing to the foreign dominance of its manufacturing base.

14.4 INTRA-FIRM TRADE

14.4.1 The Determinants of Intra-firm Trade

As this volume has frequently stressed, the distinctive feature of the MNE is that it internalises intermediate product markets across national boundaries. Intra-firm trade, be it of raw materials, parts and components, semi-finished or finished (but not final) products, is the expression of such internalisation. While the O advantages of firms and the L advantages of countries help to explain the level and pattern of international trade, the organisation of that trade is essentially determined by the costs and benefits of the alternative transactional modes.

In principle, intra-firm trade should offer not only the same benefits to participating countries as arm’s-length trade, but also a further advantage by making a wider variety of goods tradable that might not be tradable under arm’s-length conditions. At the same time, the substitution of market-based trade by administered trade opens up the possibility for transfer price manipulation and the shifting of profits to tax-advanced locations. Essentially the same arguments that apply to the internalisation of intermediate product markets also apply to intra-firm trade; and it is thus reasonable to assume that the increased market power of the MNE is likely to offset some of the efficiency gains. Several writers, for example, Lall (1978), Casson et al. (1986), Casson and Pearce (1988), Cho (1988), Hipple (1990), Gray (1992, 1999) and Gray and Lundan (1993a) have elaborated on this kind of approach.

Inter alia, they have sought to identify the factors most likely to generate intra-firm trade, the types of firms most likely to engage in it, and the characteristics of countries between which trade is most likely to be internalised. According to Gray and Lundan
(1993a), the economies of common governance are likely to be trade creating (that is, result in a larger volume of international trade than would be generated by a system of arm’s-length firms) the greater the disparity in relative factor costs among countries and the smaller the sacrifice of any economies of scale; the smaller are the proportionate costs of transportation and tariffs and the additional oversight costs; the greater the intra-firm efficiencies of vertical integration; and the more easily FDI leading to intra-firm trade is permitted by the host government to take place.

Firm-specific factors influencing intra-firm trade (which may also be country specific) include the degree and form of a firm’s multinationality (which, in turn, may be a function of its size, product structure, R&D and advertising intensity, age and experience in foreign production) and the associated transaction costs. For example, in an examination of the cross-industry pattern of intra-firm exports by US MNEs in 1970, Lall (1978) found that the technological intensity of the products being traded, the size of the FDI involved, the divisibility of the production process and the perceived need to control after-sales service and maintenance facilities, were each positively and significantly related to the share of intra-firm to total exports by US MNEs. Later studies by Cho (1988) and Siddharthan and Kumar (1990), based on 1982 data published by the US Department of Commerce, confirmed the importance of the R&D variable.605

Other studies reveal the importance of regional- or country-specific L variables influencing the amount and pattern or intra-firm trade. In particular, regional economic integration has substantially increased the opportunities for product and/or process specialisation by MNEs, and, as a consequence, inter-affiliate trade. Of the institutional variables likely to influence the organisation of trade, the most important seem to be the extent to which the countries are, themselves, involved in the international division of labour, and the kinds of actions taken by governments to affect the level and structure of trade.

For example, Helleiner and Lavergne (1979) demonstrated that the relative importance of intra-firm imports by US MNEs in the early 1970s was negatively related to the height of the US tariff at the time, and positively related to the reduction in tariff costs brought about by the Kennedy and Tokyo rounds. Other government-related variables include local content and sourcing requirements, both of which may reduce intra-firm trade, and the encouragement of the establishment of EPZs, which may lead to more intra-firm trade. In so far as they may tempt MNEs to engage in cross-border transfer pricing, or dissuade them from doing so, government policies may also have a positive or negative effect on intra-firm trade in assets, goods and services.

The opening up of more countries to trade and specialisation (both horizontal and vertical), and involving both goods and services, has been facilitated by advances in technology and communications over the past two decades. With the growing importance of efficiency-seeking FDI by MNEs pursuing regional or global strategies, intra-firm trade between parent firms and their affiliates, and between the affiliates, has increased (UNCTAD, 1996:103). The growth of integrated MNEs has facilitated this development, while at the same time, the increasing outsourcing of stages of the value chain, including business services, has increased arm’s-length trade between different units in the MNE network (UNCTAD, 2002:125). In recent years, the internationalisation of innovatory activities by MNEs has also created new possibilities for growth in intra-firm trade in R&D inputs and outputs (UNCTAD, 2005c).
14.4.2 Empirical Evidence of the Extent of Intra-firm Trade

Intra-firm trade is the mechanism whereby vertical and horizontal production networks are linked across borders. Although intra-firm trade, and MNE-related trade in general, is prevalent in all developed economies, there are differences between countries in the extent and form of their reliance on intra-firm trade. At least some of the differences are likely to reflect the kinds of activities MNEs undertake, and the industries in which they are prevalent. At the same time, national institutions and systems of corporate governance also exert an influence. Thus, for example, the Japanese and German firms’ high reliance on intra-firm trade might be related to governance structures that connect nominally independent companies in long-term relationships with a leading manufacturing firm in order to maintain customary levels of quality and just-in-time deliveries. Evidence reviewed earlier in this chapter relating to Japanese automobile and electronics manufacturers identified two kinds of strategy followed by such firms. While the Japanese automotive component suppliers followed their lead firms to transplants in the US and Europe, in the electronics industry, Japanese firms chose to rely more on intra-keiretsu imports to maintain their price and quality specifications.606

Among the earliest empirical studies on intra-firm trade, Brash (1966) estimated that 91% of all imports of 76 US subsidiaries in Australia in 1961–62 were internalised, while Deane (1970) calculated that in 1963–64, 55% of the imports made by 109 foreign firms were from other parts of the same organisation. In his field study of 266 MNE affiliates in Canada in 1965, Safarian (1969) calculated that the average export internalisation ratio was 51% and the average import internalisation ratio was 72%. These figures were considerably higher than those obtained by Forsyth (1972) for US subsidiaries in Scotland in the late 1960s (21 and 57%, respectively) and by Dunning (1977) for some 30 large UK MNEs with substantial investments in less developed countries (25 and 45%, respectively).

A survey by Lecraw (1983) of 111 MNEs in six light manufacturing industries operating in five Asian countries in 1978 found that Japanese subsidiaries sent 79% of their exports to, and received 84% of their imports from, related units of the same organisation. The corresponding percentages for US subsidiaries were 68 and 53%, for European subsidiaries, 65 and 57%, and for the subsidiaries of MNEs from developing countries, 23 and 37%.

In 1984, around 29% of UK manufacturing exports and 51% of imports were between UK MNEs and their foreign affiliates.607 The corresponding proportions for Swedish firms (in 1975) were 29 and 25% (Helleiner, 1981), for Belgian firms (in 1976), 53 and 48% (Van den Bulcke, 1985), for Japanese firms (in 1979), 26 and 16% (Ozawa, 1985), and for Portuguese firms (in 1981), 31 and 34% (Simões, 1985). In 1988, some 51% of the exports of Japanese manufacturing affiliates were to their parent companies or sister affiliates (MITI, 1989).

Unfortunately, official statistics on intra-firm trade continue to be available for only a handful of countries. Table 14.2 shows recent evidence of the foreign affiliate share in the trade of selected host countries, to the extent that such data are available in a comparable form. Additionally, for Japan, the Netherlands, Sweden and the US, the intra-firm share of affiliate trade is indicated as well.

Additional evidence, albeit fragmentary, is available from specially conducted field studies. For example, in 1993, intra-firm exports accounted for 60% of the exports of 421
Table 14.2 Share of foreign MNE affiliates in the trade of selected host countries and intra-firm trade as a percentage of affiliate trade

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Manuf.</td>
<td>Total</td>
<td>Manuf.</td>
<td>Total</td>
</tr>
<tr>
<td>Developed countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliate exports</td>
<td>15.1</td>
<td>17.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>35.3</td>
<td>37.9</td>
<td>40.6</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>82.3</td>
<td>90.8</td>
<td>90.6</td>
<td></td>
</tr>
<tr>
<td>Affiliate exports</td>
<td>77.8</td>
<td>79.8</td>
<td>84.6</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliate exports</td>
<td>57.8</td>
<td>72.5</td>
<td>81.0</td>
<td></td>
</tr>
<tr>
<td>Affiliate imports</td>
<td>62.9</td>
<td>71.3</td>
<td>78.9</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliate exports</td>
<td></td>
<td></td>
<td>10.7</td>
<td></td>
</tr>
<tr>
<td>Affiliate imports</td>
<td></td>
<td></td>
<td>10.9</td>
<td></td>
</tr>
<tr>
<td>Intra-firm affiliate exports</td>
<td>56.0</td>
<td>56.0</td>
<td>17.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Intra-firm affiliate imports</td>
<td>67.0</td>
<td>72.0</td>
<td>70.0</td>
<td>70.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliate exports</td>
<td>40.1</td>
<td>32.2</td>
<td>29.6</td>
<td></td>
</tr>
<tr>
<td>Affiliate imports</td>
<td>42.2</td>
<td>33.2</td>
<td>29.3</td>
<td></td>
</tr>
<tr>
<td>Intra-firm affiliate exports</td>
<td>63.0</td>
<td>53.0</td>
<td>51.0</td>
<td>48.0</td>
</tr>
<tr>
<td>Intra-firm affiliate imports</td>
<td>66.0</td>
<td>65.0</td>
<td>46.0</td>
<td>53.0</td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliate exports</td>
<td>18.9</td>
<td>19.9</td>
<td>20.5</td>
<td>24.6</td>
</tr>
<tr>
<td>Affiliate imports</td>
<td>30.8</td>
<td>38.0</td>
<td>46.8</td>
<td>49.6</td>
</tr>
<tr>
<td>Intra-firm affiliate exports</td>
<td>42.0</td>
<td>36.0</td>
<td>53.0</td>
<td>45.0</td>
</tr>
<tr>
<td>United States</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliate exports</td>
<td>20.2</td>
<td>20.7</td>
<td>19.3</td>
<td>18.8</td>
</tr>
<tr>
<td>Affiliate imports</td>
<td>34.5</td>
<td>31.2</td>
<td>29.1</td>
<td>25.7</td>
</tr>
<tr>
<td>Intra-firm affiliate exports</td>
<td>41.6</td>
<td>49.1</td>
<td>52.1</td>
<td>53.4</td>
</tr>
<tr>
<td>Intra-firm affiliate imports</td>
<td>77.7</td>
<td>77.5</td>
<td>84.3</td>
<td>81.2</td>
</tr>
<tr>
<td>Developing countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliate exports</td>
<td>18.3</td>
<td>31.8</td>
<td>42.7</td>
<td>46.5</td>
</tr>
<tr>
<td>Affiliate imports</td>
<td></td>
<td></td>
<td></td>
<td>57.0</td>
</tr>
<tr>
<td>India</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliate exports</td>
<td>2.4</td>
<td>3.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliate imports</td>
<td></td>
<td>3.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: OECD Globalisation database; Anderson and Zeile (2006); UNCTAD (2006); IMF Balance of Payments Statistics, authors’ calculations. Latest data for the US is 2004 others are for 2001/2002.
French parent companies and 26% of the intra-firm imports, which represented about a third of all French exports and a fifth of all French imports (Chédor et al., 2002). In Sweden, by 1994, the intra-firm share had reached 60%, even though the MNE share of total manufacturing exports declined. During the same period, MNEs accounted for about one-half of Swedish exports (Braunerhjelm, 1998). The growth in intra-firm trade was accompanied by an even faster growth in the ratio of foreign production by Swedish affiliates abroad to exports from the home country. This suggests that while the relationship between these two variables in the earlier years may have been a complementary one, it may have moved more towards substitution over time.

The most detailed evidence on intra-firm trade pertains to US MNEs, as well as to the operations of the affiliates of foreign MNEs in the US. Table 14.3 shows the share of intra-firm trade for both types of firms in US exports and imports. In 2004, intra-firm trade made up somewhat less than a third of US exports, and somewhat more than a third of US imports. Additionally, the table shows the intra-firm share of MNE exports and imports for both types of firms. Since this measure excludes the trade conducted by domestic firms, the latter proportions are notably higher than the former.

Between 1977 and 1994, as a share of US trade, intra-firm imports were around 40% while intra-firm exports were around 35% (Zeile, 1997). While US intra-firm imports consisted largely of those by marketing and distribution foreign affiliates, intra-firm exports were largely made up of US MNE exports of intermediate goods. As might be expected, intra-firm trade shares varied by trading partner and sector, with Japan recording the highest levels of both intra-firm exports and imports. As a percentage of the affiliates’ own trade (rather than total trade), levels of intra-firm trade were even higher (see Tables 14.2 and 14.3). Since the late 1980s, imports by foreign affiliates in the US have exceeded their exports by a factor of about two to one, a much larger gap than that between US exports

<table>
<thead>
<tr>
<th>Table 14.3</th>
<th>Share of intra-firm trade in goods by US affiliates abroad and foreign affiliates in the US (percentages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intra-firm exports in total US exports</td>
<td>40.1</td>
</tr>
<tr>
<td>US parent intra-firm exports</td>
<td>28.3</td>
</tr>
<tr>
<td>Foreign affiliate intra-firm exports</td>
<td>11.8</td>
</tr>
<tr>
<td>Intra-firm imports in total US imports</td>
<td>40.4</td>
</tr>
<tr>
<td>US parent intra-firm imports</td>
<td>16.1</td>
</tr>
<tr>
<td>Foreign affiliate intra-firm imports</td>
<td>24.3</td>
</tr>
<tr>
<td>Addendum:</td>
<td></td>
</tr>
<tr>
<td>Intra-firm exports in MNE exports</td>
<td>37.7</td>
</tr>
<tr>
<td>US parent intra-firm exports</td>
<td>47.1</td>
</tr>
<tr>
<td>Foreign affiliate intra-firm exports</td>
<td>38.8</td>
</tr>
<tr>
<td>Intra-firm imports in MNE imports</td>
<td>76.3</td>
</tr>
</tbody>
</table>

and imports in general. In large part, this gap is accounted for by trade conducted by foreign wholesale trade affiliates in the US (Zeile, 2004).

As a share of total US trade, the share of the exports of US MNEs (intra-firm trade plus sales to unaffiliated parties) declined from 67% in 1994 to 57% in 2003, while their corresponding share of total imports changed only marginally, from 39% in 1994 to 37% in 2003 (Mataloni, 2005). The foreign affiliate share of US exports remained unchanged at 20% between 1990 and 2002, while there was a decline in foreign affiliate imports as a share of total US imports from 35% in 1990 to 28% in 2002. Combining the share of US MNE parents and that of foreign affiliates in the US, MNEs accounted for 77% of US exports and 65% of imports in 2002.

We can also obtain some further indication of the behaviour of non-US MNEs by examining the trading patterns of foreign affiliates in the US in more detail. Of all US imports from Japan in 2002, 87% was imported by Japanese affiliates, and of that proportion, 85% was intra-firm. Among the major trading partners, other countries with high levels of intra-firm affiliate imports were Germany with 51% and Korea with 54%. For exports in the same year, the intra-firm share was generally lower, but Japan was still an outlier, with 44% of US exports to Japan accounted for by affiliates, of which 36% was intra-firm (Zeile, 2004).

Of course, intra-firm imports and local content are two sides of the same coin. In an interesting contribution, Zeile (1998) employed four different measures to assess the extent of domestic content of foreign affiliate production in the US. These were, respectively, the domestic content of gross output, the value-added share of gross output, the import share of intermediate inputs and, additionally, the export share of sales. Comparing the domestic content of the foreign affiliates in the US with that of US MNEs, Zeile revealed that in both groups of firms it was a relatively high share of output, but it was the highest for US MNEs, even when differences in industrial distribution were accounted for. In the case of US manufacturing industry in particular, the domestic content of gross output for foreign affiliates in 1994 was 87%, as compared to 93% for indigenous companies.

Zeile also found that the difference between the domestic content of foreign affiliates and US MNEs was largely attributable to differences in the share of value added in gross output and in the sourcing of intermediate inputs. The domestic content share for foreign affiliates was found to be the lowest in industries such as machinery, transportation and instruments manufacturing, where manufactured intermediate inputs, rather than commodity inputs, are prevalent. The share of intermediate inputs that were imported was 19% for all affiliates, as compared with 11% for domestically owned companies. Furthermore, in many industries, the import share of intermediate inputs for affiliates was shown to be more than twice the share for indigenous firms. About two-thirds of these imports were intra-firm. In general, Japanese, German and Swiss affiliates recorded the lowest domestic content. In the case of the German and Swiss affiliates, this was due to a high reliance on imports, while for the Japanese affiliates it reflected their high dependence on imports, as well as their relatively low share of value added in gross output. By contrast, affiliates from the UK had the highest share of local content; this, Zeile suggests, was largely due to the dominance of acquisitions as a mode of entry.

In general, one might expect intra-firm trade in services to be less prevalent than intra-firm trade in goods, since there are likely to be fewer tradable intermediate inputs. However, Table 14.4 shows that the extent of cross-border and intra-firm trade in US
services is considerable. However, it should also be noted that since 1996, the sales of services by both foreign affiliates in the US, and US MNE affiliates abroad, have grown considerably faster than cross-border trade in services. This reflects the increasing importance of services in the developed (and developing) economies, as well as the difficulties of providing many services at arm’s length. The intra-firm share is particularly high in the case of royalties and licence fees, where two-thirds of the receipts by US MNEs, and more than two-thirds of the payments by foreign affiliates in the US, involved intra-firm transactions in 2005.

Finally, a complementary view on MNEs’ trading activities in the US is provided by Bernard et al. (2005). Using a new dataset that combines US customs data on imports and US Census Bureau data on exports with the longitudinal business database of the Census Bureau, the authors confirm that the bulk of US trade is accounted for by a small number of firms. For example, in 2000, the top 1% of firms were responsible for 81% of overall US trade. The ‘most globally engaged’ firms that both import and export, and where at least some proportion of both kinds of trade is with related parties, accounted for nearly 80% of US exports and imports, and employed 18% of the US workforce. Based on these data, the authors found that 38% of US exports and 61% of imports were traded between related parties. However, within the group of ‘most globally engaged’ firms, the percentages were as high as 82 and 80%, respectively, which is considerably higher than the

### Table 14.4  Cross-border trade, intra-firm trade and affiliate sales in US services; royalties and licence fees, in billions of US dollars and percentages

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US service exports (receipts)</td>
<td>77.5</td>
<td>137.2</td>
<td>203.7</td>
<td>284.4</td>
<td>281.4</td>
<td>328.0</td>
</tr>
<tr>
<td>US parent intra-firm exports %</td>
<td>18.2</td>
<td>19.7</td>
<td>19.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign affiliate intra-firm exports %</td>
<td>5.3</td>
<td>7.6</td>
<td>6.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intra-firm total %</td>
<td>23.5</td>
<td>27.3</td>
<td>25.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US service imports (payments)</td>
<td>64.7</td>
<td>98.2</td>
<td>128.6</td>
<td>208.6</td>
<td>210.9</td>
<td>257.2</td>
</tr>
<tr>
<td>US parent intra-firm imports %</td>
<td>9.2</td>
<td>9.7</td>
<td>10.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign affiliate intra-firm imports %</td>
<td>10.8</td>
<td>12.8</td>
<td>10.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intra-firm total %</td>
<td>20.0</td>
<td>22.5</td>
<td>20.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US affiliate sales abroad</td>
<td>60.5</td>
<td>121.3</td>
<td>190.1</td>
<td>413.5</td>
<td>401.1</td>
<td>489.6</td>
</tr>
<tr>
<td>Foreign affiliate sales in the US</td>
<td>na</td>
<td>109.2</td>
<td>149.7</td>
<td>344.4</td>
<td>386.7</td>
<td>382.8</td>
</tr>
<tr>
<td>Royalties and licence fees (receipts)</td>
<td>39.6</td>
<td>44.2</td>
<td>57.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US parent intra-firm exports %</td>
<td>62.8</td>
<td>66.9</td>
<td>66.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign affiliate intra-firm exports %</td>
<td>4.9</td>
<td>7.0</td>
<td>7.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intra-firm total %</td>
<td>67.7</td>
<td>73.9</td>
<td>73.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Royalties and licence fees (payments)</td>
<td>16.1</td>
<td>19.2</td>
<td>24.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US parent intra-firm imports %</td>
<td>15.1</td>
<td>15.1</td>
<td>13.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign affiliate intra-firm imports %</td>
<td>61.1</td>
<td>63.3</td>
<td>70.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intra-firm total %</td>
<td>76.2</td>
<td>78.4</td>
<td>83.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Authors’ calculations based on Borga and Mann (2002, 2004) and Koncz et al. (2006).
estimates based on the BEA data, due to the different methods employed by the two agencies in data collection.608

14.4.3 The Implications of Intra-firm Trade

Apart from some general speculations about the (largely) adverse affects of intra-firm trade, for example, by Murray (1981) and Helleiner (1981), there have been few attempts in the literature to examine its welfare consequences on either the exporting or importing countries. There seems to be general agreement that intra-firm trade designed to promote structurally distorting transfer pricing and other practices by MNEs is undesirable. It is also commonly acknowledged that intra-firm trade which promotes a cross-border division of labour to achieve the global goals of the MNEs rather than the national objectives of countries may not always be acceptable, at least, by some of the participating countries. However, apart from some casual empirical studies, scholars have not so far rigorously pursued these issues. Because of this, and the failure to distinguish between the efficiency-enhancing effects of intra-firm trade, resulting from the internalisation of imperfect markets, and its possibly harmful consequences which may arise from an increase in monopoly power – there is little a priori reason to conclude that intra-firm trade (compared to inter-firm trade) is either welfare enhancing or welfare reducing.

Chapter 17 will concern itself with some issues related to the use of transfer pricing of products and services traded within MNEs. Clearly, the opportunities for manipulating such prices rest on the extent to which intra-firm trade is both feasible and desirable. However, such trade may, in fact, help MNEs to exploit cross-border market failures, brought about, for example, by differential tax policies of governments, or by corporate manipulation of the terms on which goods and services are traded. At the same time, foreign ownership may bring with it a variety of technological, marketing, organisational and other benefits which could not be obtained, or obtained as economically, by other means. Whether a host or home country is a net gainer or loser by such intra-firm trade – taking all costs and benefits into account – will critically depend on the particular circumstances in which it occurs.

The limited evidence available would seem to confirm that intra-MNE trade is not conducted under fundamentally different rules from arm’s-length trade, although some room for manipulation clearly remains. Rangan (1994), for example, analysed US MNEs in the late 1980s to see whether their foreign affiliates adjusted the US content of their production in response to a sizeable decrease in the value of the dollar. He found that the foreign affiliates demonstrated the expected response, in that they increased the US content of the products they sold. He then compared the response of US intra-firm exports and arm’s-length exports to the currency depreciation. While, in the aggregate, it appeared that intra-firm exports were less elastic in response to the decline of the dollar, once the different distribution of industries involving intra-firm trade and arm’s-length trade was taken into account, the two types of trade demonstrated an almost identical reaction. Indeed, in terms of the speed of adjustment, intra-firm exports appeared to adjust faster than arm’s-length exports.

In summary, the increasing globalisation of economic activity over the last two decades has led to increases in both inter- and intra-firm trade. Such increases sometimes reflect the restructuring of global trade patterns fashioned by MNEs, and sometimes other
external modalities influenced and/or controlled by them. As such, intra-firm trade is best thought of as part of the changing division of labour brought about by integrated international production systems (UNCTAD, 1993). Such systems enable firms to structure and locate each part of their value chains more closely in line with the existing comparative resource and institution advantages of countries (for example, in Asia and Latin America), while also allowing for the dynamic reconfiguration of these assets, depending on the role assigned to the affiliates, and their degree of integration with local firms.

14.5 MNEs AND THE STRUCTURE OF TRADE

Because of their privileged ownership of, or access to, knowledge capital, and the structure of their cross-border value-adding activities, it is to be expected that MNEs and their affiliates will have a distinctive impact on the structure of trade of both home and host countries (Markusen, 1995, 1998, 2002b). Indeed, their very "raison d'être" stems from their ability and willingness to internalise cross-border intermediate product markets. Chapter 15 will look further at the impact of MNEs on market structure, and the performance gaps between foreign affiliates and domestic firms. Specifically, it will demonstrate that this impact is essentially fourfold: on technical efficiency (that is, on the productivity of resources and capabilities on a given use); on structural efficiency (that is, on the distribution of resources and capabilities between uses, for example, from less to more productive value-added activities, from low- to high-growth sectors, from the production of labour to capital-intensive products and so on); on scale and scope efficiency (that is, on the incentives and capabilities of firms to reduce production and/or transaction costs by producing a larger and/or more diversified output); and on adaptive efficiency (that is, on the willingness and competences of firms to speedily and efficiently adapt their activities to changes in exogenous or endogenous supply and demand conditions).

In so far as each of these impacts affects the competitiveness of the producing firms, both in domestic and foreign markets, they will also influence their propensity to import or export assets, goods and services. In other words, MNEs may be expected to make a distinctive contribution to the structure of trade of both home and host countries whenever they operate in sectors with different trade propensities from their unincorporated or indigenous competitors. Alternatively, or in addition, they may export and/or import more or less of the particular goods and services they are producing. Regional economic integration has also had a significant influence on the trading patterns of a number of countries, such as in the case of Ireland and Portugal within the EU, or Mexico within NAFTA.

As the coordinators of globally or regionally integrated value chains, MNEs facilitate access to new markets, while at the same time, access to these markets for firms not connected to such networks has become increasingly difficult. MNEs can help to diversify a country’s exports, and to encourage exporting by local firms, whenever the restructuring or upgrading of local capabilities results from greenfield entry, or from M&As. However, the policies and institutions of the host countries, and particularly those affecting the development of indigenous firms, are a critical component in enabling such positive effects to take place.
We begin our discussion on the effects of MNE activity on the pattern of trade of home and host countries by examining the extent to which MNE activity has tended to concentrate in the more trade-intensive sectors, and by presenting some evidence of the share of MNE affiliates in the foreign trade of selected host countries. We then examine whether the propensity of MNE affiliates to import or export differs from that of indigenous firms in the same sectors.

14.5.1 The Distribution of MNE Activity across Sectors

A priori it is reasonable to suppose that MNEs are likely to be more concentrated in the trade-orientated sectors than their uninational counterparts. Partly this is because foreign production cannot take place without some trade in intermediate products (for example, managerial services and technology) and partly because almost all value-added activity by MNEs is undertaken to replace or divert trade in goods and resources, or to create such trade. An examination of the sectors in which MNEs tend to concentrate suggests that they are those for which import and export propensities tend to be above average. Their contribution seems to be least in the domestically orientated sectors and in those producing non-tradable goods and services. This is partly because the advantages of MNEs stem both from their ability to acquire, create and disseminate technology, management and skills, on a regional or global basis, as well as from their institutional capabilities to organise and control the diversification of value-added activities across national boundaries.

The available data support the view that both in developed and developing countries, MNEs and/or their affiliates tend to concentrate in trade-intensive sectors (UNCTC, 1991; UNCTAD, 2002). In developing countries, the trade-related activities of MNEs have generally been of four kinds. The first is manufacturing and assembly in labour-intensive low-technology sectors such as garments and footwear. Second is offshore assembly in the electronic, automotive and engineering industries, some of which is technologically sophisticated, for example, in countries such as Singapore, while the rest is medium-skilled activity. Third are the trade-related activities in industries that grew out of the import-substitution industries, for example, in the automotive sector in Latin America. Fourth is the large-scale processing of natural resources for export undertaken by MNEs (UNCTAD, 1999:234).

At one time, the difference between the trading patterns of MNEs (or their affiliates) and their uninational (indigenous) competitors was most pronounced in open smaller industrialised (or industrialising) economies and in resource-based economies in which MNEs are primarily engaged in export-generating activities. It was less evident in large industrialised or mixed economies that pursued a policy of economic self-reliance (for example, India, China and the former Soviet Union). However, in recent years – partly as a result of globalisation and the growth of international production networks – even in the large industrial countries, MNEs are concentrating in the more trade-intensive, and particularly export-orientated, sectors. In China, for example, the share of foreign affiliates in their manufacturing exports rose from 16% in 1991 to 44% in 2001, while in the US the increase was from 6% in 1985 to 14% in 1999 (UNCTAD, 2002:152).

The growing importance of free trade zones in several developing countries (for example, Malaysia, Sri Lanka and Taiwan) and the reduced import duties on some
products supplied by the foreign affiliates of US firms has also fostered a closer association between inbound FDI and RCA in these countries. Furthermore, the reorientation of development strategies and the removal or reduction of import barriers by several African and Latin American countries has reinforced this relationship. It should be noted, however, that the experiences of countries that have used targeted EPZs to boost export production have been variable. While many EPZs have perpetuated enclave production, and have failed to generate spillover benefits to the local economy, successful examples, such as that of Costa Rica, offer evidence to the contrary (Moran, 2002).

It is difficult to draw any generalised conclusions from the available evidence. Increasing specialisation fashioned by globally integrated production networks has served to intensify the impact of MNE activity on the trading patterns of home and host countries. Furthermore, the export-led policies of some developing countries (for example, Singapore, Malaysia and Taiwan), have led to a dominant MNE presence in the export-orientated sectors. Indeed, one of the most important contributions that inward direct investment can sometimes make to a developing country is to assist it to move from a protectionist, import-substituting strategy to one based on its perceived dynamic RCA; and in so doing help it to restructure the trade intensity of its economic activities. This is because of the superior knowledge and learning experience of MNEs about both the cross-border markets for factors of production, intermediate products and final goods and services, and the institutional underpinnings of these markets. It is also because access to global markets, whether through participation in integrated MNE networks, or as part of buyer-driven global commodity chains such as in the food, footwear and apparel sectors, or in sectors such as business services, is increasingly difficult for producers in developing countries to achieve on their own (Gereffi, 1999; UNCTAD, 2004).

At the same time, while MNE activity has been instrumental in assisting the upgrading of the (moderately) technology-intensive sectors in many developing countries, it is not a sufficient, or even a necessary, condition for successful upgrading. In most cases, an intricate institutional support structure is required to ensure that such upgrading is properly understood and maintained. Comparing the export performance of developing countries in several technology-intensive sectors, Lall (2000) distinguished between countries where industrial upgrading had been actively connected to the activities of MNEs (Singapore), with those where it was more passively connected to activities of MNEs (Malaysia, Thailand, the Philippines, China and Mexico), and those where the process had been driven by domestic firms (South Korea and Taiwan).

These differences are reflected in the share of foreign affiliates in manufactured exports which, according to the data compiled by UNCTAD (2002:153), ranged from 86% in Hungary, 52% in Poland and 47% in the Czech Republic, to 49% in Malaysia, 44% in China, 38% in Singapore and 17% in Taiwan and 15% in Korea in the latest year available during the 1994–2001 period. (See also Table 14.2.)

The UNCTAD report referred to above also presented several examples of cases where MNEs have played an important role in facilitating the exports of developing countries. These included, for example, horticulture exports from Kenya, salmon farming in Chile, and Indian computer software and business service exports. We shall return to the policy issues related to investment promotion in Part IV. However, here we would observe that there is now substantial agreement that the building or reconfiguration of domestic capabilities through appropriate institutional incentives, investment in training and education,
The encouragement of entrepreneurship and upgrading the competitiveness of indigenous firms, is likely to result in the best conditions for technology transfer and absorption, productivity growth and the promotion of exports.

14.5.2 The Export Intensity of Foreign Affiliates and Indigenous Firms

While differences in the propensity of MNE affiliates and local firms to import may be as important as any differences in their propensity to export, the latter has captured much of the attention of researchers. This has been helped by the considerable differences in the comparative rates of growth of high- and medium-technology exports, and those of low-technology exports in world trade. Due to higher growth in the technology-intensive sectors, the share of high- and medium-technology sectors in developing country exports has grown over time, and by 1995 high-technology exports had already exceeded both low- and medium-technology exports (UNCTAD, 1999:230). Much of the growth in manufactured exports over the past two decades has been concentrated in Asia and parts of Latin America, notably Argentina, Brazil, Chile and Mexico.

Several surveys, from that of Dunning (1958) onwards, have compared the trade performance of foreign-owned firms with that of their domestic counterparts. Taken as a whole, these reveal that MNE affiliates generally have a higher propensity to export than do indigenous firms, but that this difference is not as large or as widespread as some commentators have suggested, once one normalises for industry- and firm-specific characteristics. Thus, for example, MNE affiliates are likely to record a better export performance, the greater the barriers to entry into the foreign markets which they already serve. By contrast, the larger the number of countries in which MNEs operate, the lower the export/sales ratio is likely to be unless each production unit is specialising in intermediate or final products, which are then traded.

As regards the evidence on developing host countries, in India, for example, until the 1990s, inward direct investment had largely been concentrated in sectors supplying goods for the domestic market (Lall, 1985; Kumar, 1990). However, using data for 1964 and 1969, Katrak (1983) found some support for the hypothesis that higher degrees of foreign ownership in an industry were associated with improved export performance. Another study by Lall and Mohammad (1983) confirmed that there was a statistically significant positive correlation between foreign ownership and Indian export performance. At the same time, Athreye and Kapur (2001) revealed that the net foreign exchange contribution of multinationals in India was negative throughout the 1960s and 1970s. It was also found that the indigenous firms did no better due to their focus on the protected domestic market rather than export performance. However, from the mid-1980s onwards, foreign firms were shown to have improved their performance in this regard, particularly in the case of service exports.

One of the problems of many of the comparative studies is that although they try to normalise for sectoral differences between foreign affiliates and domestic firms, they rarely do this systematically, or take account of variables other than the nationality of ownership (or degree of multinationality) which might also influence trade performance. Such variables include specific industry characteristics, the institutional distance between the trading countries, the extent of vertical integration of firms, the size of firms, the age of foreign affiliates and the degree of market concentration. One way to acknowledge
such variables is to include them, along with nationality of ownership (or degree of multinationality), as explanatory variables in a multiple regression equation – and then see how far they are a significant discriminator. This methodology was used by one of the present authors in a study on the impact of inward direct investment on Brazilian trading patterns (UNCTAD, 1985). In this research, two multivariate regression equations were offered – one to explain the import propensity and the other the export propensity of some 500 firms producing in Brazil over the 1971–77 period. Some 33% of these observations were for foreign affiliates, and the balance for Brazilian state-owned or private firms.

It was found that the overall propensity of the affiliates of foreign-owned firms was 77% higher than Brazilian-owned firms, but that, after controlling for industrial characteristics and market structure, the former group of firms imported only 4% more of their sales than the latter firms. By contrast, the effect of foreign ownership on exports was positive, but insignificant, although US-owned affiliates did exhibit a significantly lower export propensity than other foreign affiliates. Of the other variables included in the explanatory equation, only capital intensity and degree of vertical integration were found to be statistically significant. Newfarmer and Marsh (1981a) also concluded that after controlling for other characteristics of the constituent firms and the nature of the market, foreign-owned affiliates in the Brazilian electrical industry had a higher import propensity than their local competitors in 1972 and 1974.

An alternative way of assessing the significance of industry- and firm-specific variables in affecting the comparative export performance of foreign- and domestically owned firms was that taken by Kumar (1990) who regressed the export performance of the two groups of firms in 43 Indian industries to such independent variables as capital, skill intensity, product differentiation, competitive structure and size of firm. Kumar found that there were no significant differences in the role of these characteristics in explaining the export performance of the two groups of firms. A later study by the same author (Kumar, 1998) also revealed that the country of origin of MNEs affected the propensity of their affiliates to be export orientated. Using data over the 1982–94 period, he found that while US MNEs tended to relocate production of intermediate products offshore for export back to their home country, Japanese MNEs seemed to shift production of more finished goods in which they had lost competitiveness at home.

Both the structural and efficiency-enhancing effects of MNE activity have recently been examined by Banga (2006) in India for the 1994–2000 period. The idea behind this study was that when FDI in developing countries takes place in non-traditional sectors, for example, in the technology-intensive sectors, it helps to diversify the export structure of the country. This occurs both directly, through the entry of MNEs, and indirectly, through spillovers, in cases where local firms are helped to raise their export intensities. To examine these effects, Banga conducted two analyses, one at the industry level using 74 industry sectors to test the export-diversifying effect of US and Japanese investment in India, and the other at the firm level, to test spillovers on a sample of 1,448 domestic firms for the same period. She found that US (but not Japanese) FDI had a direct positive effect both on the export intensity in the non-traditional sectors, and by inducing spillovers (higher exporting intensity) in local firms.

Based on field studies conducted in 2001, Rasiah (2004b) and his colleagues found foreign affiliates to have recorded higher export propensity than local firms in the auto
parts sector in Malaysia, in the textile, garment and metal engineering sectors in Kenya, in the electronics and pharmaceutical sectors in Brazil, in the pharmaceutical sector in South Africa, and in the auto parts, electronics and garment sectors in Indonesia. At the same time, these studies also revealed that foreign affiliates in Brazil, South Africa and Malaysia imported a higher proportion of their inputs than did their domestic counterparts, although these differences were not always statistically significant. In a separate study on the electronics industry, Rasiah (2004a) confirmed that foreign firms dominated exports in Malaysia, the Philippines and Thailand.

In developed countries, the picture is no clearer. Early studies on inward foreign investment suggested that US subsidiaries outperformed their UK and Netherlands competitors in the UK, but not in Canada and Australia. A later survey of the UK by Dunning (1976) found that, in 1973, US affiliates recorded a higher export/sales ratio in 23 of 37 manufacturing sectors, including motor vehicles, electrical machinery and mechanical engineering. However, subsequent analysis by Solomon and Ingham (1977) showed that the superior export performance of foreign-owned firms in the mechanical engineering sector primarily reflected the concentration of these firms in subsectors which had the highest export propensity.

In Japan, foreign affiliates generally recorded lower export performances than their local competitors in the 1970s (Ozawa, 1985). In Sweden, around the same time, there were suggestions that foreign firms helped to upgrade the export performance of those sectors in which local firms were shown to have a revealed comparative disadvantage. However, in sectors in which Swedish companies had a substantial comparative advantage, the export performance of foreign firms was no better than, and sometimes inferior to, that of their domestic competitors (Swedeborg, 1985). In their analysis of the impact of foreign manufacturing subsidiaries on the trading structure of French industry, Michalet and Chevallier (1985) concluded that while there was comparatively little difference between the export propensities of foreign subsidiaries and French firms, the former had much higher import propensities.

In Ireland, Ruane (2004) revealed that in 1999 foreign-owned firms exported a higher percentage of their output in each of the 18 industrial sectors. In Indonesia, Rasiah (2004b) found the same results for each of three sectors (namely, auto parts, electronics, and garments) for 2001. By contrast, in Kenya (in 2001) the reverse was the case, with indigenous firms exporting a higher proportion of their output than foreign firms in the textiles and garments, metal engineering and food and beverage sectors (Rasiah and Gachino, 2005).

In their comparison of the export performance of foreign-owned manufacturing affiliates in the US with that of the parent companies of US MNEs, both Pugel (1985) and Lipsey (1991) established that, while the latter recorded higher export/sales ratios in technology- and scale-intensive sectors (for example, electrical machinery, chemicals and motor vehicles), the former recorded considerably higher ratios in most of the traditional and domestically orientated sectors (for example, metals, textiles and apparel, lumber, wood and furniture, and paper products). Lipsey also discovered that the import/sales ratio of foreign affiliates was considerably higher in all sectors than that of the parent companies of US MNEs, and that the trade of foreign-owned firms fluctuated more than that of the US parent companies. Lipsey ascribes part of this latter difference to variations in the age and size composition of the two groups of firms.
What of the changes in the relative trading performance of foreign affiliates and their indigenous competitors over time? As we have seen in Chapter 2, the contribution of such affiliates to the GDP of most countries has risen sharply over the last two decades. One might then expect that this might also be the case in respect of exports. Nowhere is this better demonstrated than in the case of China and the Central and Eastern European countries. In 1991, foreign affiliates accounted for 17% of total Chinese exports; by 2001 their share had reached 50%.\(^{613}\) In the case of Hungary, majority-owned foreign affiliates accounted for 58% of the country’s exports in 1995 compared with 80% in 1999 (UNCTAD, 2002:154). Hardly less dramatic increases in the share of foreign affiliates in key industrial and service sectors have occurred in South Korea, Mexico, Ireland and Costa Rica.

One might also expect that as the share of MNEs in host country exports grows larger, the gap in the propensity to export of MNE affiliates and indigenous firms would begin to close over time. This would be the case, for example, if spillovers from the presence of MNE affiliates induced local firms to export due to the absorption of new technology and management methods.\(^{614}\) Comparing the FDI-led development of Singapore and Ireland, both of which achieved high rates of economic growth by acting as manufacturing export platforms for MNEs engaging in globally integrated production, suggests that host country policies play an important role here. According to the evidence presented by Ruane and Uğur (2006), while in Singapore, the gap has narrowed over time, thanks to policies that have encouraged the development of local enterprises and created linkages between foreign affiliates and local firms, in Ireland, there continues to be a large gap between the export propensities (and productivity levels) of foreign affiliates and domestic firms.\(^{615}\)

496

The impact of MNE activity

14.6 A POLICY FOOTNOTE

14.6.1 Macroeconomic Policies and MNEs

In the light of the findings of this chapter, what actions, if any, should home and host governments pursue so that MNEs and their affiliates conduct their affairs in a way that is consistent with the former’s balance of payments and resource allocative objectives.

We would make just three points. The first is to reiterate that, for the most part, issues relating to the balance of payments of either home or host countries to MNE activity should be dealt with as part and parcel of general macroeconomic policy. Any attempts by national governments to influence the state of the balance of payments or the terms of trade should take account of the consequences of such actions on its broader and longer-term economic and social goals. These may well change over time.\(^{616}\) For example, if the main objective of economic policy is to increase its GDP per capita, subject, for example, to a variety of social and environmental constraints, then independently of the cause of any worsening of the balance of payments, any action taken to remedy it should be judged in terms of its effectiveness in achieving this objective. If the inward direct investment advances this goal better than indigenous firms, but worsens the balance of payments in so doing, then it may be entirely appropriate that the indigenous firms (or the consumers of their products) should pay the price of remedying this situation.
Second, and following on from the first point, it follows that in addition to examining the likely impact of MNE activity on the balance of payments and the structure of trade, governments ought to consider any and all of their policies that might directly or indirectly affect these variables. It might well be, for example, that inward or outward investment lays bare the deficiencies of other economic or social policies or requires the implementation of new measures which may help improve the external trading position of the home or host countries. This is a general point about the impact of MNE activity which Chapter 19 will take up in more detail.

Third, where it can be shown that MNEs (because of their ownership or multinationality) worsen the balance of payments through the abuse of their monopoly power, which, at the same time, reduces their contribution to the GDP (for example, by transfer price manipulation, restrictions on exports, tied imports), it is entirely appropriate that some counteracting measures (for example, strengthening anti-trust institutions), should be taken to modify the behaviour of the MNEs concerned. It is also possible that, while MNE activity may lead to a higher real income over a long period, it may act as a destabilising influence in the short run. Or it may help fashion an international division of labour which stifles innovatory activities and/or the comparative dynamic advantage of the host or home countries. In such cases, as well as for non-economic reasons (for example, to maintain a degree of economic sovereignty and political independence), some intervention directed at restructuring the operation of MNEs or externalising transactions internal to the MNE may be justifiable. However, each case must be examined on its merit. As in other areas of policy and institution building, generalisations are difficult – indeed dangerous – to make.

In the last resort, however, a government’s attitude towards the impact of MNEs or their affiliates on trade and the balance of payments must rest on its perceived role in the world economy. Consider two extreme examples. Singapore, which fully accepts the costs and benefits of being part of the international division of labour, operates a laissez-faire policy towards trade, and has little concern about the impact of MNEs on such trade. In the last two decades, most Central and Eastern European countries, China and India have also recognised the benefits of fully participating in the global economy, and the part which foreign and domestic MNEs play in helping them to achieve their economic and social goals.

By contrast, North Korea and several Middle Eastern states operate a policy of controlling trade to promote their long-term goals of (near) economic and political autonomy, and thus will view critically any attempt by MNEs to draw their economies into the international division of labour. The institutional configuration and competitiveness of most countries normally lies somewhere between these two extremes, but the positioning and policies that their governments may take to protect and advance this position – much more than any specific attributes of MNEs – are likely to be the decisive determinants of their judgement on, and the actions taken towards, inward or outward direct investors in their trade-related activities.

Moreover, the international division of labour facilitated and fashioned by MNEs through networks of equity and non-equity linkages is becoming increasingly complex. A report by UNCTAD (2002:124) characterises this complexity along two dimensions, namely the nature of global value chains (technology, efficiency or marketing driven) and the type of governance within the value chains. For example, the technology-driven...
international value chains fashioned by MNEs such as Intel or Ericsson are based on their capabilities in the design of microchips and mobile phones. However, the value chain of Intel is equity based with internalised control, while Ericsson exercises non-equity-based control of contract manufacturers such as Flextronics. Production-driven value chains leading to superior efficiency, such as that of Toyota, involve both equity and non-equity modes of control. By contrast, many marketing-driven value chains in sectors such as garments and toys rely almost entirely on contractual relationships and external trade, thus allowing the MNEs to focus on creating brand value. Geographically, the importance of clustering in knowledge-intensive activities is offset by a trend towards increasing outsourcing and the breaking up of the value chain, which has increased the options of firms to relocate specific manufacturing and service activities.

14.6.2 The Stability of the Global Financial System

One almost inevitable consequence of globalisation and constant, yet unpredictable, technological change is that it has resulted in greater economic and financial instability in the international economy. Open economies are vulnerable to the influence of such instabilities generated by other markets, and the international transactions involving investment and trade act as conduits that transmit the shocks from one economy to another. If such shocks are small in relation to the size of the domestic economy, and if the domestic economy enjoys a set of robust economic and financial institutions, the costs of openness in terms of increased vulnerability are more than offset by the gains (Gray and Dilyard, 2005). However, if and when these conditions are not met, financial integration and the removal of restrictions on capital mobility can become a major source of instability, as seen in the financial crises in Russia, Latin America and East Asia.

To be successful, any liberalised trade and investment regime relies upon the efficiency and robustness of the financial institutions of the global economy, and their ability to withstand unforeseen strains. In recent years, growing global imbalances, including, but not limited to, the size of the US trade deficit, the position of the US dollar in the global economy, and the increasing international indebtedness of the US, have raised concerns about the prospect of a slowdown, or even a crash landing, of the global economy.

Although the US has been running current account deficits for more than two decades, these deficits have been getting considerably larger in recent years. Concerns about persistent deficits emerged in the mid- to late 1980s, when the trading relationship with Japan came under scrutiny. Prior to the Plaza agreement in 1985, Japanese firms enjoyed the benefits of an ‘undervalued’ exchange rate (relative to that which would exist under a balanced current account). Gray and Lundan (1993b) have suggested that although this imbalance could be largely explained by the differences in the savings rates between the US and Japan, the acquisition by Japanese firms of financial assets and FDI denominated in foreign currencies also contributed to a virtuous cycle of competitiveness for Japanese firms by underscoring the going exchange rate, and increasing the price competitiveness of Japanese products abroad.617

More recently, China seems to have been employing a variant of the Japanese model, by running current account surpluses and precluding currency appreciation by allocating the surplus to increases in international reserves. Fuelled by its stock of net inward direct investment that has been growing rapidly since the early 1990s, China has enjoyed
substantial current account surpluses since 1997, ranging from $17–46 billion annually. At the same time, China has increased its holdings of US Treasury securities from $71 billion in 2000 to $223 billion at the end of 2004, making it the second-largest holder of long-term US Treasury debt after Japan. In 2005, Chinese firms also began to show interest in the acquisition of large US firms, including Lenovo’s $1.75 billion takeover of IBM’s personal computer business, China National Offshore Oil Corporation’s $18.5 billion failed bid for Unocal, and Haier’s $1.28 billion failed bid for appliance maker Maytag.

While one might argue that the US dollar, and by implication the US economy, is simply too prominent to fail, the current situation is seen by many scholars as unsustainable. Cline (2005) asserts that the US cannot continue to run deficits on the current account indefinitely, and running a budget deficit at the same time is likely to make external adjustment even more difficult. He suggests that only a substantial devaluation (of the order of 20% or more) of the dollar could bring about effective adjustment against a trade-weighted average of US trading partners. While the dollar has depreciated in relation to the euro, it has not made a similar adjustment with respect to the renminbi, or indeed any other major Asian currency. Indeed, notwithstanding a few minor corrections undertaken by China, that country and Japan together amassed 59% of the increases in dollar reserves between 2001 and 2004.

By the end of 2006, the US current account deficit had reached $857 billion, accounting for a record 6.5% of its GDP. At the same time, China surpassed Japan to become the largest surplus country in the world, along with amassing the largest foreign reserves (Bergsten, 2007). This seemingly intractable situation has generated a degree of political hostility towards China, as became evident in the deliberations over the (failed) takeover bids by Chinese companies of US targets, and the thus far empty threats by the US Treasury to label China a ‘currency manipulator’ under the rules of the IMF. In early 2007, some kind of Plaza II agreement, encompassing a multilateral effort to correct the currency misalignments that are fuelling the imbalances, was being discussed as a solution (ibid.; IMF, 2007).

While there are two sides to every investment equation, recent attempts to portray the problem as excessive saving on the part of the lender nations would seem to divert attention away from a major borrower’s inability to assume responsibility for its continued profligacy. In an extensive analysis of what he termed the ‘exhaustion of the dollar’, Gray (2004) makes several important points. What makes the current situation novel, he argues, is that the dissaving has been financed by easily cashable assets, which itself has been made possible by the relaxation of capital controls. Furthermore, the debt is denominated in the borrower’s rather than the debtor’s currency, due to the position of the dollar as the currency of the global hegemon. The ability of the US to sustain this role is now under threat, and, in addition to increased levels of protectionism, the concern is that the protracted deficits will cause the dollar adjustment to occur in an abrupt rather than in a controlled manner.

Even in the absence of severe disruption of financial markets, a sizeable devaluation of the US dollar would significantly reduce global aggregate demand. Any marked cutback by the US on expensive imports would reduce domestic incomes in the exporting nations. The ensuing recession would further reduce nominal wealth and depress entrepreneurial activity, and make it more difficult for the US to rely on increased exports to reduce or
remove the deficit. While countries with reserves have the option of deliberately running deficits to induce consumption, whether they would want to do so is an open question. Unfortunately, the historical parallels identified by Gray offer little cause for optimism. In the aftermath of the First World War, major trading nations resorted to competitive devaluation and impediments to imports in an effort to try to ‘export unemployment’. Britain, as the exhausted hegemon of its time, paid a heavy price for attempting to return to the pre-war exchange rates under the gold standard in 1925, as the earlier wartime inflation in Britain had far exceeded that in the US, and the combination of the loss of productive capacity, an overvalued currency and high interest rates, made the recovery of British industry very difficult indeed.

14.7 CONCLUSIONS: THE EVOLUTION OF TRADE AND FDI LINKAGES

The composition of both FDI and trade changes with the process of industrialisation. As the chapter has already observed, the great majority of intra-Triad economic involvement is of an intra-industry character. Moreover, in today’s global economy not only are trade and FDI increasingly interlinked, but also a substantial portion of the former is undertaken by, and within, MNEs. As MNEs become more regionally or globally integrated in their value-added activities, so trade switches from being based on traditional factor endowments to that based on ‘created’ country-specific assets, including institutional infrastructure, demand characteristics and actions taken by extra-market actors (Audretsch, 1989; Porter, 1990).

In Chapter 10 we examined the interaction between FDI and trading structures according to the changing OLI configurations facing MNEs as countries move along their investment development paths (Dunning and Narula, 2004). Inter alia, we suggested that the nature and significance of this interface depended on the type of FDI undertaken by MNEs and the institutional configurations of the countries in which it was located. In turn, the significance of these variables was likely to vary according to the age, degree of multinationalisation and global strategy of the MNEs involved as well as on the stages of development and degrees of openness of the home and host countries.

Efficiency-seeking and strategic asset-acquiring FDI each has its own distinctive consequences for trade (Dunning et al., 2001). While the former tends to lead to more trade based on product specialisation, differentiation and scale economies, and tends to be intra- rather than inter-firm in character, the latter affects trade only in cases where the changing ownership of cross-border activity itself leads to a further product or spatial rationalisation, and/or the upgrading of the L-specific attributes of countries.

Chapter 4 discussed the determinants of FDI, and the extent to which it was likely to substitute for, or complement, other forms of international economic activity, particularly arm’s-length trade in goods, services and assets. Chapters 11 and 12 further argued that the linkages between FDI and trade were critically dependent on the extent, pattern and dissemination of the resources, capabilities, institutions and technology owned or accessed and organised by MNEs. Often, as earlier sections of this chapter have shown, one of the main consequences of both outbound and inbound FDI has been to restructure comparative advantage, and hence the trading patterns of the source and recipient
countries. Throughout history, trade-related policies of governments have decisively influenced both the motivation and ability of MNEs to engage in FDI.

Also, as we have already observed, not only are trade and FDI increasingly linked with each other, but a substantial portion of trade is conducted within rather than between firms. The large volume of trade that is conducted inside multinational enterprises raises questions as to how such transactions are priced. In order to maintain operational efficiency and to avoid distorting management incentives, intra-firm prices should parallel those prevailing in an arm’s length market. How such prices can be determined, and whether MNEs might wish to deliberately deviate from such prices in order to minimise their tax liabilities, will be examined in Chapter 17.

The composition of both FDI and trade has been shown to change with the process of industrialisation (Dunning et al., 2001). In the early stages of development, the two forms of international activity tend to complement each other as both are organised on the basis of Heckscher–Ohlin comparative advantage. Indeed, FDI fosters trade in (natural) resource-intensive goods wherever it provides the capabilities and markets to the exporting countries. Also, in so far as outbound and inbound MNE activity may help upgrade the competitive advantage of both the investing and recipient countries, it may assist in the global industrialisation and restructuring process. By contrast, where FDI is intended to defend or exploit a monopolistic or oligopolistic market structure, it may lead to a less-efficient international division of labour and a suboptimal pattern of international trade.

Once again, generalisations are difficult to make. One study by Katseli (1992) has demonstrated that while in several developing countries (for example, most Asian NICs and, more recently, Mexico) inbound investment acted as a catalyst for industrial restructuring and cross-border economic integration, in others (for example, Brazil and Nigeria) linkages between MNE activity and export development were much more tenuous. Katseli firmly puts the onus for ensuring an orderly and sequential evolutionary pattern of trade and investment on national governments. She cites, as a role model, the strategy of the Japanese authorities in the upgrading of their post-war economy from export-orientated and labour-intensive manufacturing, to domestic capital goods and chemicals industries, to assembly-based production, and finally to knowledge-intensive and globally orientated manufacturing and service-based industries. Although, in the Japanese case, inbound MNE activity did not play a major role in this process (but outward direct investment did), in several other Asian countries it is currently playing a critical role. As Terutomo Ozawa has put it, MNEs frequently act as ‘inter-stage arbitragers of economic development’ (Ozawa, 1990, 1996).

Clearly, there are important policy issues surrounding the interaction between MNE activity and trade. In the 1960s and 1970s, most of the emphasis of home and host governments focused on the contribution of FDI to the balance of payments or, in the case of some developing economies, the advancement of their import-substitution policies and drive towards economic sufficiency. This is no longer the case, although in some developing countries, FDI is helping to alleviate (though not solve) the debt crisis. Instead, governments are viewing MNEs as vehicles for upgrading the quality of their indigenous resources and capabilities, for advancing their dynamic comparative advantages and for integrating their economies into the global marketplace. The reconfiguration of institutions and policies required to meet these objectives – especially as they affect trade – are
likely to be very different from those which primarily view FDI as an import replacement mechanism, or as a necessary (but not always welcome) vehicle for the exploitation of natural resources. The question facing governments of the early 2000s is not whether MNE-related activity (compared with its next best alternative) is trade promoting or trade replacing, but whether it is an efficient instrument for the reorganisation of the cross-border allocation of economic activity in a way which best addresses their developmental and restructuring objectives and the economic and social well-being of its citizens.
15. Market structure, performance and business practices

15.1 INTRODUCTION

We now turn to consider the ways in which MNEs may affect the structure, efficiency and adaptation of resource and capability usage in the countries in which they operate. In particular, this chapter will seek to answer six groups of questions which have particularly engaged the attention of researchers and policy makers over the past three decades or more. These are:

1. Is the inter- and intra-sectoral distribution of output of the parent companies of MNEs, or that of their affiliates, different from that of uninational or indigenous firms?
2. Given the value-added activities in which they engage, are MNEs more or less efficient in undertaking these activities than their uninational counterparts? Are they more or less productive? Are they more or less profitable? Do they record faster or slower rates of growth?
3. Do MNEs induce more or less industrial concentration than would otherwise be the case? Do they prompt more or less product diversification? Do they foster more or less vertical integration? Do they engage in more or less alliance formation and networking?
4. In what ways are the goals, attitudes and behaviour of MNEs and their affiliates different from those of other firms in the economies in which they operate? To what extent is this explained by their distinctive governance of interrelated cross-border activities?
5. Given the growth in asset-augmenting investment, particularly in the form of M&As, as a form of foreign investment, what are the implications of acquisitions on market structure and performance?
6. What are the macro-institutional and policy implications of the kinds of effects identified in (1) to (4) above? In particular, how might home or host governments ensure that, as far as possible, the conduct of their own MNEs and that of the affiliates of foreign MNEs in their midst is consistent with their own economic and other objectives?

How should such comparisons be made? As we have seen, the problem of identifying the appropriate point of comparison is common to all efforts to understand the effects of MNE activity. In their discussion of the home and host country effects of FDI, Barba Navaretti and Venables (2004) refer to ‘unconditional’ and ‘conditional’ comparisons between MNEs and local firms. The unconditional approach simply compares firms of different categories to each other (domestic/foreign, MNE/non-MNE), while the conditional approach takes into account such contextual differences as size, technology and choice of industry. The
unconditional approach is simple, but not always very informative. Yet, while the conditional approach is preferable in many ways, there is a danger that it explains away much of the uniqueness of MNEs and the O-specific advantages they possess.

Such conceptual difficulties aside, the empirical evidence is quite unambiguous on the fact that performance gaps exist between foreign affiliates and domestic firms, the most notable of these being the productivity and wage gaps. Furthermore, as we saw in Chapter 13, even in conditional analyses, once the choice of industry and the quality of the employees (their skill level) and/or productivity are controlled for, wage gaps still persist. Similarly, in the studies reviewed in this chapter, a productivity gap still persists, even after the normalising for differences in the sectoral distribution of the two groups of firms, although, as in the case of the wage gap, the differences are much smaller than in the unconditional comparison.

In some of the more recent studies reviewed in this chapter, performance comparisons have been extended to include not just comparisons between foreign and domestic firms, but also those between foreign and domestic multinationals. Inter alia, such studies have revealed that the former tend to be more productive than the latter, which, in turn, tend to be more productive than purely domestic firms in a given host economy. They also confirm that in terms of the kinds of factors that have been used to account for productivity differences, such as firm size, choice of industry, the kind of technology employed, or the level of R&D expenditure, foreign and domestic multinationals tend to be much more alike, and different from purely domestic firms.

In this chapter we shall concentrate on the effects of MNE activity that in one way or another impinge on the market structure of the home or host economies. In addition to comparative value-added structure, productivity and performance of foreign and domestic firms, we shall look at the distinctive impact of foreign acquisitions, since they represent almost a natural experiment that reveals the ‘true’ productivity advantage of the acquiring firm. We shall also review the evidence on the extent to which FDI crowds in or crowds out domestic investment, either in the host or in the home country. (It should be noted, however, that there is considerably less evidence in general on the home country effects of MNE activity, and more work remains to be done in this area.)

The discussion in this chapter is complemented by Chapter 16, which is concerned with the linkages formed between MNEs or their affiliates and the value-added activities of their competitors, suppliers and customers. The local knowledge externalities (spillovers) arising from MNE activity, as well as the importance of agglomeration economies, are also part of this discussion. The essential difference in focus between this and the following chapter is that the latter is concerned with the effects of MNE activity on local firms (whether through linkages or spillovers), while this chapter is concerned with the ways in which foreign entrants differ from local firms, and their consequent effects on inter- and intra-sectoral efficiency and average productivity.

15.2 A CONCEPTUAL FRAMEWORK

Why and under what circumstances should it be expected that the impact of MNEs on the industrial and market structure of national economies would be different from that of their uninalational or indigenous competitors? What, in fact, are the main determinants of
this impact? Once again, we believe that the answers to these questions lie in the distinctive characteristics both of MNEs, qua MNEs, and of the economic and political environments in which they operate. More particularly, we would expect the impact of MNEs on the competitiveness of home and host countries to be dependent on the nature and extent of their O-specific assets and of the ways in which they augment and/or organise the deployment of these assets in different locations. Second, it will no less rest on the institutional infrastructure of the countries in which they operate, and how it might be affected by the conduct and performance of MNEs.

Previous chapters have analysed some of the ways in which MNE activity impacts on the creation and accessing of technological capacity, and on the upgrading of human resources, as well as on the external trade and payments of both home and host countries. In particular, these have emphasised how globalisation, facilitated by technological change, has encouraged not just the global integration MNE activities, but also the growth of asset-augmenting investment, often undertaken via M&As.

This chapter and the following ones concentrate on the interaction between MNEs and such L-specific characteristics as the size and composition of markets, the pattern and quality of consumer demand, the institutional framework, the number, quality and effectiveness of competitors, the strength and structure of supplying industries, the ethos of entrepreneurship and the degree of openness of the economy, as well as the influence exerted by governments – both national and subnational – on these variables. It is the way in which MNEs interact with these factors and how each affects the industrial and market structures in which they operate that is the subject matter of this chapter.

The impact of MNEs will initially show itself on the level, range and composition of economic activity in which they engage, namely, (1) and (3) in Section 15.1, and on the extent to which their behaviour and performance differ from those of uninaional firms, namely, (2) in Section 15.1. The outcome of the distinctive actions by MNEs will directly or indirectly influence the economic position and organisational structure of ‘related’ firms, and that of the competitive position of the industries of which they are part. Such actions may also actuate a reconfiguration of institutions and of policy responses by governments, which, in due course, may also impinge on the composition and efficiency of indigenous industrial activity.

Can one predict the direction and extent of these activities of MNEs on the industrial and market structures of home and host countries? In theory, their distinctive O advantages should improve inter-sectoral (allocative) efficiency and/or help raise technical and/or scale efficiency. Over time, these advantages should also assist the restructuring of indigenous resources and capabilities to meet new supply or marketing needs. De facto, however, much will rest on the nature of the O advantages – and in particular, whether they are the outcome of competitive or monopolistic forces – and of the use made of these advantages. This, in turn, will be partly dependent on the country-specific institutional configurations with which the MNEs are faced.

Take, for example, the case of an MNE or uninaional firm which acquires its foreign supplier of a particular raw material. The outcome of this acquisition will be very different depending on whether the acquired firm is the sole supplier of the material or one of several. In the former case, the acquiring firm could, if it so desired, crowd out any, or all, of its competitors, or potential competitors, in the final goods market. In the latter
case, it may inject a new element of competition into the supplying industry. Similarly, by integrating forward, an MNE may either reduce, or block, the marketing options of competitors, or stimulate competition in the distribution sector. Third, consider the case of a firm which acquires a foreign competitor. This could restrict the purchasing choices of consumers and, by lowering the elasticity of demand for the product, enable the MNE to raise prices. Alternatively, it could save the acquired firm from extinction, thereby protecting the competitive structure of the industry. In almost every new or expanded FDI, there is a possibility of it causing both positive and negative consequences for the market structure and economic welfare. Even the most obvious O advantages of MNEs (for example, the provision of superior intangible assets, new markets and more dynamic entrepreneurship) may have an ambivalent outcome. On the one hand, they may promote growth and competition in the industries or strategic groups in which they operate. On the other, they may squeeze out their competitors and give the investing firms a monopolistic stranglehold on the industry of which they are part.

Nor does economic theory offer any clear-cut prediction as to whether international production will lead to a more or less concentrated market structure, to more or less product diversification, or to more or less vertical integration. On the first question, as we shall argue later in this chapter, much depends on the mode of entry by the MNE, its size and product composition, and status in relation to its competitors. Moreover, the effects of MNE activity on the market structure of a particular home or host country may be different from that on the global economy. The only general point which may be made is that, where the geographical distribution of value-added activities offers further opportunities to the investing firm to exploit the economies of size and common governance, then, from a global perspective, FDI may foster a greater concentration of market power than otherwise would be the case. Similarly, it may offer new opportunities for product diversification, vertical integration and arbitraging, while the benefits gained by accessing new knowledge, learning capabilities, institutional systems, and by internalising cross-border markets, may give MNEs a cutting edge over national firms in overcoming domestic market failure.

In short, the OLI configurations with which MNEs are faced, and their strategic responses to these configurations, are likely to be different from those facing indigenous or uninational firms. It is the nature of this difference, and its impact on domestic and international market structure, that the following sections of this chapter seek to address.

15.3 MNEs AND ALLOCATIVE EFFICIENCY

Depending on the degree of similarity between the industrial distribution of inward direct investment and that of indigenous firms in the host country, the entry of MNEs may facilitate the restructuring of economic activity between sectors. MNE entry may also facilitate such a restructuring within sectors, depending on the degree to which inward FDI is concentrated in the more capital-intensive, higher value-added segments of particular industries. Finally, according to the degree to which outward FDI is complementary to or substitutes for investment in the home country, some industrial realignment may also be experienced in the home country of the MNE. This section will discuss each of these three effects in turn.
15.3.1 Inter-sectoral Efficiency

Data set out in Chapter 2 have shown that the sectoral distribution of value-added activity by MNEs, both in their home countries and in those in which their affiliates operate, is different from that of the other firms in these countries. However, this is no more surprising than the fact that the structure of a country’s imports and exports of goods and services is likely to be different from that of those domestically produced and consumed. For after all, the MNE is one of the main conduits for trade in intermediate products in which the exporting country has (or wishes to gain) a comparative advantage, to which it adds value by utilising resources and capabilities in which the importing country has (or wishes to gain) a comparative advantage.

It is true that among advanced industrialised countries, at least, there is some similarity in the structure of both domestic and international economic activity. Inter alia, this is shown by the particularly rapid growth in intra-industry trade in recent years. Similarly, there is some suggestion that the patterns of FDI, of cooperative ventures and of networking by MNEs in these same countries are converging – and, with it, the nature of the impact of MNE activity.

It might also be reasonable to hypothesise that the greater the resource-based and institutional differences between countries exporting and importing capital, the more pronounced the impact of FDI by the former on the latter (or vice versa) is likely to be. In part, at least, this may explain why developing countries are generally more mindful of this particular consequence of both inbound and outbound MNE activity than are most developed countries.

We would make one other observation. Most analyses of the impact of MNEs on industrial market structure tend to use sales rather than value-added data, and to look at the composition of the output of final rather than intermediate goods. But no less important to the efficiency of an economy may be the contribution of FDI to intra-sectoral resource allocation. For example, take the case of a group of foreign MNEs which have set up subsidiaries in Pakistan to produce pharmaceutical products. Using sales data, their impact on market structure may appear to be a major one. However, if the purpose of the affiliates – unlike that of their Pakistani competitors – is simply to undertake dosage and bottling operations from imported pharmaceutical chemicals, it may be quite minor. Contrast this situation with one in which these same pharmaceutical companies transfer part of their R&D facilities and pharmaceutical chemicals production to Pakistan. The total sales of the subsidiaries in Pakistan may not change, but their contribution to the value added of the drug industry could be quite significant.

It is quite clear that the OLI configuration influencing the type of production likely to be undertaken by affiliates of MNEs is different from that of indigenous firms – even if the latter also engage in FDI. Take innovatory capacity, for example. Chapter 11 has shown that the great majority of MNEs still undertake most of their R&D in their home countries, although the trend is towards increasing internationalisation (UNCTAD, 2005c). We also explained why, in the case of asset-exploiting FDI, this kind of value-added activity tends to be among the last to be transferred by MNEs from home to host countries. However, with the growth of asset-augmenting FDI, MNEs both from developed and developing countries are buying out or into foreign innovatory facilities.
at a much earlier stage in their internationalisation experience, such as in the recent acquisition of IBM’s PC business by Lenovo (UNCTAD, 2006).

There has been a good deal of empirical research on the impact of MNE activity on inter-sectoral industrial structure. Early studies by Dunning (1958) for the UK, Safarian (1966) for Canada and Brash (1966) for Australia all showed that the sectoral composition of inbound (mainly US) direct investment in manufacturing industry was markedly different from that of indigenous firms. Dunning expressed the difference in terms of a coefficient of deviation, which measured the average difference between the percentage share of employment in US affiliates in a particular industry and that of their employment in all industry, and of an equivalent percentage for all UK firms. He calculated that this coefficient was 0.9% in 1953. (A zero figure would indicate an identical industrial distribution between the two groups of firms.) In particular, Dunning, Safarian and Brash each found that US affiliates were especially concentrated in sectors supplying three kinds of products:

1. high capital- and technology-intensive producer goods (for example, earth-moving equipment, industrial instruments and pharmaceuticals);
2. mass production consumer or producer goods (for example, motor vehicles); and
3. differentiated consumer goods with a high income elasticity of demand (for example, processed foods, detergents and cosmetics).

At the same time, FDI was generally underrepresented in some of the traditional sectors, such as metal manufacturing, textiles and clothing, and also in infrastructural services, for example, public utilities, construction and banking.

The first studies of the industrial structure of outward direct investment were undertaken in the US. Based upon some data collected in 1972, the US Tariff Commission (1973) showed that there was a considerable difference in the distribution of the foreign sales of US MNEs – and, indeed, the domestic sales of such firms – compared with those of their uninational competitors. Several years later, a major study of American investment overseas (Bergsten et al., 1978) concluded that such activities improved the competitiveness of the investing firms, both by enabling them to intensify or upgrade their innovating activities (as R&D could be spread over a larger sales volume), and by the gains of internationalisation per se (for example, the diversification of risks, and the extension of the economies of product or process specialisation).

Subsequent, and more sophisticated, studies have come to the same conclusions, although they show that the degree of deviation in the inter-sector distribution of activity between MNEs and other firms varies according to the kind of investment undertaken between host and home countries, and over time. In general, both trade and industrial organisation theories suggest that the impact of MNE activity on the composition of output of host countries should be positively correlated to the differences between the industrial structure of the investing and recipient countries, although other factors (for example, national government policy towards inward investment) may also affect that composition. The concentration of FDI in Ireland, Belgium and Singapore in several manufacturing sectors, and that in Zambia, Liberia and Guyana in a variety of natural resource-based sectors with relatively little indigenous presence, is testimony to this latter effect (UNCTAD, 2005c). We would also expect that if, and when, globalisation leads to
more convergence in the industrial structure of participating countries, the divergence between the composition of output of foreign- and domestically owned firms should diminish.\textsuperscript{626}

These propositions are generally supported by empirical findings. We refer first to a detailed study edited by one of the present authors two decades ago – and prior to the main thrust of contemporary globalisation (Dunning, 1985a). The study was unique in that it presented a series of country case studies and employed a common analytical framework, first to compare and contrast the industrial composition of outward and inward direct investment with that of domestic investment by uninational firms; and second to examine how far, and in what ways, any of the differences revealed appeared to affect the competitiveness of the capital-exporting and -importing countries. Using data mainly derived from national censuses of production,\textsuperscript{627} these studies found that in the absence of artificial barriers to trade or investment and other structurally distorting features in the domestic economy, MNEs generally had a beneficial effect on resource allocation in the 1970s and 1980s – at least in a static sense.

However, in several of the 12 case studies (that is, in Sweden, India, Canada, Korea and France), the authors concluded that the beneficial effects might have been even greater had the host countries’ institutions and government policies been more market friendly. Given such institutions and policies, however, it was found that the impact of inward and outward investment in Canada and Germany had been mildly positive (in the sense that it had generally advanced inter-sectoral efficiency), and decisively so in Belgium, the UK, the US and Japan. In India, the government’s restrictionist policies towards inbound MNE activity was shown to have inhibited efficient industrial restructuring and institutional upgrading.

The studies also revealed that the effects of outward investment on domestic economic structure have been primarily indirect, through the impact of MNE activity on trade (see Chapter 14). In the case of South Korea and Japan, government policy steered inward investment into those sectors in which the country was evolving a competitive dynamic advantage. This policy worked well in South Korea in the case of export-orientated investment, but not in the case of import-substituting investment. In Singapore, a variety of investment incentives steered foreign-owned companies to invest in higher than average value-added activities, and to upgrade the quality of indigenous human capital.

Another measure frequently used to evaluate the impact of MNEs on allocative efficiency is the extent to which they are concentrated in sectors that have a higher than average RCA or have helped to reallocate resources to sectors in which a country’s RCA is growing.\textsuperscript{628} The higher the RCA, the more a sector is assumed to be comparatively advantaged in international markets. With the exception of France and Canada, in all the countries studied in the Dunning (1985a) volume,\textsuperscript{629} MNEs, relative to indigenous firms, were more prone to concentrate their activities in sectors in which the RCA ratio either was greater than 1, or was increasing over time. However, there was some divergence of opinion about the interaction between outward foreign investment and a sector’s RCA. The Japanese and UK data seemed to support the view that such investment was likely to favour sectors in which the home country’s RCA is less than 1, or was declining, while that of the US, Sweden, Germany, France and Canada strongly suggested that exports and outbound MNE activity were likely to be complementary and in the same sector.
These apparently conflicting views may be explained by several factors. The first is that just as much trade between countries is within similar sectors (that is, intra- rather than inter-industry), so a good deal of cross-border production is also intra-industry (see Chapter 2). Such investment is likely to be based less on the O advantages of MNEs which are specific to their country of origin, and more on those which arise from their firm-specific characteristics, including the extent and pattern of their multinationality. Second, an increasing proportion of investment is trade creating in the sense that it has promoted the international division of labour within the control of the MNE. In such cases, intra-firm trade is part and parcel of FDI. And third, as Chapter 14 has shown, even much import-substituting trade may lead to a continued, and often increased, export of intermediate products, as well as that of final products not manufactured by the foreign affiliates.

The growth of intra-firm, intra-industry FDI, especially between countries in the OECD area – a feature related to the growing convergence of European and Japanese industrial economies with that of the US – partly explains why, over time, the inter-sectoral impact of MNE activity on the economic structure of advanced industrial economies has become less clear cut.

Although the evidence is scant, we can point to some sector-specific findings on how the intensification of globalisation over the past two decades has affected inter-sectoral efficiency. In Mexico, the automotive industry was transformed in the late 1980s and early 1990s from a fragmented low-productivity industry to integrated global production led by US and Japanese MNEs (UNCTAD, 1995:233). Similarly, the UK automotive sector was revitalised by Japanese (and later US) investment in the same period. For the US investors this was, in fact, the second time they were involved in the restructuring of the UK industry, the first having taken place some seven decades earlier.

In Japan, after the Second World War, technology transfer from US MNEs (mostly through licensing) assisted the industrial restructuring away from the labour-intensive industries (food and beverages, textiles) to the capital-intensive industries (machinery, fabricated metals, transport equipment, chemicals). Outward investment from Japan also played a decisive role in the restructuring process. First, it occurred in the labour-intensive sectors, and this was followed by resource-seeking investment in the energy-intensive (and -polluting) activities, and then by high value-added FDI particularly in the automotive sector and in services (Ozawa, 1992, 1996).

Outward investment from Japan and the US also prompted an industrial reconfiguration by other Asian countries in a pattern consistent with the predictions of the ‘flying geese’ paradigm (Akamatsu, 1961; Ozawa, 1992, 2005). One by one as they became more industrialised, these countries, led by Japan and followed by Singapore, Hong Kong, South Korea and Taiwan, moved away from producing labour-intensive textiles and apparel to electronics, and shifted intra-industry production from lower to higher value-added activities. In textiles, the materials and markets provided by MNEs allowed for the growth of indigenous trading companies in South Korea and Taiwan, and a move up the value-added chain to, for example, synthetic fibres, and eventually outward FDI from Taiwan and Hong Kong. In electronics, similar developments took place in Malaysia, Thailand, the Philippines, South Korea and Taiwan, where low-end assembly operations gave way to higher value-added activities, and the emergence of indigenous competitors (UNCTAD, 1995:233). The best known of such firms is probably the Taiwanese firm
Acer, which grew from being an OEM supplier to the fourth largest global computer maker in 2005.

In Central and Eastern Europe, the more recent contribution of FDI to restructuring has also been substantial. According to the data presented by Rojec (2000), there were considerable differences in the distribution of MNEs and indigenous firms in Central and Eastern Europe in the mid-1990s, with MNE activity concentrated in sectors with above-average profitability, assets per employee and export orientation. For example, in the Czech Republic, Slovenia, Hungary and Slovakia, MNEs were overrepresented in motor vehicles, and in Hungary and Slovakia, they were prominent in chemicals and electrical machinery. In general, the distribution of MNE investment tended to be in line with the country’s comparative dynamic advantage vis-à-vis the rest of the EU. However, in Slovenia, the restructuring of domestic industry was not in accord with its RCA, which was still highest in the labour-intensive industries such as apparel. Rather, it appeared that the foreign investors saw the future of Slovenia to be in the more capital- and knowledge-intensive sectors.

Finally, a different view to industrial upgrading is provided by Barry and Kearney (2006), who suggest that inbound foreign investment might also help host countries to achieve a more balanced industrial portfolio, that is, an industrial structure that enables faster growth with lower risk. They provide supporting evidence of Ireland in 1974–99, where MNE activity was concentrated in the higher value-added manufacturing sectors such as office equipment, computers, electrical professional instruments and pharmaceuticals, while domestic investment was concentrated in sectors such as food and textiles.

15.3.2 Intra-sectoral Efficiency

No less important than the impact of FDI on the inter-sectoral distribution of value-added activity is its consequence for the intra-sectoral distribution of such activity, for in many sectors, particularly the technology-intensive ones, the productivity of activities at different points on the same value-added chain may vary as much as that between similar activities across value-added chains. Measured in terms of opportunity cost of inputs, for example, it is likely to be high in innovatory activities and manufacturing or service activities involving substantial amounts of human and physical capital, and low where the activity involves substantial amounts of unskilled labour and standard raw materials. In principle, there is no reason why the activities of firms should not be classified by their contribution to GDP or international competitiveness, in the same way as are the products they produce. In practice, however, data are not classified in this way, but the point at issue is that where it is possible spatially to separate stages of the value-added chain, there is an optimum intra-sectoral structure of activity which foreign-owned firms may, and do, influence.

Compared with both their parent companies and their indigenous competitors, research suggests that the affiliates of MNEs will normally produce a truncated range of goods and services, especially in the early years of their establishment. In market-seeking ventures, it is common for greenfield investors to start by engaging in relatively low-value-added activities and then to diversify into the higher-value upstream manufacturing processes and innovatory activities (for example, R&D and design work). In resource-based ventures, the extraction of minerals or the growing of raw materials and foodstuffs
is often the initial activity, while the secondary processing of these outputs – which is usually a higher-value activity – tends to follow later (if at all). For export-processing 
manufacturing activities, the value-added component will again vary between countries and in a country over time, according to the nature of the products produced and the kinds of inputs, particularly human inputs, they require.

Indigenous firms may follow a similar pattern of development, but they are more likely to engage in higher value-added activities from the start. Indeed, many firms begin life as innovators. Frequently, production by them precedes that by foreign-owned firms. For example, US-owned companies were producing colour television sets in the US long before Japanese MNEs began to set up affiliates in that country; the German chemicals industry was long established before being penetrated by FDI; while Swiss firms were the pioneers in the hotel sector. Moreover, where foreign markets were previously supplied by exports, foreign investors can, and often do, take their time in relocating their entire range of products – if they do at all! The impatience sometimes shown by host governments towards MNE affiliates who appear reluctant to reduce the import content of their sales has sometimes led to local content requirements being imposed on them. Many developing countries have long since felt that foreign MNEs were treating their affiliates as hewers of wood and drawers of water, rather than helping them to develop their full value-added potential.

The conflict of interest between the activities which MNEs may wish to undertake in particular countries and those which governments would like them to undertake has long been a cause for concern. To some extent, this conflict is inevitable. When one examines, for example, the list of sectors which many developing countries identify as those in which the participation of foreign firms is especially welcome, it is usually the same sectors and, within those sectors, the same, namely, the higher-value, parts of the value-added chain.

From an economic perspective, such activities can only be justified up to the point at which the perceived marginal social benefits of the investment are equal to its marginal social costs. In the past – and to a large extent still today – most MNEs are primarily interested in maximising the private net benefits of their foreign activities. We have seen earlier why these two goals may not be compatible and why, in particular, governments may wish to influence the behaviour of MNEs or their affiliates for social, cultural or political reasons.

What, then, is the evidence that MNEs behave any differently from domestically owned firms in the extent and pattern of their vertical integration? Are they more or less prone to concentrate their activities in the higher value-added stages of the production sequence?

First, there is some evidence to suggest that firms that operate subsidiaries abroad tend to engage in proportionately more high-value activities in their home countries, and/or employ a higher proportion of skilled workers than their uninational counterparts. In the leading European investing nations and in Japan, the share of the domestic output of capital-, technology- and information-intensive goods and services accounted for by their own MNEs is considerably higher than their share of all goods and services. But beyond this it is difficult to generalise, as the strategies of firms towards intra- and inter-sectoral diversification appear to vary with factors that have nothing to do with their multi-nationality per se. For example, reference to UK data reveals that the propensity of firms to engage in vertical integration is positively related to their size. Other studies, for example, Jenkins (1979, 1984) and Pearce (1990b), suggest that firm-specific variables,
such as age and experience, and country-specific variables, such as business customs, legal systems and market structures, are more important than the extent to which a firm is geographically diversified. In a detailed study of the development of the pharmaceutical industry in Latin America, Jenkins (1984) showed that the value added to sales ratio of foreign affiliates varied according to their age and the size of the local market.

What, however, does seem clear is that when the foreign activities of MNEs are taken into account, at least one group of these firms is more likely to be vertically integrated than its unination al competitors. This should not be surprising as the main rationale for FDI in upstream resource-based activities and downstream manufacturing or marketing activities is to circumvent, or capitalise on, the failure of intermediate product markets. The oil industry is a classic example. In an attempt both to create barriers to the entry of new competitors and to reduce the strength of existing rivals, the major oil companies in the late 19th century tried to gain control of markets and then supplies of crude oil. This led to the almost complete vertical integration of the oil industry.

In many other industries, too, by engaging in multiple cross-border intra-value-added chain activities, MNEs have become more integrated than their unination al counterparts. This has had considerable ramifications for their economic power and market structure in general. Section 15.5 will discuss this in more detail.

Some research has been done on the vertical integration of multinational affiliates as compared with their local competitors. However, it points to no definitive conclusions. While some studies have shown that well-established market-seeking foreign affiliates may be more vertically integrated than their local counterparts, there is also strong evidence that export-orientated subsidiaries are likely to be less integrated than their indigenous competitors. An alternative measure of differences in intra-sectoral activities by foreign and domestic firms is the skilled labour content of the value added generated. Here, there is more evidence that foreign affiliates employed higher ratios of skilled to unskilled workers. We reviewed some of this evidence in Chapter 13. For example, in the UK, Driffield and Taylor (2000) showed that foreign firms employed higher levels of skilled workers than did domestic firms within a given industry, as well as across industries. However, in the US, Blonigen and Slaughter (2001) found that FDI had an insignificant effect upon the demand for skilled labour.

15.3.3 Effects on the Home Country

A somewhat paradoxical development took place as a consequence of the growth in out-bound investment in Sweden between the early 1980s and the mid-1990s. According to Kokko (2002), there appeared to be a concentration of the production of intermediate goods with relatively low value-added and high raw material content in Sweden, while at the same time, the R&D undertaken by large Swedish firms at home remained considerable, but did not result in higher domestic value-added production. This may have been partly caused by the fact that the increasing specialisation of the domestic production of Swedish MNEs had resulted in a reduction in the number of SMEs. As Kokko notes, in the last decade, the growth of exports in the electronics and telecommunications equipment sectors may have signalled a reversal of this trend, but the episode illustrates one possible consequence of outward MNE activity on the economic performance of smaller open economies.
While it is clear that the reallocation of activities within and between sectors that accompanies internationalisation has a great impact on both the home and host countries, much of the research to date has focused on the host, rather than home country effects of MNE activity. In Chapters 13 and 14, we reviewed the evidence on the home country effects of outward FDI in terms of home country employment and trade. As in so many other issues related to the effects of MNE activity, it is unlikely that those on the home country would be uniformly good or bad, since they combine many separate effects that can often have opposing consequences. This is clearly the case when we look at FDI in the aggregate, since it conflates the influence of different motivations for the investment. Thus, for instance, we might expect that market-seeking investment abroad might lead to a reduction in exports from the home country, while resource-seeking investment might allow for an increase in the production of complementary inputs at home. By contrast, in the case of asset-augmenting investment, firms in the home country might benefit from reverse-technology transfer.

In this subsection, we shall discuss the impact of outward FDI on the level and structure of domestic investment in the home country. The general concern of home countries has been that if MNEs are faced with capital constraints, they may allocate investment into projects abroad or projects at home; in such cases foreign and domestic investment are viewed as substitutes for each other.

Such a relationship was, in fact, found by Feldstein (1994), who analysed the effect of outbound FDI on the domestic capital stock for a sample of OECD countries in the 1970s and 1980s. The study employed a model in which gross domestic investment was a function of gross national savings, as well as that of inward and outward FDI. The results indicated that each dollar of outward direct investment reduced domestic investment by approximately one dollar. Additionally, estimating that only about 20% of the value of the assets by US affiliates abroad was financed by cross-border flows of capital, and another 18% was financed by retained earnings, Feldstein calculated that each dollar of foreign assets acquired by US MNEs was likely to reduce the US domestic capital stock by up to 38 cents. In the Netherlands, Belderbos (1992) also found a substitutable relationship for MNEs in the food and metal and electronics industries in 1978–84.

Indeed, several cross-sectional studies from the 1970s and 1980s found that investment abroad tended to reduce domestic investment in the same period. However, using aggregate panel data on the foreign and domestic capital expenditures of US MNEs in the 1980s and 1990s, Desai et al. (2005b) found a complementary relationship. In a subsequent study using more detailed panel data on US MNEs drawn from the BEA benchmark surveys, Desai et al. (2005a) revealed that MNEs that expanded their activities abroad, also tended to increase their activities domestically. Since foreign economic activity and domestic economic activity may be, at least partly, determined by the same factors, the authors devised an instrument that related to investment abroad, but had no connection to domestic investment. To create this instrument, the authors used the differences in GDP growth rates in the firm-specific geographic distribution of foreign investment to predict changes in foreign investment. They found that outward FDI was complementary to domestic investment, and that foreign employee compensation, sales, assets and numbers of employees were also positively associated with equivalent domestic economic activity. They also unearthed evidence that increases in outward FDI were associated with additional domestic exports and R&D spending.
Using manufacturing census data for the US economy in 1992–97, Bernard and Jensen (2006) found that while, on average, plants belonging to multi-unit and multinational firms were less likely to be shut down, once the effects of industry- and plant-specific characteristics were accounted for, the results were reversed. Thus, although individual production units belonging to multiplant firms tended to be larger, older and more productive than those of single-plant firms, they were actually more likely to be closed down. Although US MNEs accounted for only 6% of all manufacturing plants in the US in this period, they were responsible for 26% of the total employment and 34% of output; hence the authors concluded that plant closures by MNEs were likely to have a significant effect on the restructuring of US industry.

Using industry-level data from Sweden between 1982 and 1995, Braunerhjelm and Oxelheim (2000) noted that there was considerable growth in outward FDI in R&D-intensive (Schumpeter) industries, such as chemicals, fabricated metal products, machinery and equipment. In the traditional (Heckscher–Ohlin) industries, such as textiles, wood products, paper and pulp and basic metal industries, outward FDI also grew, but to a lesser extent. The authors hypothesised that since the Schumpeterian industries utilised headquarters services and R&D, which could be employed in multiple plants, they were likely to be more footloose, thus creating more potential for a substitutable relationship. By contrast, Heckscher–Ohlin industries were more likely to record scale economies at the plant level, and be more tied to location-specific resources, which gives rise to possible vertical complementarities. In fact, the authors found a weak substitutable relationship between outward FDI and home country investment in R&D-intensive industries, although this was present only for investment within the EU. The opposite (complementary) pattern was observed in sectors based on traditional comparative advantage. It should be noted, however, that while the study was conducted at the industry level, it is still likely to have masked differences between more-disaggregated industry sectors, as well as any variation in the strategies of firms within each sector. Indeed, many of the studies reviewed in Chapter 14 on the relationship between outward FDI and home country exports suggested that the level of aggregation can significantly influence such results.

In their study of the Canadian case, Hejazi and Pauly (2003) used a stock adjustment model, in which firms adjusted their investments to reach a desired capital stock, but where adjustment carries some cost. In their model, home country gross fixed capital formation (GFCF) was dependent not only on corporate profits, taxes, prices for intermediate inputs, wage levels, interest rates, lagged capital stocks, depreciation and R&D spending, but also on inward and outward FDI. Their results indicated that the impact of FDI varied according to the investing partner. Overall, inward FDI to Canada was positively related (complementary) to domestic GFCF, but investment from the UK or from the rest of the world had a greater positive impact than did investment from the US. For outward FDI, the results were more mixed. Canadian investment to the US was shown to increase domestic investment, while capital flows to the rest of the world, excluding the UK, decreased domestic investment. The authors explained these results by reference to the motivation for the FDI. They suggested that as Canadian outward FDI into the US and the UK was aimed at market access, it would be expected to have a positive or neutral impact on domestic investment. For inward FDI, to the extent that investors from outside NAFTA were locating their activities in Canada to produce goods for sale
in the free trade area, this would be likely to boost domestic capital formation, although this was not specifically investigated in the paper.

Using firm-level panel data for a sample of medium-sized and large manufacturing firms in Austria in the 1997–2001 period, Pfaffermayr (2004) demonstrated that MNEs that expanded activities in their foreign affiliates, also experienced employment growth at home, suggesting a complementary relationship. In Finland, an analysis of a panel of 218 Finnish manufacturing firms between 1998 and 2002 discovered that outward FDI by financially unconstrained firms increased domestic investment, while such investment directed at emerging markets, or undertaken by financially constrained firms, decreased domestic investment (Oksanen, 2006). These results were, however, sensitive to the specification of the particular model used.

Finally, in an analysis conducted by UNCTAD (2006:183) of outward FDI from developing countries, the authors concluded that it had not only had a positive effect on the investor firms’ performance, but that in some countries, mostly in South-East and East Asia, outward FDI has been one of the factors of successful industrial restructuring, alongside sustained economic growth. Once again, however, the study emphasised that the impact of outward FDI on both the amount and composition of domestic investment was likely to vary according to country-specific factors, the motives for FDI, the path of internationalisation taken by MNEs, and the spillover effects arising from being part of a foreign-based cluster or network of firms.

15.3.4 Conclusions

We conclude, then, that the evidence, scant and fragmentary as it is, would seem to support the proposition that the transfer of O advantages by MNEs has generally raised inter-sectoral efficiency in both home and host countries. But there is no a priori presumption that this should be so. In cases where MNEs respond to inappropriate institutions or government policies, or fail to adjust efficiently to market signals, then, as Kojima (1978, 1990) has consistently argued, they may worsen the economic structures of home and host countries rather than improve them. However, it is important to judge the structural impact of international investment from a dynamic viewpoint, and in terms of the particular goals and aspirations of the participants concerned.

The evidence on the impact of MNEs on intra-sectoral resource allocation is even more inconclusive. There seems little doubt that the global operations of MNEs are more vertically integrated than are the domestic operations of non-multinationals – especially in resource-based sectors; and that, in relation to domestic sales, they are more capital and knowledge intensive than unilateral firms. In host countries, while there is evidence that the presence of foreign affiliates has raised both the value-added component of sales of goods produced and the skill content of that value added, they are generally less vertically integrated than their indigenous competitors. Indeed, far from raising the skill level of host countries, in some developing countries, at least, they may reduce it. Which of these two scenarios is the more likely largely depends on the type of FDI and the motivation for it, the age of that investment and the economic and business environment in which it is made.

Finally, it should be emphasised that a beneficial restructuring of economic activity does not mean that upgrading will occur in all sectors. It is quite possible – indeed probable –
that while MNE investment, both outbound and inbound, will raise the skill content of
the labour force in some value-adding activities, some deskilling will occur in others. It is
also important to distinguish between the short- and long-term structural adjustment con-
sequences of FDI, and especially those for the entrepreneurial ethos, market structure and
innovatory capacity of both home and host countries.

Indeed, the same general conclusion applies to the effects on the industrial structure of
the home country as well. It is clear from recent firm-level evidence that the assumption
that outbound investment will necessarily reduce domestic investment is no longer
justifiable. However, the degree of complementarity is context specific and depends on a
number of factors, such as the motivation for the investment and the ability of the home
country to adjust its comparative advantage to stay competitive in the global economy.

15.4 MNEs AND TECHNICAL EFFICIENCY

The fact that foreign-owned firms do possess unique income-generating O assets relative
to indigenous firms might suggest that they should be both more productive and profitable.
This, however, is a non sequitur. First, as several authors from Hymer (1960) onwards have
pointed out, as well as possessing certain competitive advantages, foreign firms may be
faced with certain competitive disadvantages vis-à-vis local firms in penetrating the latter’s
markets. This is particularly likely to be the case when the host country houses its own
global enterprises. Second, and allied to the first point, it is often not necessary for an MNE
to earn higher average rates of return on its capital than its competitors (either in its home
or host country). Discounting for risk, all that is required is that, at the margin, it should
be earning profits at least equal to its opportunity costs. Third, the fact that MNEs may be
more efficient as suppliers of intermediate products does not necessarily mean that they
are better at adding value to these products than are domestic firms. There are failures
among MNEs just as there are among uninational firms.

Fourth, like other firms, a firm may use its O advantages to exploit a monopolistic pos-
tion rather than to improve the efficiency of resource allocation. Indeed, some firms may
seek to acquire O advantages to strengthen their market power (Hymer, 1960; Newfarmer,
1979, 1985). In this event, not only might any increase in profitability or productivity take
the form of monopoly rent, but any such benefits may accrue entirely to the investing
company and will not be reflected in the performance of the affiliates. Much, of course,
depends on the accounting and intra-firm pricing practices of the MNE, to which we shall
turn later in this section and in Chapter 17. Lastly, as Chapters 3 and 5 have shown, much
MNE (and particularly incremental MNE) activity is motivated by the desire to augment or
to tap into foreign resources and capabilities, which might help advance their global strate-
gic goals. Here, as with some ancillary (for example, trade-related) investments, the value of
a foreign capital stake is judged by its effects on the economic well-being of the MNE in toto,
rather than on that of the productivity or profitability of its local affiliates.638

In so far as, on average, MNEs and their affiliates tend to be larger than their uni-
national counterparts, and are more geographically or industrially diversified, it might be
hypothesised that they should be better able to take advantage of any economies of scale
and scope. We do know that there is some propensity for MNEs to concentrate in sectors
and activities most subject to the economies of size (Horst, 1972a; Pugel, 1981; Dunning,
1985a; Kumar, 1990; UNCTAD, 2005c); while Kogut (1985) and others have detailed the kind of O-specific advantages which MNEs might enjoy arising from the geographical economies of scope. Caves (1981) has also demonstrated that such economies are a significant discriminating feature between MNEs and uninational firms.

For more than 30 years, researchers have been fascinated by the productivity and profitability of multinational affiliates as compared with those of their indigenous competitors. Most earlier studies were concerned with foreign manufacturing investments, primarily those of a market-seeking variety. They attempted either to make matched or paired comparisons between foreign-owned and indigenous firms, or to incorporate the foreign ownership variable into a regression equation explaining productivity or profitability differences. Another approach has been to try to isolate the most distinctive characteristics of foreign affiliates vis-à-vis indigenous firms.

Each kind of analysis has produced similar results. The earlier studies of US subsidiaries in the UK, Canada and Australia, based on intra-industry or matched paired comparisons, all concluded that, using either productivity or profitability indices, US firms outperformed their indigenous competitors by a substantial margin. Haex et al. (1979) found that productivity and profitability were among the most significant variables which distinguished foreign- from domestic-owned firms in Belgium; this result was confirmed by a matched sample survey. More recent evidence, reviewed in this chapter, has confirmed the earlier findings, while taking advantage of new techniques, such as panel data analysis, which combines both a cross-sectional and a longitudinal dimension.

15.4.1 Evidence of Productivity Gaps

Studies on productivity usually employ one of two measures, labour productivity, or total factor productivity. The benefit of TFP is that the choice between capital and labour is also taken into account, but other features make it less desirable. TFP is the residual of the production function where each of the components, notably capital, is subject to measurement error. Labour productivity, which is typically measured by value added per employee or output per employee is more accurately measured, but only reflects the efficiency with which human resources are employed within the enterprise.

Apart from assessing whether or not foreign-owned firms are more productive than domestic-owned firms, we are also interested in the extent to which such advantages influence the operations of domestic firms in the economy. If MNEs, in general, are likely to be more productive than purely domestic firms, the entry of a foreign firm into a host economy might be expected to have two kinds of effect. The direct effect is a simple composition effect, whereby average productivity in the host economy would be increased with the inclusion of a high-performing firm. In addition, if the entry of a more productive foreign firm also caused some of the least-productive domestic firms to exit, this would result in further increases in average productivity in the host country. These kinds of direct productivity effects of MNE entry are the focus of this subsection.

An indirect effect arises if and when the productivity advantage of the MNEs also helps to improve the productivity of local firms. These effects have three main sources. First, they can arise from the linkages between the MNE and local suppliers. In this case, an increase in the demand for intermediate products is likely to result in a higher scale of production and lower costs for local firms. These are known as ‘pecuniary’ or
‘market’ externalities. For example, using published sources and interviews with suppliers of soap and detergent products in Mexico, Smarzynska Javorcik et al. (2006) show how the entry of Wal-Mart in 1991 through a joint venture (in which they later acquired a controlling interest) modernised warehousing, distribution and inventory management, changed the relationship between the suppliers of consumer goods and the retailers, and reduced profit margins while increasing volumes. Local firms that were not able to meet Wal-Mart’s terms lost market share and many exited, while the remaining players became more efficient by reducing their demand for labour and by becoming more innovative.

Second, productivity advantages can be transmitted to domestic firms through deliberate transfers of knowledge and technology by, for example, training, or through licensing (see Chapters 11 and 13). These technology flows are also often connected to vertical supplier relationships. Third, productivity advantages can spill over to local firms as non-pecuniary knowledge externalities, such as demonstration effects and labour market exchanges. Both pecuniary and non-pecuniary (knowledge) externalities will be discussed in Chapter 16.

Productivity gaps in developed host countries
Among the early studies on productivity gaps, Dunning (1976, 1985a) observed that the gap between US and other foreign firms and their UK counterparts had narrowed over the years – a result which the author suggested reflected some loss in the O-specific advantages of the former, and some improvement in those of the latter group of firms. Dunning (1985b) also reported that in 30 of 41 manufacturing sectors in the UK in 1979, foreign affiliates recorded a higher TFP. This result was subsequently confirmed by Davies and Lyons (1991) who found that although in 1987 foreign-owned firms in UK manufacturing recorded a 48.6% productivity advantage over UK-owned enterprises, less than half of this advantage could be traced to their nationality of ownership – the balance reflecting the fact that they tended to be concentrated in more highly productive sectors.641 By contrast, in 1971, all of the 30% productivity difference was attributed to the ownership effect. A more detailed study by Solomon and Ingham (1977) of the performance of foreign firms in the UK mechanical engineering industry concluded that foreign firms did no better than domestic firms.

Belgian research also showed that there were country-specific differences in the performance of foreign-owned firms. While US-owned firms recorded consistently higher rates of return on capital and productivity, other (especially EC-based) firms did not.642 In Canada, too, Shapiro (1983) found that while US-controlled firms earned a premium of 3.5% on their profits/net assets ratio in the late 1970s, other foreign-owned firms performed no better than their indigenous competitors. Perhaps most noteworthy of all, foreign affiliates in the US did not appear to record a higher value added per employee than that of indigenous firms, except in the mining and wholesale trade sectors (Graham and Krugman, 1989). Indeed, in 1986, although the average productivity of the former group of firms was marginally (4.0%) higher than the latter, the authors found that this was entirely because they were concentrated in the more highly productive sectors. Such data strongly suggested that the relative performance of MNE affiliates was likely to be both home and host country specific, and could well be a function of the overall and sectoral competitiveness of the investing and recipient nations.
More recently, Pfaffermayr (1999) has revealed that in the 1992–96 period, Austrian manufacturing firms that operated plants abroad recorded higher labour productivity at home than did their purely domestic Austrian competitors. He also found that foreign-owned firms in Austria were more productive than the totality of Austrian firms, including those with foreign production. Using evidence for 1,002 firms in Spain, 1,915 in France and 918 in Italy in 1992–97, Castellani and Zanfei (2003) found that, in France, domestic firms were more productive than foreign firms across a broad range of industries, while in Spain and Italy, foreign firms were more productive on average. In all three countries there were a number of industries in which domestic firms acted as the technological trailblazers.

In Canada, using a firm-level panel of 359 domestic firms and 49 foreign firms, Rao and Tang (2005) found that, after controlling for the influence of other factors, foreign controlled firms were on average 10–20% more productive than their domestic counterparts in 1988–2001. The authors attributed this to the superior O advantages (especially technological and managerial advantages) of foreign firms. They also found evidence of spillovers to local firms.

In the UK, using 3-digit industry-level data for 1989 and 1992, Driffield (2001a) found that the productivity advantage of foreign investors boosted the productivity growth of domestic firms by 0.75% annually. However, rather seeing this as evidence of spillovers, Driffield argued that this advantage stemmed from the increased competition introduced by the foreign entrants. Using the establishment-level Annual Business Inquiry Respondents Database (ARD), a study by Oulton (2001) showed that between 1973 and 1993, US ownership of UK manufacturing firms increased productivity by as much as 20%, with higher capital intensity and better labour quality (proportion of white-collar workers and higher wages) explaining more than half of this advantage. Also using the ARD data, Harris and Robinson (2003) confirmed that foreign-owned plants in the UK had higher productivity as measured by TFP, with US-owned plants being the most productive. However, the positive productivity gap was not consistent across the 20 sectors covered in the study, even for US firms.

Helpman et al. (2004) suggested that if there is a fixed cost to a domestic firm becoming an exporter – and an even larger fixed cost to becoming a multinational – then the logical order of productivity advantage of firms would run from the least-productive domestic firms, who might have to exit, to somewhat more-productive domestic firms that serve niche markets, to even more-productive domestic firms that export, and finally to home-based MNEs that both serve the domestic market, and undertake trade and FDI. Additionally, to the extent that operating in a foreign market imposes costs that the MNE has to overcome, one might also expect that foreign affiliates in any given host country would be somewhat more productive than its domestic multinationals. To test this proposition, Griffith et al. (2004) performed a three-way comparison between foreign multinationals, British multinationals and domestic firms in the UK using ARD data for 1999 to 2001. Their results confirm those discovered by Dunning (1985b) two decades earlier that this is, indeed, the order of value added per employee in Britain; similar differences were also found in the investment per employee and intermediate inputs per employee.

The methodology of propensity score matching was used by Barba Navaretti and Castellani (2004) to assess the effects on performance of a firm investing abroad for the first time, that is to say, in changing its status from a purely domestic to a multinational enterprise. Their central argument is that part of the productivity gap between
multinational firms and domestic firms is likely to be due to the self-selection of firms that perform better prior to venturing outside their home countries, and consequently a simple comparison with national firms is inappropriate. Instead, they recommend a comparison between the performance of foreign firms with those domestic firms that are similar to themselves, but, nonetheless, have not made the same choice. Assessing the counterfactual position, then, provides an opportunity to model what would have happened had the foreign investment not been made.

In the empirical study, Barba Navaretti and Castellani used a comprehensive panel dataset of Italian firms between 1993 and 1998, where performance was measured by TFP growth, employment growth and output (total sales) growth. They found that the performance of Italian firms that invested abroad for the first time improved following the investment. Specifically, the post-investment rate of growth of output and rate of growth of productivity was higher than for the counterfactual (that is, the not investing) firms. They did not find evidence of a deceleration of the rate of employment growth, which suggests a complementary rather than a substitutional relationship between foreign and domestic activities.

Incorporating the dynamics of entry and exit into productivity comparisons, De Backer and Sleuwaegen (2003b) showed that the productivity dynamics in domestic- and foreign-owned firms in Belgium are entirely different. Their study concentrated on labour productivity, measured as value added divided by employment. They found that most of Belgian productivity growth between 1990 and 1995 occurred within firms (rather than through entry and exit), and that most of that growth was accounted for by foreign affiliates. In terms of the dynamics of entry and exit, the patterns were also very different. The entering foreign-owned firms recorded a higher than average productivity, while their exiting counterparts had lower than average productivity. For indigenous Belgian firms, the net effect of entry and exit was marginally positive, but the level at which they entered and exited was considerably below their average productivity levels. The authors also suggested that downsizing by foreign affiliates and increasing automation had contributed to the strong growth in labour productivity.

In a subsequent paper, De Backer and Sleuwaegen (2005) extended their analysis by distinguishing between foreign-owned subsidiaries, Belgian MNEs and domestic Belgian firms. In 1995, there were only 129 domestic MNEs in manufacturing in Belgium, while there were 1,060 MNE affiliates. At that time, the foreign firms accounted for only 4.5% of all manufacturing firms, but were responsible for 41% of employment and 51% of value added. The authors found that the labour productivity of foreign affiliates was higher than that of domestic MNEs, which, in turn, was higher than that of purely domestic firms. The authors asserted that the productivity advantage of foreign affiliates was due to scale economies (calculated on the basis of the output elasticities of the input factors) and technical efficiency (measured as the distance from the industry production frontier). In general, they found that the domestic Belgian MNEs were much more similar to foreign MNEs than domestic firms in terms of their performance.

**Productivity gaps in developing host countries**

What, then, of the differences in performance between foreign and domestic firms in the less-advanced developed and industrialising developing countries? In his study of foreign affiliates in Portugal, Simões (1985) found that in 17 out of 21 sectors their net output per
head in 1977 was higher than that of Portuguese firms. The differences were most marked in the high- to medium-technology-intensive and advertising-intensive sectors where foreign affiliates were set up mainly to supply the local market. In Singapore, in 1975, foreign affiliates recorded a higher value added per worker than domestic firms in 17 of 28 industries (Lecraw, 1985a). In Brazil, using multiple regression analysis, Willmore (1986) demonstrated that foreign-owned firms recorded an average of 20% higher value added per employee, even allowing for scale and industry differences; these differences were significant at the 1% level. Fairchild and Sosin (1986) obtained similar results for other Latin American countries, as did Kumar (1990) for India. By contrast, Koo (1985) found that in Korea there was no significant difference in the value added per capita of foreign and domestic firms.

In Morocco, although MNE subsidiaries recorded a higher labour productivity than domestic firms in 13 out of 18 industries between 1985 and 1989, when the data were controlled for firm size, not only were the subsidiaries more productive in only three sectors, but also their average productivity was 30% below that of their Moroccan counterparts (Haddad and Harrison, 1993).649 Haddad and Harrison also found that, even normalising for size differences, foreign firms in Morocco achieved the same or higher levels of multifactor productivity in 13 of 18 manufacturing sectors. In Venezuela, Aitken and Harrison (1999) found that foreign firms were more productive than local firms, but that foreign ownership was also concentrated in the more-productive sectors. In Slovenia, Rojec and Hocevar (1996) revealed that foreign firms enjoyed 42% higher value added per employee in 1994 than did domestic firms. This was confirmed by Zajc Kejžar (2006) for a large sample of manufacturing firms in the 1994–2003 period.

In an interesting contribution, Bell and Marin (2004) found that between 1992 and 1996, the sectors in which inbound direct investment in Argentina was growing, and which accounted for three-quarters of all such investment, were not the most technology-intensive sectors, but rather those in which local firms had considerable competences. Based on the results of a comprehensive innovation survey, the authors found that there was a great deal of heterogeneity in the levels of productivity and technological activity between firms. This was notably the case between foreign-owned affiliates and local firms, but it was also true within each group, with a small number of top performers, and long tails of lagging firms. While the labour productivity of foreign affiliates in Argentina conformed to previous findings in that they were more than twice as productive as domestic firms, in terms of export intensity and investment per employee, they only performed at par with domestic firms. And, in the area of technological activities, the MNE affiliates’ R&D intensity and training intensity was lower than that of domestic firms, although their skill intensity was higher. In terms of investment in capital-embodied technology, MNE subsidiaries also performed worse than domestic firms.

A further series of country case studies conducted by Rasiah (2004b) demonstrated that while the productivity gap between foreign and domestic firms was positive in Kenya and Uganda, it was non-existent in South Africa, and mixed in Malaysia and Brazil. These (and other findings) suggest that productivity differences between groups of firms may be sector specific, and that before such gaps are used to justify any policies that favour foreign over domestic investors, the productivity advantage of the former in specific sectors needs to be established (see also Bellak, 2004b). Chapter 16, which will review the evidence of indirect spillover effects on domestic productivity, discusses many studies that demonstrate the existence (and sector specificity) of positive productivity gaps between

15.4.2 The Impact of Acquisitions on Productivity

Cross-border acquisitions are interesting in the context of studying productivity differences, since they offer something approaching a natural experiment for revealing the productivity advantages of MNEs and/or their affiliates as compared to domestic firms. Such studies, while still small in number, have generally found a positive impact on the productivity of the acquired firm, although there is also some evidence that this effect declines over time.

One important challenge in such studies is how best to control for the competitiveness of the acquired firm prior to acquisition, since any observed productivity gain following the acquisition might be due to foreign MNEs having ‘cherry picked’ the most productive candidates for acquisition, rather than any productivity improvements arising from the O advantages of the MNE. Furthermore, even controlling for the initial level of productivity, it is possible that any improvements following an acquisition might be due to exogenous improvements in the host economy, rather than those specific to the M&A. To overcome this problem, a few studies have explored the counterfactual scenario (that is, what would have happened in the absence of an M&A) by comparing the performance of the acquired firm to other domestic firms that, in every other identifiable respect, resemble it. While there are understandable difficulties in using this approach, it can yield very interesting results as it allows for comparisons between firms that were acquired by foreign multinationals, firms that were acquired by domestic multinationals, and firms that were not subject to acquisition during the period of the study.

In the UK, Conyon et al. (2002) compiled a sample of 331 domestic and 129 foreign takeovers between 1989 and 1994, for which there were at least two years pre- and post-acquisition data available. They found that on average the labour productivity of the acquired firms increased after a foreign acquisition, while it decreased after a domestic one, as well as in domestic firms where no ownership change took place. Foreign firms paid equivalent employees 3.4% more than did domestic firms, but this was wholly attributable to their higher productivity. Firms bought out by foreign MNEs increased their labour productivity by 12% in the first year, with those firms acquired by US affiliates recording the most gains.

Other scholars have paid attention to the kinds of plant acquired by foreign and domestic enterprises. In particular, they have sought to examine whether foreign acquirers selected underperforming firms with the intention of replacing inefficient management, or whether they were simply looking for the best-performing targets in the target country. In the UK, Harris and Robinson (2002) using plant-level data from the ARD database for the 1987–92 period, compared productivity differences between domestic and foreign acquisitions and domestic- and foreign-owned plants that did not change ownership. They found that foreign-owned plants had higher TFP, and were more likely to purchase better-performing domestic plants than were their indigenous counterparts. In acquisitions undertaken by other UK firms, while the plants were still more productive than the average in the control group, they were less productive than those bought by foreign-owned firms.
In Italy, using data on a sample of 113 foreign and 71 domestic acquisitions, and 374 non-merged manufacturing firms between 1994 and 1997, Piscitello and Rabbiosi (2005) found that two years following an M&A by a foreign MNE, the labour productivity of the local target improved. A similar improvement was observed following acquisitions by a domestic MNE, but not in acquisitions by uninational firms.

In Japan, Fukao et al. (2005) analysed the impact of inward FDI between 1994 and 2000 by comparing TFP in foreign- and domestically owned firms in the manufacturing sector. During the period of the study, the expansion of the presence of foreign firms in Japan took the form of M&As and the growth of already existing affiliates, rather than greenfield investment. Foreign-owned firms recorded significantly higher TFPs, and slightly higher TFP growth, than did their indigenous counterparts. Foreign affiliates also spent more on R&D per worker, and had a higher capital to labour ratio. Consequently, the labour productivity of the former was also higher than that of the latter, as were the wages they paid. There were 143 foreign acquisitions and 1,360 domestic acquisitions during the period of study; by analysing the characteristics of the targets, the authors found that the Japanese firms acquired by foreign MNEs tended to be larger and more productive and profitable than those acquired by Japanese firms. According to the authors, this finding reflected the prevalence of ‘rescue missions’ within keiretsu networks, where low-performing small firms were salvaged by other member firms.

Since ownership status and productivity are not likely to be completely independent of each other, studies such as these are likely to suffer from the problem of endogeneity.652 There are several ways of dealing with such problems in panel data, one of which is the propensity score matching approach we discussed earlier. This involves creating a counterfactual situation to assess what would have happened to the domestic plant had it not been acquired. This is done by matching as closely as possible the observable characteristics of the domestic firms that remained under domestic ownership with those that were acquired by foreign firms.

This was the method adopted by Arnold and Smarzynska Javorcik (2005) in a study using plant-level manufacturing data from 1983 to 1996 in Indonesia. This study revealed that purchase of local firms by foreign MNEs had a significant positive effect on the former’s TFP. After three years, the acquired plants outperformed the control group by 34%, and about half of this gain was realised during the first year following the acquisition. The sample included 185 plants that changed their ownership, although, unfortunately, the authors were not able to test for the effect of domestic acquisitions.653 They found that the rise in productivity following an acquisition was due to corporate restructuring, as evidenced by increased investment, employment and wages. Additionally, the authors performed numerous checks of robustness to ensure that the improvements in productivity were not caused by other factors, such as relaxation of credit constraints or changes in capacity utilisation. While there was some evidence that the acquired plants were performing better than the average prior to acquisition, the act of foreign ownership led to significant improvements in the acquired plants.

15.4.3 Evidence of Profitability Gaps

The two questions of whether MNE affiliates are not just more productive, but also more profitable than local firms in a host country, and whether MNEs are more profitable than
uninational or less multinational firms in their home country, have attracted considerable attention in the empirical literature. The latter question, of whether it ‘pays’ for firms to become multinational, or to increase their degree of multinationality, has been particularly extensively studied over the past decade or so.

The empirical studies we review in this subsection reveal a variety of efforts to uncover the nature of the multinationality–performance relationship, most of which are frustrated by the difficulties involved in capturing the degree of multinationality of the firm in a meaningful way when using large samples. Indeed, at the aggregate level, there would seem to be little reason to expect that there would ever be one unequivocal answer to the form of the multinationality–performance relationship, as it is likely to be dependent on a variety of contextual variables, such as the mode of entry, and the countries and sectors involved. However, for an individual MNE, there may clearly be a point(s) of inflection, past which point further increases in multinationality no longer yield a net benefit. Whether such points are firm specific, or exhibit some sectoral or geographical patterns, continues to be the focus of much ongoing research.

Between foreign-owned and local firms

The early studies concerning the performance of MNE affiliates indicated that they recorded superior performance in developed countries, but mixed results in developing countries. But what do such data actually mean? To what extent can one conclude that higher productivity or profitability means superior technical efficiency? The literature distinguishes a number of reasons for differences in inter-firm performance. These include:

1. manipulation of transfer prices of intra-firm transactions (including interest rates on loans and payments for managerial services and technology) which might be used by MNEs either to lower or to raise profits in one or other of its subsidiaries;
2. manipulation of the asset base of subsidiaries by MNEs which may increase or lower the rate of return on capital;
3. differences in accounting conventions (for example, depreciation provisions, valuation of assets, currency translation adjustments and so on, between the two groups of firms);
4. deliberate use of the financial leverage of the MNE qua MNE to alter the costs, revenue or profits of subsidiaries as a means of improving its long-term competitive power;
5. profits recorded by a foreign affiliate may be an inadequate indicator of their value to the investing firm (that is, there may be benefits external to the affiliate but internal to the MNE);
6. host government tax and other policies may discriminate against or in favour of foreign affiliates; and
7. there may be other differences between local and foreign-owned firms which are not captured in any multiple regression equation or matching analysis that might explain differences in performance.

This last reason needs further elucidation. Fairchild (1977), Lecraw (1983) and Kumar (1990) have each hypothesised that part of the differences in profitability between foreign-owned and local firms may be explained by the fact that – even within particular
industries – they do not always compete with each other as they belong to different strategic groups. For example, MNEs may be technologically more aggressive, serve dissimilar market segments, engage in different kinds of competitive strategies and business practices, and be faced with different entry or mobility barriers. Sometimes these differences may reflect the different ownership of firms – and sometimes not. Lecraw (1983), in his analysis of the performance of MNE activity in six light manufacturing industries in five Asian countries in the late 1970s, found that their profitability varied inversely with the degree of competition with which they or their parent companies were faced. Other scholars (McGee and Thomas, 1986) have argued that intra-industry variables may account for up to half of the differences in profitability or price-cost margins.

Kumar (1990) found that foreign and domestic firms in India did belong to different strategic groups within an industry, and that the former were protected by entry barriers more than their local counterparts. This was particularly the case in knowledge-intensive sectors. His statistical analysis confirmed that it was these, rather than intra-group differences in efficiency, that accounted for the major part of the higher profit margins of foreign-owned firms.

Apart from the research just mentioned, economists and business analysts have paid only scant attention to assessing the importance of the factors identified here, though it is known that some of them – notably the first, fourth and fifth – can be extremely important. (It will be observed that these factors do not always work in the same direction!) Additionally, comparative studies have generally focused on the profitability of MNEs and local firms, rather than between that of foreign MNEs of different nationalities, or between foreign and domestic MNEs. Some earlier studies suggested that, even allowing for differences in accounting conventions, there were country-specific variations in the performance of MNEs, with US MNEs doing considerably better than their European counterparts (Rugman, 1983; Dunning and Pearce, 1985). More recent studies have examined some of the reasons for the poor performance of foreign-owned firms in the US, both historically (Jones and Gálvez-Muñoz, 2002), as well as in comparison to the investments of US MNEs abroad.

**Between multinational and uninational firms**

The second question of interest is whether MNEs are more profitable than uninational firms, or whether there is a positive relationship between the degree of a firm’s multinationality and its profitability. It is not unreasonable to hypothesise that MNEs are likely to be more profitable than their uninational competitors because of the distinct O advantages (inter alia arising from their foreign operations) possessed by the former. On the other hand, there is no guarantee that the geographical diversification of value-added activity is the most profitable form of growth and expansion. Indeed, some commentators have argued that FDI is often a second-best growth strategy, and that the resources spent on it would be better allocated to innovatory activities or improving domestic productivity. However, foreign- and domestically orientated strategies are probably less substitutable than they were 20 years ago. Today, it is often imperative for a firm to produce outside its national boundaries if it is to remain competitive in global markets – even though, as a result, it manages to earn only an average or below-average rate of return.

The earlier research suggested that MNEs were likely to be only marginally more profitable than their domestically orientated competitors, and that MNEs earned modestly
higher rates of return on their global sales and for assets than did non-MNEs, but the differences were rarely statistically significant.656 By contrast, in a major study of 1,198 US manufacturing firms in 1967, Horst (1971) established that once size was taken into account, MNEs did no better than uninational firms. Lall and Siddharthan (1982) went further and established (in the case of 74 of the largest US MNEs in the 1976–79 period) that the degree of a firm’s multinationality had a negative influence on the growth of firms, excluding the influence of advertising and R&D intensity, scale economies and profitability. Finally, in a controlled sample of 58 manufacturing MNEs and 43 domestic corporations, Michel and Shaked (1986) discovered that, over the 1973–82 period, the latter group of firms actually recorded a consistently higher risk-adjusted performance.657

Other studies have attempted to establish whether there is any relationship between the degree of multinationality of firms and their overall performance.658 In their survey of 523 of the world’s largest industrial companies, Dunning and Pearce (1981) found that while firms with a modest degree of foreign production (that is, between 2.5 and 22.5% of their global production) recorded higher rates of return on sales in 1977 than those with little or no foreign production, the most multinational of all companies did less well. Buckley et al. (1984) established that profitability (net income/assets) was positively and significantly related to the degree of multinationality of the world’s largest industrial enterprises in 1972, but not so in 1977 (except for non-US firms). In a later study of 181 US and European MNEs, Geringer et al. (1989) showed that the average annual rate of return on their sales between 1981 and 1985 monotonically rose as the proportion of their foreign subsidiaries to total sales increased between 1 and 60–80%, at which point the relationship spiked and then monotonically decreased. Finally, in a seminal study on the performance of US firms abroad in the 1965–71 period, and using data provided by the Internal Revenue Service (IRS), Bergsten et al. (1978) found not only that US MNEs were more profitable than domestic firms in the same industry, but also that part of the reason for this higher profitability could be attributed to their FDI. However, the latter conclusion was later disputed by Gaspari (1983), who failed to find any significant impact of outbound MNE activity on domestic profitability.

Using a sample of 5,704 firm-year observations of quoted non-financial firms in the UK for the 1991–96 period, Garrod and Rees (1998) compared the valuation of the assets and earnings of uninational firms and UK MNEs on the one hand, and of the domestic and foreign operations of the MNEs on the other. They hypothesised that if international diversification contributed to the net worth of MNEs, this should be apparent in the comparison of the valuation coefficients for these two groups of firms. If, however, MNEs benefited from the better economic opportunities available in foreign markets, their foreign operations should be more highly valued than their domestic ones. In the event, they found that the MNEs enjoyed higher valuations than uninational firms, but that there was little or no difference between their domestic and foreign operations.

While the above studies have largely focused on the international expansion of firms, scholars in strategic management have sought to analyse the relationship between firm performance, product (industrial) diversification and international expansion (geographical diversification) simultaneously.659 Most of the latter research treats product diversification and geographical diversification as distinct strategic choices.660 For example, Kim et al. (1989), using an augmented Jacquemin–Berry entropy measure, focused on profit growth – as measured by growth in operating profit margin and return
on assets – and found relatedness in product and international expansion to influence one another for a sample of 130 US MNEs in the early 1980s. Unrelated global diversifiers were shown to have performed better than domestic firms, but the same was not true of related diversifiers. They also looked at profit stability as a measure of risk, and found that the reverse was true, that is, that related global firms performed better than domestic ones, but there was no difference between unrelated global firms and their domestic counterparts.

Another study on 304 UK MNEs by Grant et al. (1988) used both a categorical\textsuperscript{661} and a Herfindahl index of product and international diversification. This study found that profitability in the domestic market contributed to foreign expansion in the 1972–84 period, which in turn contributed positively to firm profitability. By contrast, Tallman and Li (1996), using return on sales as a measure of performance, and affiliate sales as a proportion of global sales, and the number of foreign countries in which US MNEs were present, as measures for multinationality, offered strong evidence of a positive performance effect of product diversification, but only a limited effect from international diversification, in 1987.\textsuperscript{662}

In a study of Japanese MNEs in the early 1990s, Delios and Beamish (1999) found that while their geographic scope was positively related to performance, their degree of product diversification was not. Another study by Geringer et al. (2000) on the performance of Japanese MNEs between 1977 and 1993 used a Herfindahl-type measure of product diversification, and the ratio of foreign sales to global sales as an index of international diversification. They found that the profitability of the MNEs was only weakly related to the degree of product diversification, and was negatively correlated with the degree of international diversification, although the latter effect was not consistent over time.

Using Compustat data for US firms in 1984–97, Denis et al. (2002) found that globally diversified firms\textsuperscript{663} traded at a discount relative to a portfolio of single-segment domestic firms in the same industries, and that this discount was similar in magnitude to that associated with industrial diversification.\textsuperscript{664} Since firms that become foreign investors tend to be more productive than other domestic firms, this suggests that the discount is more likely to be the result of some destruction of value arising from the process of geographical diversification, rather than that of the initial selection. The authors draw parallels to the received literature on industrial diversification, which has attributed the observed loss of value to empire building and inefficient investment decisions by corporate managers, for example, through the subsidisation of losing projects.

Indeed, the authors cite evidence that in the heyday of the conglomerate boom of the US in the 1960s, diversified firms were in fact valued at a discount, and that it is only with the focus on core competences over the past two decades that the causes for the value discount have been addressed. This raises some interesting questions concerning the expansion of cross-border M&As since the 1990s, as the evidence so far would seem to indicate that in many cases they have brought little benefit to the acquiring firms’ shareholders, while offering similar private benefits to managers as industrial diversification.

\textbf{Some methodological and theoretical issues}

Reviews of the international diversification literature by, for example, Grant et al. (1988), Sullivan (1994) and Ruigrok and Wagner (2003), reveal a wide distribution of
conclusions which favour a positive relationship between the degree of multinationality of firms and their financial performance, those which favour a negative one, and those which are inconclusive. Part of the explanation for such disparity could be to do with problems in the measurement of either multinationality or performance, or indeed both.

Clearly, of critical influence in assessing the multinationality–performance relationship is the extent to which the measures used adequately capture the range of foreign activities of the MNE. Several suggestions have been made to improve the simple foreign to domestic sales, assets or employment ratio, by incorporating some measure of the degree of spread across countries, and the distribution of assets in those countries (see, for example, Sullivan, 1994, 1996). Other scholars, such as Vachani (1991), have extended the division between related and unrelated diversification to geographical diversification, while Goerzen and Beamish (2003) have suggested that any assessment of geographic scope should incorporate both the degree of asset dispersion and that of host country diversity. Their empirical results, based on Japanese firms in 1999, suggested that while the relationship between economic performance and geographical asset dispersion was positive, the diversity of host countries was negatively related to performance, with a positive interaction between the two factors.

In addition to improved measures of multinationality, different functional forms for the multinationality–performance relationship have also been proposed. For example, Gomes and Ramaswamy (1999) identified an inverted U-shaped relationship for a sample of US firms, while Capar and Kotabe (2003) found a U-shaped relationship between multinationality and performance for a sample of German service firms. Contractor et al. (2003) reviewed the earlier findings concerning a U-shaped relationship, and an inverted U-shaped relationship, and suggested an S-shaped relationship, for which they found some support in a cross-section of service industries. The reasoning for such a relationship is that good financial performance is likely to be required prior to initial internationalisation, which, in turn, would contribute to better future performance. While the period of early internationalisation may not be profitable, it is expected to be followed by a period of profitability before diminishing returns set in.

Furthermore, there is also the possibility suggested by Hennart (2007) that many studies exploring the multinationality–performance relationship have sought empirical regularities without a firm theoretical base. Specifically, Hennart identified four common explanations employed by the authors to justify a multinationality–performance relationship: financial diversification, the exploitation of scale economies, greater flexibility, and enhanced opportunities for learning. In each case, he argues that a persuasive case for the superiority of the financial performance of MNEs remains lacking.

Financial diversification as a benefit of multinationality has a long history dating back to the pioneering work of Agmon and Lessard (1977), Rugman (1977) and Aggarwal (1980). While such benefits may be real, any negative correlation in the returns of the main markets of the MNE, which underlies the benefits from financial diversification, is as likely to be an incidental outcome as one driven by firm strategy. If financial diversification was the primary objective, this could be more easily achieved through investment in financial assets rather than via FDI. Furthermore, such benefits must be considered in the context of the increased risks the MNE is likely to incur in multiple foreign markets.
The size of the market does matter in enabling the firm to achieve economies of scale, but the distribution of sales between domestic and foreign markets is of secondary importance in its contribution to performance. Operational flexibility is similarly important, but a firm’s ability to take advantage of it is not necessarily related to the dispersion of its assets or sales across countries. Indeed, the experience of some MNEs from emerging economies would suggest that there may be benefits of possessing relatively few O-specific assets, and obtaining or augmenting these by a multiplicity of cooperative and contractual relationships instead (see, for example, Mathews, 2002b). The learning argument is perhaps the most persuasive one, but even here the benefit of an extensive network of partner firms does not automatically confer a competitive advantage on the initiating firm, if and when it does not have the organisational competences to successfully integrate the acquired assets and competences with those it already possesses.

The fact that the ownership of assets (and thus FDI) may no longer be the sole, or even the main, distinguishing characteristic of an MNE, compounds both the measurement and the conceptual problems involved in examining the multinationality–performance relationship. Methodologically, all of the studies based on cross-sectional regressions face considerable problems, since at any one time, and even within the same industry, MNEs are likely to differ on a number of dimensions, for example, their motivations for cross-border activity and the diversity of means to reach their objectives, and any effect on performance would have to be very sizeable to overcome the effects of averaging across firms. Furthermore, if it is assumed that the firms’ activities reflect the best choices available to them, and that, at best, these choices would be expected to result in normal levels of profitability, it is not clear why at any particular point in time, a cross-sectional average of a group of MNEs would show higher or lower levels of performance than those exhibited by a group of domestic firms. The extent to which some MNEs might manage to make consistently successful choices in their internationalisation processes over time is a promising area of study, but it is separate from that directed to establishing a general relationship between multinationality and performance.

One way to overcome such problems would be to conduct longitudinal studies using panel data which allow for the exploration of both firm- and time-specific effects, while employing rigorous controls for reverse causality (that is, good financial performance causing multinationality rather than vice versa). While the latter condition is seldom met, Kotabe et al. (2002) incorporated the effects of firm heterogeneity by using Compustat data for a panel of 49 US manufacturing MNEs from different sectors in the 1987–93 period. They found that the impact of multinationality on both financial and operational performance of the investing firms was moderated by their R&D and marketing capabilities. Also employing panel data on 22 Dutch firms for the 1967–92 period, Vermeulen and Barkema (2002) found that their financial performance during the process of internationalisation was dependent on the speed at which internationalisation took place, and the firm’s organisational ability to undergo further expansion at a given point in time.

15.5 MNEs AND MARKET STRUCTURE

We now turn to consider the impact of MNE activity on the market structures in the countries in which they operate. ‘Market structure’ is a generic term which describes the extent
and character of the rivalry that exists between firms engaging in broadly the same lines of value-added activity, and which pursue similar product and marketing strategies. In particular, we shall consider three elements of such a structure identified in the literature:

1. the number and significance of firms supplying a particular market (industrial concentration);
2. the degree of product or process differentiation (range and scope of products and value-adding activities); and
3. the extent to which markets are contestable (entry and exit conditions).

15.5.1 Market Concentration

The subject of the impact of FDI on the number and distribution of firms in a particular industrial sector or strategic group has fascinated economists and business analysts for the past 30 years. In particular, two questions have intrigued researchers:

1. Do MNEs or their affiliates concentrate their production in sectors with different market structures from non-multinationals or indigenous firms?
2. In the sectors in which they do concentrate, what impact do they have on the market structure of that industry?

On the first question, the kind of O-specific advantages possessed by MNEs suggest that these are likely to be most prevalent in sectors characterised by a two-tier market structure. The first tier consists of a small group of large firms supplying similar, but differentiated, products to the leading domestic and international markets. The second tier comprises a large number of smaller producers supplying more-specialised products for particular market segments and/or countries. Thus, in the motor vehicle industry, Ford, GM, Toyota and Nissan are in the first tier while Jaguar, Porsche and Ferrari are in the second. In the petroleum sector, there are several hundred oil-producing and -refining companies, but most of the oil-refining capacity is in the hands of a handful of MNEs. There are literally thousands of banks, accountancy and advertising firms and hotels, but, in each case, most FDI and cross-border collaborative venturing is undertaken by a small number of leading companies.

A market structure of perfect competition would contain no MNEs (and, for that matter, no multiplant or multispatial national firms) simply because there would be no need to internalise intermediate product markets. Chapter 4 categorised market imperfections into two groups: first, those that were endemic to a particular market, namely, risk and uncertainty, scale economies and externalities; and second, those that arose as a result of the structurally distorting behaviour of the government or the participants in the market (for example, barriers to access to intermediate or final product markets, product differentiation, predatory pricing). The greater these imperfections, the more the market structure is likely to veer towards oligopoly or monopoly.

In general, MNE activities are most pronounced in sectors where the market structure is best described as an amalgam of oligopolistic and monopolistic competition. In some sectors (for example, oil, aluminium, rubber tyres and reinsurance) the output is largely
in the hands of a few large firms. In others (for example, cosmetics, pharmaceuticals, textiles, food processing, insurance and business services) the concentration ratio is not as high, but such sectors are likely to be characterised by other market imperfections (for example, extensive product differentiation, branding and other entry barriers). It is also worth noting that as a result of technological and organisational advances, privatisation, rising standards of consumer demand and the entry of MNEs from developing countries, today there is more FDI in the (so-called) traditional sectors such as iron and steel, telecommunications, public utilities and clothing and footwear, than once there was.

At the same time, a high concentration ratio should not be equated with a lack of competition. Indeed, an oligopolistic market structure may provide the best guarantee of effective inter-firm rivalry in sectors where the optimum size of firms is large, yet there is open competition between foreign and domestic producers. Nor is it correct to assume that MNE activity will always lead to an increase in concentration ratios. Even if one takes perfect competition as a norm, one cannot infer that prices will necessarily be higher and quality lower in imperfect markets. Economies of scale and scope may offset any increase in market power resulting from an increased inelasticity in demand. As part of a rising standard of living, consumers may value a higher quality of output, or environmentally friendly products which only a small number of firms may be able to supply.

Viewed from a dynamic perspective, oligopoly may be the best structure to promote innovation and institutional upgrading. In short, in some circumstances, a highly concentrated market structure may offer a better guarantee of effective and lasting competition than any other practical alternative. Most certainly, too, the attributes of an optimum market structure are likely to vary both between sectors and, within sectors, by countries.

On the question of the role played by MNEs in fashioning market structure, much will depend upon the kind and extent of market one is considering. Is it the home country market, or that of the host country, or that of a region, or the worldwide market? Is it for the complete range of (similar) products produced by a firm (for example, glassware, chemicals, rubber products or management consultancy) or a particular product line? For example, concentration ratios for the worldwide output of a wide variety of products, largely supplied by MNEs, generally fell in the 1962–82 period (Dunning and Pearce, 1985). Since competition does not just take place at a national level, but also at a global level, one might go as far as to ask if domestic market structure matters, if there are no barriers to imports, or if output is in the hands of foreign affiliates?

Over the past couple of decades, these ratios have increased again in some sectors – such as pharmaceuticals and banking – as a result of a substantial number of cross-border M&As, and an increasing tendency for firms to hive off their less-profitable or non-core activities (UNCTAD, 2000b, 2005c). While it is possible that a large number of firms may produce a generic product (for example, an anti-histamine drug), a particular variety of that product may be supplied by very few firms, or even only one firm. Moreover, while, measured in terms of the products supplied, there may have been a fall in concentration ratios, measured in terms of the ownership of the resources to produce these products, it is possible that the ratios may have increased. Finally, in so far as the economies of scope and R&D may confer market power on the firm, this type of concentration should also be considered.

While globalisation has opened up more markets and introduced new competitors to the market over the past two decades, two other developments in the patterns of firm
growth have taken place. On the one hand, waves of M&A activity, and particularly the horizontal mega-mergers that have taken place since the late 1990s, have increased global concentration in some sectors. On the other, the trend away from product diversification that began with the dismantling of US conglomerates in the 1980s, has continued throughout the 1990s, resulting in a redistribution of ownership in several industrial sectors. Indeed, out of the top 201 global firms in 2000, only 10 were conglomerates and 14 were highly diversified, a third of the equivalent number seen two decades earlier (Franko, 2004).

However, in spite of these trends, and contrary to popular belief, in a wide range of industries, such as automobiles, oil refining, paper and board and aluminium, global concentration ratios have actually declined substantially since the 1950s, and increased only modestly in response to the merger wave of the late 1990s (Ghemawat and Ghadar, 2006). Using data on seller concentration by industry complied by Franko (1991, 2002), Ghemawat and Ghadar demonstrate that even on the national or regional level, the industry-weighted average share of the top 12 firms by sales in manufacturing has actually declined between 1980 and 2000 in the US (50 to 38%) and Europe (40 to 37%), and increased in Japan (8 to 21%), but from a much lower base.

Looking at the share of the largest, and the four largest, firms in global markets in 1980, 1990 and 2000, more industries showed signs of increased concentration, but these changes were seldom dramatic. Indeed, as Franko (2003a) demonstrates, the notable feature of the past two decades has been the extent to which the global top positions have been challenged by newcomers. Of the largest firms in 15 industry sectors in 1960, only four were still at the top in 2000. In the 1960s and 1970s, American firms were displaced by Europeans, while in the 1980s they were mainly superseded by Japanese firms. In the 1990s, American firms reasserted themselves again in industries such as computers, pharmaceuticals and textiles. Turnover in the top four positions was particularly pronounced, averaging more than 40% in the 1980s and 1990s. Furthermore, the firms that held their positions tended to be those that built, rather than acquired, their positions in the market. Consequently, both Franko (ibid.) and Ghemawat and Ghadar (2000) question the idea motivating many of the mega-mergers of the 1990s, that large size (rather than networks of contractual or cooperative relationships) is necessary in order to compete in the global economy.

Most empirical research by IB scholars has centred on the effects of MNE activity on the market structure of host countries. Here there are two conflicting hypotheses. The first is that MNEs may increase competition and reduce industrial concentration by their entry into existing foreign markets. The second is that, because of their unique O-specific advantages – or their desire to augment these advantages – MNEs may either enter into new markets and create their own barriers to further competition, or, as a result of their superior efficiency and aggressive business practices, drive out competitors from existing markets, thereby increasing industrial concentration (Section 15.5.4 reviews the evidence on the crowding-out effect).

Both hypotheses are eminently plausible. Which, however, is likely to be correct depends very much on the mode of entry by the MNE and its marketing strategy, as well as on industry- and country-specific circumstances. Moreover, at least part of the impact of foreign-owned competitors on the structure of a particular sector’s market may be made without the physical presence of the foreign firm. The initial penetration by
Japanese and Korean firms of the US and European auto and colour television markets occurred mainly through exports rather than by foreign production. The difference between the two modes of market entry is that foreign imports do not directly affect concentration ratios (as normally measured) as these relate only to the composition of domestic output.

This, indeed, is one of the weaknesses of such ratios. Although they may tell us something about the structure of production in a particular industry, they tell us nothing about its competitive position in international markets, or about the willingness and ability of its firms to pursue particular global strategies. Indeed, the more open an economy is, the more generic the intermediate products (for example, technology) used by firms are likely to be; and the more diversified their product composition, the less useful are national concentration ratios as a measure of (the lack of) competition.

Clearly, the modality of entry of an MNE into a foreign market is an important factor affecting market structure. Where it is by way of a greenfield investment and the affiliate is not introducing a completely new product into the economy, competition is likely to increase and the concentration ratio will fall. The entry of US firms into the UK pharmaceutical industry in the 1960s, of Korean and Taiwanese firms into the US consumer electronics industry in the 1980s, of Western MNEs into the Indian computer software industry in the 1990s, and into the Indian call centre industry in the early 2000s all had this effect.

By contrast, where the investment takes the form of an acquisition, for example, the purchase of tyre companies in Europe and the US by Japanese MNEs in the late 1980s, or the acquisitions made by European pharmaceutical and food processing firms in the US in the late 1990s, or the takeover or partial takeover by Chinese companies of high-technology companies in the US, and those by Indian companies of the leading iron and steel producers in the UK in the 2000s, there may be no immediate effect on the concentration ratio, except that which arises from any changes in output of the acquired firm consequent upon its change in ownership (see, for example, UNCTAD, 2000b).

Indeed, cross-border M&As accounted for most of the growth in international production over the 1990s, even allowing for the differences in the way in which flows of M&As and greenfield investment are calculated. In total, flows of M&As accounted for 80% of all FDI in the boom year of 1999 (UNCTAD, 2000b). Less than 3% of M&As were actually mergers, and full acquisitions accounted for two-thirds of the total, while minority acquisitions were twice as common in the developing countries. Additionally, most cross-border M&As took place between firms in the same industry, and hostile mergers accounted for less than 5% of the total value.

Country-specific factors affecting the mode of entry include the size of market and the structure of M&As (compare, for example, the favourable institutional mechanisms and relaxed attitude towards mergers in the UK with the extreme reluctance to allow foreign acquisitions in Japan), the age of the investing firm and the competitiveness of the exchange and capital markets (Walter, 1992; Dunning and Lundan, 1997). A prolonged under- or overvaluation of exchange rates is also likely to play a role in cross-border M&A activity. In the early 1980s, the overvaluation of the pound sterling in relation to the US dollar resulted in some very substantial acquisitions of US assets by firms from the UK (and Japan), many of which were awash with liquidity. By contrast, when later the US dollar was overvalued in relation to the pound, there was a reverse flow of acquisitions.
In the mid-1990s, the substantial flow of FDI into South Korea after the Asian economic crisis reflected the weakness of the Korean currency, while in the early 2000s, acquisitions by Chinese firms in the US have been bolstered by the substantial reserves of foreign currency held by the Chinese authorities, notwithstanding the fact that the Chinese renminbi has been undervalued with respect to the dollar.

A different reason for the speedy entry into a particular market achieved by M&As is to pre-empt competitors from entering into it, or to avoid the (perceived) unfavourable consequences of not being active in that market, or not having access to specific resources. This of course presumes that the acquiring firm can gain control over not only the assets and the labour force of the acquired firm, but also its network of relationships with suppliers and customers, which in fact may not always be achievable (Anderson et al., 2001).

Indeed, the fact that M&As have either not created value, or have only created wealth for the target firm’s shareholders, suggests that strategic considerations are likely to play a significant role in cross-border M&As. For example, a study by Aw and Chatterjee (2004) on UK acquirers with targets from the UK, the US, and continental Europe between 1991 and 1996 found that UK firms acquiring large takeover targets experienced negative two-year cumulative abnormal returns (CARs). However, the post-takeover performance of UK firms acquiring domestic targets was less negative than that of foreign targets, and UK firms acquiring US targets fared better than those acquiring continental European targets. This would lend support to the contention that, in cross-border M&As, cultural and institutional differences, and management control problems also often outweigh any cost savings or scale economies gained.

With these remarks in mind, let us now turn to review briefly the evidence on the effects of MNE activity on the number and size of firms in their home or host countries. Most of the earlier research revealed that the average size of foreign affiliates (usually measured in sales or employment terms) was considerably larger than that of their indigenous competitors. Caves (1974a) suggested that a major reason for this might be the former’s privileged access to the scale economies of their parent companies. Because of this, he argued, MNEs are less likely than de novo domestic firms to set up subsidiaries of below optimum size.

On the other hand, in some countries (for example, the US and Japan) and in some sectors (for example, computers, autos, tyres, pharmaceuticals, accountancy services and aluminium) the main competitors of a particular foreign affiliate are other foreign affiliates, domestic MNEs or multiproduct domestic firms, which are of comparable or even greater size. Moreover, where foreign affiliates are set up as part of a defensive oligopolistic strategy and/or are truncated versions or miniature replicas of their parent companies, they could be (and often are) much smaller than their local counterparts. This has been found to be the case in developed countries with relatively small domestic markets (for example, Canada, Belgium and Australia) as well as in several developing countries. In a study of the pharmaceutical industry in Brazil, Jenkins (1984) disclosed that, although the industry was almost completely dominated by foreign-owned firms, there was no evidence that their presence had led to an increase in concentration. Rather, he found that as a result of a clustering of different nationalities of foreign firms, the contribution of the top eight firms in the industry was less than that in their respective home countries.
As might be expected from the arguments so far addressed in this chapter, the effects of MNEs on the extent and form of rivalry between firms in host countries is mixed. While there is abundant evidence of a positive association between the participation of foreign firms in an industry and its degree of concentration, there is much less agreement about the effects of inbound investment on the market structure of an industry. In several service sectors in which deregulation has occurred, the evidence strongly suggests that MNEs may have intensified local competition, although they have sometimes encouraged a dualistic market structure (UNCTC, 1992c). Examples include the role played by foreign-owned firms in restructuring the retailing industry in South Korea and Taiwan, once the governments of these countries lifted the legal restrictions on FDI in the retail trade sector in the mid-1990s. A similar restructuring has taken place in the South African banking sector, following deregulation in 1994 which allowed foreign banks to conduct business in the country (UNCTAD, 1997).

It is to be noted, however, that most of the studies identified in the previous paragraphs were based on cross-sectional rather than on time-series data. In other words, they sought to explain whether the presence of MNEs helped determine concentration ratios, rather than if they led to an increase or decrease in such ratios. One exception was that of Steuer et al. (1973) who found that there was no evidence to suggest that inbound investment had increased industrial concentration in the UK between 1963 and 1968. However, several of the industrial case studies described in Newfarmer (1985) strongly suggest that in the smaller advanced and in several developing economies, industrial concentration had risen in sectors in which the participation of foreign firms was most pronounced; examples include the cigarette, telecommunications and banana sectors.

More recent examples include a variety of infrastructural sectors in Central and Eastern Europe following the opening up of this region to inbound FDI. Much of this increased concentration was as a direct result of privatisation and its aftermath (Artisien-Maksimenko and Rojec, 2001). In one of the few recent studies to model the dynamics of concentration over time, Driffield (2001b) discovered that inward investment to the UK between 1983 and 1992 reduced concentration, and it increased the speed at which industries adjusted to the new equilibrium level of concentration. This effect was more pronounced in industries with high sunk costs, for example, due to high R&D or advertising expenditures, capital intensity and/or scale economies, suggesting that MNEs might help to reduce concentration levels particularly in industries that indigenous firms find difficult to enter.

We would enter one further caveat. If there is some uncertainty about the effect of FDI on industrial concentration, there is no less ambiguity as to the optimum size structure of a particular industry and for groups of competing firms. Clearly, this will depend on the extent to which economies of scale are possible, the degree of competition from imports and/or related products and the positioning of the domestic firms in international markets. Each of these, and other related variables, is likely to be industry and country specific, making it exceedingly difficult, if not impossible, to generalise about the welfare consequences of FDI on the size distribution of firms. In some instances, MNE activity has most certainly increased (domestic) industrial concentration and improved performance in international markets. In others, it has led to an abuse of monopoly power which has reduced efficiency and lowered consumer welfare. Similarly, FDI has sometimes broken up national or international cartels with beneficial effects; but at other
times it has fragmented markets, created surplus capacity and fostered inefficient levels of production.

15.5.2 Product Differentiation

Depending upon the size and diversification of the enterprise of which it is part, the age and operating experience of the affiliate, the market structure and economic environment of the host country and whether the mode of entry is by greenfield investment or M&A, affiliates of MNEs may produce a greater or lesser range of products than their indigenous counterparts. Once again, generalisations are becoming less easy because some MNEs, as part of their global strategies, are seeking to establish a substantial presence in each of the main markets of the world, either through FDI or by cross-border cooperative alliances.

Earlier in this chapter we suggested that the foreign value-added activities of MNEs, especially those designed to service relatively small local markets, are likely to be more truncated than those of their domestic counterparts. At the same time, it is worth recalling that some of the world’s largest MNEs are, themselves, from smaller developed countries, and that the foreign operations of companies such as Norsk Hydro (of Norway), Novartis (of Switzerland), Nokia (of Finland) and SKF (of Sweden) in the larger industrialised nations, are likely to parallel, or even exceed, those in their home countries.

We have also seen how the extent and form of the value-added activities of a foreign affiliate is dependent upon its age and experience, as well as its place in the global strategy of the parent firm. Most East Asian manufacturing affiliates in Europe, for example, produce only a limited range of products and buy out most of their intermediate products. By contrast, their competitors – both other foreign affiliates and their own parent companies – are much more horizontally diversified and vertically integrated.

Much, too, depends upon the strategies pursued by particular MNEs. *Ceteris paribus*, one would expect rather more product and process specialisation in affiliates of MNEs pursuing globally or regionally integrated strategies, than in those supplying mainly domestic markets. Of course, the presence of a strong foreign-owned sector may help to increase the quality and range of products supplied to domestic consumers, even if not all these are produced locally. It has long been recognised that manufacturing affiliates may serve as a marketing bridgehead for the parent company in a way in which a pure sales operation may not. This may enable the investing company to gain easier access to the local market for its other goods. Again, this is especially likely if the MNE acquires, or collaborates with, an indigenous company more knowledgeable about local market conditions and channels of distribution.

There seems little doubt that foreign-owned firms do engage in more product differentiation than local firms. This, after all, is what one might expect, as Caves (1974a) and others have shown that the ability to secure customer loyalty through cross-border product branding is one of their main O-specific advantages. *Inter alia*, this has been shown by the above-average advertising/sales ratio of foreign subsidiaries (**vis-à-vis** indigenous firms) in many countries. At the same time, many of the studies investigating this issue have relied on data about US MNEs, and it may be questioned whether these findings can be generalised to other foreign investors or, indeed, whether the higher advertising/sales ratios reflect other characteristics of MNEs, such as their size or product
diversity. Furthermore, cross-section studies comparing foreign and local firms should be complemented by industry-specific case studies and panel analysis, allowing for the differences to be examined over time and revealing how local firms respond to the presence of MNEs in the economy.689

Finally, it is worth reiterating the point that the behaviour of foreign-owned affiliates is likely to be as much the outcome of the policies of host governments or the desire to achieve extra-plant economies, as anything to do with FDI per se. This is the conclusion of several scholars who have investigated the impact of inward investment on the market structure of highly protected economies (Safarian, 1985).

15.5.3 Entry and Exit Barriers

It is no less difficult to generalise about the effect of MNE activity on barriers to entry or the contestability of markets. On the one hand, whether set up by takeover or a greenfield venture, a foreign-owned firm may help reduce market imperfections in the host country (for example, by opening up new markets, sources of inputs, access to patents and trademarks). On the other, a valued benefit of inward investment arises from the ability of foreign affiliates to capitalise on certain services provided by the investing company, which would otherwise have to be undertaken by a de novo indigenous firm (Caves, 1971).

Depending on the nature of these services, they may act as a deterrent to new entrants. There are many other obstacles to competition which might be exacerbated by the strategy of the investing firm. If, for example, a foreign affiliate is restricted in its value-added activities (with respect to products produced, R&D, exports, use of technology and trademarks and so on) to meet the global needs of its parent company, barriers to competition may be raised in the event of an entry by takeover at least. In the case of vertically integrated investments or exclusive dealing arrangements concluded between MNEs, or their affiliates, and their suppliers or customers, it may become more difficult for de novo firms to source their inputs or to enter new markets. Finally, once established, and perhaps as a condition for its presence in a host country, a foreign affiliate may bargain with the host government for it to restrict competition from imports or, indeed, from other inward investors.

The globalisation of the past two decades has had a number of contradictory effects on the ease of entry and exit in a number of industries. On the one hand, the dominance of globally integrated production systems has made entry more difficult for smaller firms in industries such as autos, electronics and food.690 On the other, the growing market in a wide variety of digital services offers new possibilities for smaller firms, and firms from emerging economies, although the required level of technology and skill is relatively high. Furthermore, the increasing pattern of global specialisation implies that particular value-added activities may be highly concentrated or cluster on a national or regional level, while competition in final goods markets is being conducted by a relatively small number of large MNEs on a global level. This is particularly the case for R&D- and capital (scale)-intensive MNE activity, where the benefits from localised clustering are likely to be the most pronounced.

Thus not only is the definition of the relevant market a critical factor in assessing the effects of concentration, but the issue of concentration alone does not matter as much as the degree of contestability. There are reasons to believe, as UNCTAD (1997) suggests,
that if markets are regional or global, they are likely to be more contestable, although the presence of entry barriers such as sunk costs would suggest that industries where MNEs are prevalent are likely to remain concentrated. However, even in cases of extreme concentration, such as the duopoly of Boeing and Airbus Industrie in commercial airliners, the real issue is the strength of competition in the final product market.

Indeed, even during the M&A boom of the 1990s, in the US, the EU and Japan, only 1–5% of the proposed transactions led to further action by competition authorities (UNCTAD, 2000b:194). However, many developing countries do not have competition laws, or these are not rigorously enforced, which can lead to market dominance by MNEs, as has occurred in the soap, detergent and ice cream markets in India, the cigarette market in Brazil, the banking sector in South Africa, and in the alcoholic beverages market in Mexico (UNCTAD, 1997:147, 2000b:194). In Central and Eastern Europe, many of the foreign firms that invested in privatisations also inherited monopolistic market positions (Antaloczy and Sass, 2001). Chapter 19 will discuss the extra-territorial application of competition policy in the connection of cross-border merger review.

Substantive empirical research directly concerned with assessing the impact of outward or inward direct investment on entry barriers has been fragmentary. There is, however, a good deal of accumulated evidence about the strategies used by MNE oligopolists to maintain or enhance entry barriers. Some of these strategies will be described in Section 15.6. There is also reason to suppose that MNEs may influence, or collude with, the governments of home or host countries to shelter them from foreign competition. On the other hand, there is a good deal of casual evidence to support the ‘follow my leader’ hypothesis, which suggests that an initial FDI might lower the barriers to entry to other competitors. Indeed, using a game-theoretic approach to analysing the behaviour of MNEs in oligopolistic markets, Graham (1998) argues that FDI does not have to result from the firm’s inherent advantages, but can also be a reaction to the investments made by a first-mover firm.

We have also seen that MNEs tend to be more vertically integrated than uninational firms, and to conclude exclusive dealing agreements with their suppliers and/or customers. However, part of the reason for such integration or quasi-integration may be to reduce market failure rather than to lessen competition. In any event, that component of any anti-competitive behaviour which can be specifically attributable to the ownership or multinationality of an enterprise may be very small indeed.

15.5.4 Competitive Effects and Crowding Out in the Host Market

In the well-known model of Caves (1974b), there are two principal effects on indigenous firms that result from MNE entry: a competitive and a technology transfer effect. The first effect arises because the entry by a foreign firm increases competition, which, in turn, induces productivity improvements in some incumbent firms, while also prompting the exit of poorly performing firms. The second effect is due to technology transfer, which can take place either through the market (for example, by licensing), or through spillovers (see Chapters 11 and 16).

The adverse effects of FDI on local firms occur through increased competition in the product market, where the foreign firm captures some of the market share previously held by domestic producers. This causes the latter to reduce output, operate at a lower scale,
and possibly experience increased unit costs. Additionally, domestic firms may face negative factor market effects, such as increasing prices for capital goods and increasing wages or poaching of talent from the local labour market (see Chapter 13). These effects can be overcome by positive externalities, which can result from an increased demand for intermediate inputs, or from non-pecuniary spillovers such as demonstration effects or labour market exchanges (see Chapter 16). Furthermore, as Driffield and Hughes (2003) have suggested, even in cases where the domestic sales of the foreign firms simply replace imports, a foreign investor possessing a productivity advantage would be willing to pay a higher price for capital goods, which, in itself, might lead to a reduction in domestic investment.

While a great deal of attention has been paid in the extant literature to the importance of technology transfer and spillovers, some recent research suggests that the competitive consequences of MNE entry can be equally, if not more, important. In particular, such studies emphasise that the impact on local firms should be seen as a combination of competitive effects, which may be positive or negative, and technology transfer and spillover effects, which may or may not take place.

A recent study that considered both competitive effects and technology transfer was that by Chung (2001) on the impact of MNE entry on TFP in US manufacturing in 1987 to 1991. Specifically, the premise of the study was that if one seeks to identify technology transfer indirectly by observing productivity growth in domestic firms, the competitive impact of MNE entry should be accounted for before examining whether or not any productivity effects could be attributed to technology transfer. Chung used the sales of foreign affiliates in a given industry to measure foreign presence, while the degree of competition was proxied by the size of the price mark-up, which is the ratio of price divided by marginal cost. When mark-up is high, competition is low, and vice versa, and industries with low levels of competition would be expected to invite higher proportions of foreign affiliates seeking to exploit existing advantages, resulting in technology transfer. Industries with high levels of competition would be expected to attract relatively more knowledge-seeking affiliates, resulting in reverse technology transfer. Chung’s findings suggested that at an aggregate level, the presence of foreign firms seemed to have an insignificant impact on domestic productivity. However, once the level of industry competition was introduced, there was a significant effect. Specifically, the interaction of foreign presence with industry competition showed that when mark-up was high (that is, when competition is weak), the net effect was positive. Conversely, when mark-up was low (that is, when competition was robust), the net effect was negative (that is, no technology transfer occurred).

A subsequent study by Chung et al. (2003) focused specifically on Japanese investment into the US auto components industry between 1979 and 1991. The authors compared the changes in the productivity of two kinds of US suppliers in the industry: those that became suppliers to the Japanese transplants as they entered the market, and those subcontractors that continued to supply the big three US auto makers. In addition to competitive pressure and technology transfer, the authors added a third factor: adverse selection. They argued that if the Japanese transplants faced information asymmetries when they first entered the market, they might have been less able than local producers to judge the quality of local component suppliers. Since concluding a supplier relationship with another manufacturer carries a considerable fixed cost, they argued that there was also likely to be self-selection among the American suppliers, where below-average-performing subcontractors would
seek relationships with the foreign transplant. Consequently, the researchers sought to determine whether the US firms supplying the Japanese auto transplants recorded below- or above-average productivities, whether they had lower or higher rates of exit, and whether they experienced greater productivity growth, as compared to those firms supplying US auto makers.

The authors found that, as predicted, the US firms supplying the Japanese transplants were less productive than those supplying US companies. The US suppliers of Japanese transplants were also slightly less likely to exit the industry. When the sample was split into high- and low-productivity subsamples, it became apparent that servicing a Japanese transplant did not affect the exit rate of high-productivity suppliers, but that it did result in a significantly reduced exit rate for low-productivity suppliers. Since considerable productivity growth, nonetheless, took place in the US auto component industry during the period of the study, the likeliest explanation for this was due to a competitive effect, as no evidence for technology transfer was found. Furthermore, to the extent that foreign entry extended the lifespan of some lower-performing suppliers, average productivity in the sector may have been adversely affected.

Another model incorporating the competitive effects of MNE entry was employed by Barrios et al. (2005), who hypothesised a U-shaped relationship, which implied that while at the time of MNE entry the negative competition effects would outweigh any positive externalities, over time this would be reversed. They expected that a negative competition effect would deter the entry of domestic firms, while positive (market) externalities would encourage the development of local industry. Using plant-level data from Forfás on majority-owned affiliates in Irish manufacturing, they regressed the foreign-owned share of employment on the net entry rate of domestic firms in 1972–2000, and found support for the existence of a U-shaped relationship.

In the UK, Driffield and Hughes (2003) employed ARD data at a sectoral and regional level in two time periods, namely 1984–92 and 1993–97. The authors discovered that the overall impact of inward investment on the level of domestic investment – and hence on a more competitive market structure – was positive. The developmental linkages between foreign and domestic companies were particularly strong in sectors such as motor vehicles and chemicals, but there were also sectors where the impact was negative, and where crowding out of indigenous investment occurred. Furthermore, an examination of the data at a regional level revealed that crowding out was more likely to occur in Wales and Scotland (but not in Northern Ireland), than in the higher-earning areas of the UK such as the West Midlands, Yorkshire or East Anglia. Thus the regions with the largest crowding-out impact were found to be those that had spent the most on attracting inbound investment as part of their regional development strategy.

In Belgium, De Backer and Sleuwaegen (2003a) also found some evidence of the crowding-out effect as a result of inward FDI. Their study linked the growth rate of imports and inflows of FDI to entry and exit rates in 129 manufacturing industry sectors in the 1990–95 period. They modelled entry separate from exit, and hypothesised that domestic entry would be negatively affected by import competition and the inflow of FDI, while domestic exit would be positively related to import competition and inward FDI. They used an occupational choice model, in which an entrepreneur decides whether to enter the market by comparing the income he or she might expect to earn as an entrepreneur to the wages he or she could earn in existing businesses. They expected that if import
The impact of MNE activity

competition and FDI caused prices on the product market to fall, this would be likely to reduce entrepreneurial income more than wage income. An additional impact of inward FDI might be that the best entrepreneurs who previously would have decided to take the entrepreneurial income, might now prefer to receive the higher wages offered by the MNE. Consequently, they argued that both the product market effects and the self-selection of potential entrepreneurs, might contribute to crowding out in the empirical model. The results were as predicted: import competition had a negative effect, and inward FDI a strong negative effect on the entry of domestic entrepreneurs. Foreign entry also forced domestic entrepreneurs to exit. At the same time, the results also revealed that domestic entry was more likely in industries characterised by an above-average foreign presence. Similarly, the exit of local firms was substantially less likely in industries dominated by foreign firms. These additional effects were particularly important in industries in which domestic entrepreneurship was limited, as in some high-technology industries in Belgium.

In terms of evidence from developing or transition economies, a study by UNCTAD (1999:173) found mixed results regarding the effect of FDI on crowding out in the host economy. In a sample of 39 developing countries in 1970–96, a neutral effect was most common, while the likelihood of crowding-out and crowding-in effects were roughly equally prevalent.

Using a representative sample of manufacturing plants with 10 or more employees in Chile in 1990–2000, Alvarez and Görg (2005) investigated three interrelated questions: whether MNE affiliates were more likely to exit than domestic firms, whether the propensity to exit was dependent on exports, and whether the presence of MNEs affected the survival of domestic firms. They found that when firm and industry characteristics were controlled for, foreign plants were more likely to exit the economy during the significant economic slowdown of the late 1990s. However, the higher propensity to exit applied only to MNE affiliates that were domestically orientated, and not to multinational exporters. The presence of MNEs also had a modest positive impact on the survival of local firms, which was accounted for by productivity improvements.

In the Czech Republic, Kosová (2006) used firm-level data from Amadeus for the 1994–2001 period to investigate the impact of MNE presence on the growth and survival of domestic firms. The author found some evidence of crowding out, since foreign entry increased the exit rate of domestic firms. However, subsequent sales growth of the MNE affiliates increased both the growth rate, as well as the survival, of domestic firms due to increased domestic demand (rather than an increase in exports). In line with other studies incorporating the effects of spillovers, she found that domestic firms in the technologically advanced industries were the main recipients of technology spillovers. Finally, using a comprehensive sample of manufacturing firms in Slovenia, Zajc Kežar (2006) found that foreign firms were more likely to exit than domestic firms, and that the entry of foreign firms decreased the probability of survival of the least-efficient domestic firms. However, the more-efficient and skill-intensive domestic firms were unaffected by foreign entry.

15.6 CONDUCT AND BUSINESS PRACTICES OF MNEs

We turn, finally, to consider some of the business practices of MNEs which may affect the structure of markets and domestic rivalry. These may be different from those undertaken
by non-MNEs, partly because MNEs internalise cross-border markets, and partly because, in the case of their foreign affiliates, they are part of a larger enterprise. In addition, and partly as a result of their multinationality, their corporate goals and values (or those of their stakeholders), their incentive structures and enforcement mechanisms may also be distinctive.

Such discriminating characteristics allow an MNE and/or its affiliates to pursue a range of business practices – some of which may have nothing to do with its efficiency. These include, on the one hand questionable practices such as predatory pricing, the use of ‘deep pocket’ advantages to promote non-price competition, the provision of intra-group services at below marginal cost, a willingness by the parent company to accept zero or below-normal profits and dividends from its affiliates, the manipulation of cross-border intra-group prices, and others identified by Hymer (1960). On the other, they include issues such as policies and practices to advance CSR, and upgrade international labour standards and environmental sustainability. The latter are the subject of Chapter 18, and will not be discussed here.

Most of these devices may be practised by diversified firms of all kinds and are not always against the public interest. However, there are two main differences in the case of MNEs. First, because they operate in a variety of economic, institutional and political environments, each with its specific characteristics, they may have more opportunity and incentive to engage in these practices. Indeed, some – such as the manipulation of transfer prices – are largely (but not exclusively) undertaken by MNEs. Second, whatever the effects on the distribution of the benefits arising from the operation of uninational companies, they are retained within the country which produces them, whereas in the case of those arising from MNEs or their affiliates, part (or all) of the benefits may accrue to other countries.

Of course, various incentive structures and practices of the MNE parent companies will affect the long-run prosperity of their foreign affiliates, even though they may have no direct bearing on their day-to-day behaviour. Such structures (for example, as they affect the responsibility of local managers and the motivation of the labour force) and practices (for example, the raising of new capital, financial management, the allocation of export markets and the centralisation of purchasing procedures) may benefit the enterprises of which the affiliates are part, but not always – or to the same extent – the affiliates themselves, or the countries in which they operate. In some cases, too, the policies of home governments may affect the competitive positions of affiliates.

Here, we shall confine our attention to the kinds of business practices which directly affect market structure. As a general proposition, one might expect that affiliates of MNEs will engage in more non-price competition than indigenous firms in the same industry. This is partly because the types and range of products of the parent company are likely to be different from those of firms in the host country, and partly because one of the main O advantages of MNEs is their possession of assets which encourage product differentiation and diversification (Caves, 1971, 1980). Inter alia this is revealed by their above-average expenditures on both innovating and promotional activities.

To what extent, however, are such practices perceived to be restrictive in the sense defined by Article 46 of the Havana Charter for International Trade (1948), namely, ‘practices which restrain competition, limit access to markets or foster monopolistic competition’? Here it is helpful to distinguish between two kinds of practices:
1. those undertaken by MNEs or other affiliates which would normally be regarded as unacceptable when undertaken by indigenous firms, or by groups of independent firms of different nationality; and
2. those which would not normally be regarded as restrictive when undertaken by the above firms, but, when undertaken by foreign direct investors, may be so regarded.

The first type embraces the whole gamut of practices that lead to lower efficiency, higher costs, inferior-quality goods, unfair competition, increased barriers to entry, wasteful advertising, excessive product differentiation and so on. They arise largely because the market structure, in at least one area of a firm’s operations, allows it to earn above competitive profits, which may be used to ‘buy’ these practices, any or all of which may help to protect the firm’s established market position or to force out its competitors. Once identified, such conduct in MNEs or their affiliates can be dealt with in exactly the same way as if it were pursued by uninational firms. The only difficulty is that the criteria by which the performance and behaviour of indigenous firms are evaluated are not necessarily appropriate in the case of affiliates of MNEs.

However, it is the second group of business practices that are more relevant in the present context. They pose two challenges to the researcher: one is to discover whether the practices are, in fact, restrictive; the other is to evaluate them in the light of the total effects of the MNE’s operations. Normally, host governments will regard practices in this category as restrictive only in so far as they are perceived to work against their long-term economic or social interests. Examples include restrictions on the foreign markets open to the affiliates, predatory pricing, cross-border subsidisation of activities designed to drive out competitors, limitations on the use of technology, patents and trademarks, control over sourcing of inputs, the manipulation of intra-corporate transfer pricing, the promotion of unacceptable cultural mores and belief systems, and interference in the political system of the countries in which they operate.

Within a nation state, such actions on the part of multiregional firms may not be thought restrictive because the product of their activities is still retained domestically. However, once they are engaged in across national boundaries, they take on a very different complexion. Yet, the fact remains that such behaviour often arises because of distortions in the international price structure of goods and services which may inhibit the efficient division of labour, or because of differences in the incentives given by governments to MNEs to produce goods or to earn income within their boundaries. It also reflects the goals and conduct of international economic institutions, and the characteristics of the international patent, taxation and monetary systems. Some of the concerns of host countries towards MNEs could, in fact, be removed by the rationalisation or harmonisation of these and other actions.

But if it is right that governments should accept the legitimacy of the conduct of MNEs, these enterprises need to accept that similar patterns of behaviour may produce different consequences in different situations: control of an affiliate’s markets by the parent company may have the same effect as a barrier to market entry; control over its sourcing of inputs may inhibit the development of related industries in the host country; control over the location of R&D activities may be a barrier of entry to innovation or to the development of local skills; control over trademarks may reduce the contestability of markets; and control over production methods may lessen the opportunities of a country
to exploit its comparative resource endowments. At the same time, by their governance procedures MNEs can increase competition, open up new markets and upgrade indigenous resources. Moreover, an unwelcome business practice to one country may be a welcome business practice in another. Sometimes within the same country, an MNE may bring with it linked patterns of behaviour, some of which are acceptable and others which are not.

What, then, is the evidence about the business practices of MNEs? Early studies conducted by UNCTAD (1973), Newfarmer (1979), Long (1981) and ESCAP/CTC (1984) each revealed that MNEs and other foreign firms engage in a wide variety of practices which the host countries identify as unacceptable. Broadly speaking, they may be classified into four main groups: anticompetitive pricing policies, controls on the use of transferred technology, territorial market and production allocation arrangements and boycott or enforcement measures. The literature suggests that the first three of these are frequently important ingredients of the global strategies of MNEs. Such strategies may be either defensive (for example, to protect existing markets) or predatory (for example, to pre-empt or corner new markets). These and other kinds of restrictive practices are identified in Box 15.1.

The history of the primary sector is replete with examples of MNEs attempting to limit competition. Perhaps the best known of these are the cartel agreements, marketing alliances and price maintenance schemes set up at various times over the past century to regulate production and trade in the oil, copper, bauxite, tin, zinc, banana, rubber, cocoa, sugar and bark (quinine) industries. Certainly, MNEs soon came to dominate these markets as a result of their M&As and their strategies to forestall entry by competitors. However, it is erroneous to infer that their subsequent patterns of behaviour should be attributed solely to their transnationality per se, any more than to other firm-specific characteristics or, indeed, to the industry of which they are part. Cartel agreements also flourished in other sectors in which MNEs were not involved. Moreover, there seems to be little evidence to suggest that the nationalisation of some of the sectors in which MNEs have been involved has lessened the propensity of firms or countries to engage in anti-competitive business practices – at least as far as the final consumer is concerned. The Organisation of Petroleum Exporting Countries (OPEC) cartel is, perhaps, the best example.

In manufacturing industry, the last two or three decades have offered prolific examples of restrictive business practices. Foremost among these have been the oligopolistic tactics pursued by MNEs in the Latin American electrical equipment industry, where Newfarmer (1979, 1985) and Newfarmer and Marsh (1981a) found substantial evidence of cross-subsidisation, control of supply channels, formal and informal collusion, interlocking directorates, predatory pricing and hostile acquisition behaviour, both among and by MNEs. While not all these practices were MNE specific, many did stem from their global financial and marketing power. At the same time, part of this power may be attributed to the protectionist policies followed by national governments, especially in Latin America. Similarly, the imposition of controls on the import of products, for example, pharmaceuticals in the case of the Philippines government, have tempted foreign-owned firms into both developed and developing countries. In the case of the Philippines for example, the tariffs and quotas imposed on pharmaceutical products in the 1960s led to foreign MNEs capturing 70% of the total market by 1970. While this was not in itself a
BOX 15.1 SELECTED RESTRICTIVE BUSINESS PRACTICES ADDRESSED BY COMPETITION LAW

There are four main types of business practices that can have anticompetitive effects:

1. practices undertaken by a single firm (when a firm enjoys a dominant position);
2. anticompetitive mergers and acquisitions;
3. horizontal restraints (i.e., arrangements between competitors to restrain competition); and
4. vertical restraints (anticompetitive arrangements between firms along the production–distribution chain).

**Horizontal Restraints**

*Price fixing* Competing suppliers enter into cooperative agreements regarding prices and sales conditions.

*Restraint of output* Competing suppliers enter into agreements regarding output and product quality.

*Market allocation* Competing suppliers allocate customers among themselves, who therefore cannot benefit from competition by other suppliers.

*Exclusionary practices* Competing suppliers employ practices that inhibit or preclude the ability of other actual or potential suppliers to compete in the market for a product.

*Collusive tendering (bid-rigging)* Competing suppliers exchange commercially sensitive information on bids (and agree to take turns as to who will make the most competitive offer).

*Conscious parallelism* Competing suppliers generally set the same prices, but without an explicit agreement.

*Other restraints on competition* Generally characterised by suppliers entering into cooperative agreements not to undertake certain actions of competitive value (e.g., advertising).

**Vertical Restraints**

*Exclusive dealing* A producer supplies distributors and guarantees not to supply other distributors in a given region.

*Reciprocal exclusivity* A producer supplies on the condition that the distributor does not carry anybody else’s products.

*Refusal to deal* A supplier refuses to sell to parties wishing to buy.

*Resale price maintenance* A producer supplies distributors only on the condition that the distributor sells at a minimum price set by the supplier.

*Territorial restraint* A supplier sells to distributors only on the condition that the distributor does not market the product outside a specified territory.
bad thing, the strategies of MNEs to obtain and maintain this share sometimes involved questionable business behaviour (such as tied purchases of raw materials, export restriction and transfer pricing; UNCTAD, 1973).

More generally, in the 1970s, UNCTAD studies revealed that MNEs were imposing a wide range of export restrictive clauses on their subsidiaries in numerous manufacturing countries. Indeed, of the total restrictive clauses in agreements in which MNEs were involved, export restrictions typically accounted for between 72 and 90%. A study by Epstein and Newfarmer (1982) showed that cartelisation among the leading MNEs in the heavy electrical equipment industry had raised global prices on average by 23% compared with their competitive price. More recently, Grosse (1997) has found evidence of four types of restrictive business practices in service industries in Latin America: market allocation schemes (including restrictions on exports); refusal to supply; requirements to buy from specific suppliers; and limitations on technology transfer. However, all the examples involved restrictions within the firm (between the headquarters and affiliates), rather than between firms.

Perhaps the highest-profile case involving restrictive practices by MNEs in recent years is that involving the US software giant Microsoft. The company was first investigated by the US Justice Department, with the case settled in 2001. This was followed by a five-year investigation by the European Commission, which resulted in a judgment of record fines of €497 million in 2004. Two years later, the European Commission levied a further €280.5 million in fines for noncompliance against Microsoft. The EU case found the company guilty of abusing its dominant position in two respects: first, by bundling its media player with the operating system, and thus foreclosing competition, and second, by failing to make public sufficient information in the server market, in order to ensure that third-party products would have ‘full interoperability’ with computers running Windows. The European Commission also has an ongoing investigation concerning US chip maker

---

### Market structure, performance and business practices

#### Discriminatory pricing
A supplier charges different parties different prices under similar circumstances.

#### Predatory pricing
Suppliers sell at a very low price (or supply intermediate inputs to competitors at excessive prices) in order to drive competitors out of business.

#### Premium offers or loyalty rebates
A dominant supplier offers discounts or other inducements only to certain parties on the condition that they do not sell someone else’s products.

#### Tied selling
Producers force purchasers to buy goods they do not want as condition to sell them those they do want, or force resalers or wholesalers to hold more goods than they wish or need.

#### Full-line forcing
A supplier requires distributors, for access to any product, to carry all of the supplier’s products.

#### Transfer pricing
May involve over- or under invoicing of intermediate inputs between foreign affiliates. Underinvoicing can be used to facilitate predatory pricing.

*Source:* Adapted from (UNCTAD, 1997:191).
Intel, which has been accused of predatory pricing by granting generous rebates to companies such as Dell for using Intel chips, and for paying retailers not to stock computers using rival AMD’s chips.708

These cases notwithstanding, in the mid-2000s, there is reason to suppose that MNEs have reduced some of their restrictions both on the conditions of technological transfer and on marketing arrangements. This has been partly in response to the pressures of host governments, and partly because of the improvement of supply capabilities in many developing countries. Indeed, an UNCTAD (1997) report argued that in order to ensure the contestability of markets, FDI liberalisation should be accompanied, along with other market-enhancing policies, by a rigorous competition policy, and cooperation between authorities in different countries. Moreover, as MNEs have become more globally integrated, their control over ‘what is produced, where and by whom’, has become tighter and more, rather than less, orientated to the needs of the parent organisation, rather than one or other of its affiliates. As we saw in Chapter 8, MNE affiliates today have gained more autonomy in some areas (for example, R&D), while in others, they may be more reliant on other MNE units. Also, the growing public demand for more corporate transparency and accountability may have helped to curb some types of questionable practices.

15.7 CONCLUSIONS

This chapter has demonstrated that although MNE activity is likely to have a distinctive impact on market structure and on the efficiency of value-added activity of the countries in which they operate, the extent and character of this significance is often exaggerated. Moreover, it is clear that such effects are sometimes difficult to interpret (for example, the superior productivity and profitability of MNEs). At the same time, they very much depend on the mode of entry (or expansion) by the MNE, the existing market structure, the kind of investment being undertaken, and the incentive structure and policies of the home and host governments. Indeed, if there is one lesson to be learnt from the various empirical studies which have been undertaken, it is that it is more fruitful to identify the kind of OLI configurations facing MNEs, and the differences in the institutional configurations of countries, which will lead to MNE activity bringing about certain consequences, than to generalise about the impact of such activity. Once more, this suggests that an ‘if . . . then’ approach may be more helpful to policy makers than the ‘because . . . then’ approach.

In principle, it should not matter whether the higher productivity of a foreign firm is due to its foreignness, or whether it reflects the characteristics that it shares with domestic multinationals. MNEs, in general, seem to possess unique advantages relative to purely domestic firms, and what matters to the domestic economy is whether the productivity advantage spreads to local firms, and not so much whether it is foreign or domestic in origin. At the same time, we have seen that foreign and domestic MNEs do not often concentrate in the same industries in the host country, and that consequently foreign multinationals may introduce unique advantages to the host economy that simply would not be available otherwise. Even so, to the extent that the domestic economy benefits mostly from the competitive effect of the MNE, the advantage may not be unique to (foreign) MNEs. However, to the extent that local benefits are also due to technology transfer,
either directly or through spillovers, the unique contribution of MNEs becomes more prominent.

Assuming that (i) national governments choose to pursue market-orientated economic policies, (ii) they put in place the appropriate institutions to further these policies and (iii) they adopt a reasonably neutral stance to FDI, it is possible to offer some general propositions. We would emphasise seven of these.

First, the activities of MNEs bind the countries in which they are involved more closely into the international division of labour. MNEs are, if nothing else, conduits of economic, technological and institutional change, and of new patterns of consumer demand. They are also a powerful force integrating attitudes and business practices across national boundaries. Whether or not these features are beneficial to the participating countries depends on the raison d’être for MNE activity, and the market structures facing foreign direct investors. Certainly, however, each activity exposes countries to the volatility of world economic events, and places more demands on governments to ensure that adjustments to external changes are accomplished with minimum social costs.

Second, and allied to this first point, there is some suggestion that as firms become more multinational, so do market structures. In particular, firms which face oligopolistic competition in domestic markets tend to replicate this structure abroad (Rosenbluth, 1970; Knickerbocker, 1973). Such MNE activity will have considerable implications for domestic macro-organisational policies, especially for those which directly or indirectly impinge on the allocative, technical and adaptive efficiency of indigenous resources and capabilities.

As yet, few governments seem to appreciate fully the implications of the internationalisation of industries as it affects not only their domestic market structures, but also their ability to influence the activities of their own and foreign-based MNEs. The reconciliation between the desire of MNEs to minimise their cross-border transaction costs and the needs of home and host governments to promote a market structure which best meets their long-term economic and social goals is not as easy. This is because the benefits of internationalisation arise not so much from the O-specific assets of the investing firms, as from the common governance of geographically or industrially diversified activities. The dilemma is that without some kind of globally accepted incentive structures, which may seem to threaten the sovereignty of nation states, this benefit would not arise. It is such issues as these that many national governments have still to address, let alone resolve.

Third, affiliates of MNEs gain their market power relative to uninational firms (of a similar size and degree of diversification) by being part of a larger and geographically diversified organisation. The greater the global orientation of MNEs, the more the possibility arises that affiliates will engage in business conduct and practices which differ from those they would use if they were uninational or multidomestic firms.

Fourth, because of the market structures in which they compete, there is a temptation for MNEs to engage in excessive product or spatial diversification, and not to adapt their internal institutional structures and corporate practices to the economic and social needs of the countries in which they operate. While MNEs might help to overcome obstacles to cross-border markets, they may (and frequently do) create their own barriers by dint of their ability to control the sourcing of raw materials and intermediate products, and their favoured access to finished-goods markets.

Fifth, because of the specific attributes of MNEs – most noticeably, their ability and need to move goods and assets around the globe – governments are being forced to
reconfigure their institutions and reappraise their macroeconomic and organisational policies. The events of the past decades suggest that this has generally been to the benefit of the countries concerned. Nowhere is this better demonstrated than in the increasing attention being given by governments to improving the competitiveness of their resources and capabilities. In this respect, not only are MNEs perceived to have an important role to play as a result of their distinctive O advantages, but it is also recognised that to gain the greatest benefit from these advantages and the way in which they are organised, countries must offer the appropriate L-specific attractions and ensure that their indigenous institutions and capabilities are restructured in a way that is consistent with their long-term objectives. To achieve these objectives, governments need to ensure that the domestic market structure and their own market-facilitating policies are such as to promote effective and dynamic competition.

Sixth, in any examination of the impact of MNEs on market structure and performance, it is important to take account of the secondary, as well as the primary effects. Secondary effects include the consequences of inward and outward investment for the network of value-added activities in which MNEs are involved. The evidence of several studies suggests that, depending on industry- and country-specific circumstances, MNEs can both create and upgrade clusters of related activities, or weaken them. Chapter 11 introduced the concept of L-specific ‘vicious’ and ‘virtuous’ asset-creating circles which might be modified (or even reversed) by the presence of foreign affiliates; Chapter 16 will pay more attention to the linkages between inbound foreign affiliates and locally owned firms.

Finally, and related to the last point, any consideration of the effects of the interaction between the O advantages of MNEs and the L advantages of countries on the organisation of markets needs to take a dynamic and systemic perspective. Often, for example, there may be no direct and immediate relationship between inward or outward investment and the structure of inter-firm rivalry. Over time, however, through their impact on such variables as government policy, the pattern and quality of consumer demand, the creation of innovatory capacity and the upgrading of the appropriate institutions, human skills, entrepreneurship and the work ethic, they may quite dramatically affect the market structures in which they compete, and the performance, values and business practices of indigenous firms.
16. Linkages, spillovers and clustering

16.1 INTRODUCTION

The previous chapters in this part of the book have been concerned with the direct effects of MNE-related activities on the home and host economies in which they are undertaken. These effects include those on the structure of trade and the balance of payments, on technology transfer, on local market structure, on the levels of employment and human resource development, and on average labour productivity and wages. In addition to these consequences, which follow directly from the entry of a new investor, or the expansion of existing MNEs, there are others which impinge on the local firms in the host economy. These may be experienced either through linkages with MNEs, or through increased competition and knowledge spillovers to the local economy. Consequently, the focus of this chapter is on the externalities of the presence of MNEs and their affiliates on the incentive structures, resource creation and usage of local firms, both those that are in direct contact with the MNE, for example, as subcontractors, and those that are not.

We follow the economic literature in distinguishing between ‘pecuniary’ and ‘non-pecuniary’ externalities. In this chapter, we shall define pecuniary externalities as arising out of the vertical linkages formed by the MNE. Such linkages occur when, by design or not, any particular firm (in this case MNE or its affiliates) affects the amount and/or conditions of supply of, or the demand for, other goods and services by another firm, or by consumers. Even in the absence of any transfer of knowledge or institutions, the increasing demand of intermediate products might enable production on a larger scale, and thus improve the cost competitiveness of supplier firms. If, in addition, the MNE transfers knowledge or incentive structures to its suppliers to help them meet its quality specifications, the performance of the supplier firm may be further improved.

Non-pecuniary externalities are commonly known as ‘technological spillovers’. These arise when productive knowledge ‘spills over’ into the local economy through labour market exchanges, demonstration effects, reverse engineering, or participation in local trade associations and consortia. Spillovers of this type are the consequence of unintended technology transfer from the MNE to an unaffiliated local firm, and are thus conceptually distinct from other, more organised, forms of technology transfer, such as licensing, or training provided by the MNE (see also Chapter 13). In principle, knowledge and institutional spillovers can occur both in vertical (with suppliers and buyers) as well as horizontal (with competitors) relationships, although most of the evidence relates to backward linkages with suppliers. We shall also see that the empirical challenges of distinguishing between the deliberate and non-deliberate components of the intermediate inputs and incentive structures that are transferred, often means that both types are counted as one in assessing the impact of MNE entry on local firms.
Figure 16.1 summarises the likely effects of MNE entry on the host country. Most of the direct effects from MNE entry occur logically before the indirect effects on local firms manifest themselves. Among the direct consequences, those on the balance of payments, the pattern of trade (increases/decreases in imports and/or exports) and market structure depend on a number of factors in the host economy, and fall largely outside of the control of the MNE. By contrast, the effects on the labour market, and the transfer of technology and institutions, fall under the purview of the MNE. In the case of technological and institutional transfer, intentional transfers are accompanied by unintentional transfers, and both types of transfer are, in principle, bi-directional, that is, the MNE may also absorb technological knowledge and emulate institutions in the local market.

For all of the different types of direct effects, the net impact on the host economy may be either positive or negative, and, for any given MNE, it is likely to be positive in some directions and negative in others. In particular, the effects on market structure and competition in the local market may have a significant positive or negative impact on local firms. These consequences are positive if MNE entry creates incentives for local firms to upgrade their products and processes, particularly if such firms are also able to benefit from technology transfer or spillovers from the MNE. On the other hand, the impact on local firms may be decidedly negative, if they are unable to make the required investments, or to appropriate spillovers. M&As differ from greenfield investment in so far as there are no immediate effects on trade or industry structure, and the transfer of
knowledge to the host economy may be more limited, particularly in the case of asset-augmenting investment.

The indirect effects on local firms are of two kinds: first, those on firms that come into contact with the MNE by forming linkages, and second, those on other local firms. Particularly in the case of equity-based local linkages, such as a joint venture or shared participation in local firms, the indirect effects may be nearly indistinguishable from the direct effects induced by the establishment of wholly owned subsidiaries. For non-equity types of linkages, the transfer of technology, knowledge or institutions may be much more curtailed, although not necessarily so. However, all local firms forming backward or forward linkages with MNEs stand to gain from the pecuniary externalities that are due to the increased demand for the product or service they provide.

The third group of firms, the local firms that are unrelated to the MNE, may (or may not) benefit from the non-pecuniary externalities arising from the unintentional transfer of knowledge by the MNE. Due to their nature, such spillover effects take a while to materialise, and their magnitude depends on the strategies and motivations of the MNE, as well as the ability of the local firms to absorb any technological and institutional knowledge that may spill over. Since the direct effects from MNE entry may be only mildly positive (or indeed negative), and since local firms particularly in developing countries often do not possess the required absorptive capacity, it is not surprising that the economy-wide spillover effects from MNE activity that have been found in empirical research have often been small or non-existent.

Indeed, much more evidence can be found that firms with sufficient absorptive capacity, particularly those that are linked to the MNE through equity linkages, are more likely to experience positive spillovers. This is mainly because firms that have formed linkages with the MNE benefit from both pecuniary and non-pecuniary externalities, while spillovers to unrelated firms arise solely out of non-pecuniary (knowledge) externalities. Furthermore, the non-pecuniary externalities experienced by unrelated firms are due to involuntary transfer, while, depending on the type of linkage formed by the local firm with the MNE, the local partner is likely to benefit from deliberate transfers as well.

Consequently, while policies to increase the absorptive capacity of local firms, for example, through investment in education and training, are clearly desirable, specific efforts to encourage the formation of linkages are likely to be needed as well. Indeed, while the extant research has not embraced the institutional dimension, this is evident in the ability and willingness of MNEs to form linkages and to participate in local clusters, and understanding such motivations is necessary for governments to be able to offer appropriate incentives.

The final issue embraced by this chapter concerns the geographical clustering of economic activity. We shall see that this may have a considerable impact on the formation of linkage externalities and the likelihood of knowledge spillovers. MNEs both draw resources and capabilities, including relational capital, from, as well as contribute to, local clusters of economic activity. Indeed, much of asset-augmenting FDI in knowledge-intensive industries is motivated by the possibility of reverse-knowledge transfer from the host country firms and institutions to the rest of the MNE. At the same time, MNEs may act as catalysts for the development of localised clusters of economic activity, as has occurred in Hong Kong and Singapore, for example (Dunning, 2000b).
16.2 BACKWARD AND FORWARD LINKAGES TO LOCAL FIRMS

16.2.1 Backward Linkages to Local Suppliers

The amount of purchases made by a multinational affiliate will depend first on the range of goods and services produced by the affiliates; second, on the quantity of each of the products produced; and third, on the extent to which the affiliates internalise the markets for the inputs required for their value-added activities (that is, how vertically integrated they are). The higher the proportion of value added to gross output, the less dependent a firm will be on the quality and price of raw materials and intermediate products bought from outside producers. The lower the proportion, the more dependent the firm will be on the vagaries of the open market for its purchases.

Following our discussion on internalisation in Chapter 4, we would expect the decisions concerning range and quantity to depend upon the volume and characteristics of the goods and services produced by the MNE, and on the contribution of its foreign affiliates to these value-added activities. Thus, for technical reasons, the production of processed goods (for example, chemicals, metal manufacture and food products) tends to be more integrated than that of fabricated products (for example, washing machines, computers and marine engines). At the same time, the strategy of the MNE towards its foreign operations is also a relevant consideration. Are its affiliates intended to serve local, regional or world markets? Are their activities coordinated with those of the rest of the organisation of which they are part, or are they truncated replicas of their parent companies?

As we saw in Chapter 7, the modern MNE controls and coordinates a network of activities, some of which involve equity ownership (wholly owned affiliates and joint ventures), while other relationships are contractual. Indeed, the tendency in the past decade or so has been for the value chains of MNEs to become increasingly fragmented (Porter, 2001; Chesbrough and Teece, 2002). Better communication technologies, the use of the internet to acquire and share information, along with low costs of transportation, have enabled the ‘modularisation’ of globally integrated manufacturing. This means that subassemblies can be manufactured, brought together for assembly, and delivered to the end customer, all in separate locations. In addition to lowering costs, modularisation also enables MNEs to focus on their core competences, which they hope will lead to sustained profitability in an increasingly competitive marketplace.

Since the desire to focus the scarce resources of the firm on areas of core competence is not limited to manufacturing activities, the past decade has also seen a considerable increase in services outsourcing, ranging from back-office functions, such as payroll processing to customer call centres, to activities very close to the core, notably corporate R&D (UNCTAD, 2004, 2005c). Among other things, this implies that more of the activity controlled and coordinated by MNEs is ‘contestable’, that is, for most activities multiple locations are feasible, and at least an implicit threat of relocation is always present. At the same time, it means that those local firms that manage to integrate into the MNE’s network stand to gain from higher volumes, and the use of cutting-edge technologies.

In this chapter, we propose to concentrate on two kinds of sourcing decisions that an MNE (or, for that matter, any firm) has to make. The first is the ‘make or buy’ decision, that is, the extent to which it purchases its raw materials, intermediate or finished...
products from outside suppliers rather than producing them itself. The second is the extent to which it chooses to produce or buy these goods or services in the host country or to import them from a foreign source, namely, the ‘produce locally or import’ decision.

The ‘make or buy’ decision

The decision to produce a product in-house or buy from another producer will rest on the relative costs of the two alternatives. The costs break down into the production and transaction costs involved. Production costs are the cost of internally producing an intermediate product of a given quality compared with the price paid to external suppliers. The transaction costs of in-house production include any additional costs associated with increasing the range of products, less any benefits arising from the economies of joint supply or scope. The transaction costs of engaging in external transactions are the outcome of market failure of one kind or another.

Normally, one might expect that the production costs of a specialist and experienced supplier would be lower than those of its customers. This is simply because the former is likely to be producing in greater volumes and be knowledgeable about the latest products and production techniques. Moreover, the purchasing flexibility of a firm is obviously reduced by vertical integration. In the case of relatively simple components, small outside suppliers may have the advantage of lower labour, material and overhead costs. However, if the supplier is also a monopolist and/or is not aware of, or is unprepared to utilise, the most-efficient production or managerial techniques, the purchasing firm may prefer to undertake its own production or, indeed, to acquire its supplier. As we shall later suggest, it may sometimes be in the purchaser’s best interest to aid the supplier to improve the quality of its products or to raise its productivity, including by emulating the formal or informal institutions of the MNE. Alternatively, the purchasing firm may wish to persuade the suppliers of its parent company to set up subsidiaries or license local producers in the host country.

What, then, of the transaction costs of using external suppliers? These are essentially the risks of market failure. The possibility of disruptions to supplies, unreliability, or inability to control, product quality, failure to keep to delivery dates, unacceptable price hikes and the misuse of property rights can all be avoided if the supplying firm is owned by the purchasing firm (that is, by backward vertical integration). The transaction costs of hierarchies are essentially those of the additional intra-organisational and management costs. For example, by diversifying its activities, a firm may overextend its organisational capacity and/or reduce the efficiency and innovativeness of its mainstream activities. Risks are also likely to be attached to the additional capital investment involved, while governments may view any move towards vertical integration as a potential reduction in competition.

What will determine the balance between using markets or vertically integrated production? How might this vary among countries, sectors and firms and over time? In particular, are multinational affiliates likely to forge more or fewer linkages with independent indigenous firms than are their local competitors? How has linkage formation been affected by contemporary globalisation? Much of the reasoning here is similar to that concerning outsourcing discussed in Chapter 7. Since the early 1990s, there has been increasing emphasis on the need for firms to stick to their core competences, and to outsource non-core activities, whether domestically or internationally. At the same time, as
discussed in Chapter 8, there has also been an increasing tendency for MNE affiliates to gain more autonomy, and to develop locally based competences in host countries. Here, we shall make just four brief points concerning the make or buy decision facing affiliates in host countries.

The first and most obvious point is that the more numerous the suppliers, the greater the opportunities and benefits of product or process specialisation. Also, the fewer the synergies between different stages of the value-added chain, the less likely firms will wish to engage in backward integration. Examples include most traded commodities and financial assets, where there are thriving futures markets. Similarly, strong external markets exist for standard and mature products, such as basic chemicals, iron ore and newsprint, which are produced under highly competitive conditions. By contrast, the wider the range of products and the more complex the technology to produce them, and the less competition there is between suppliers, the more likely it is that some form of hierarchical control will be exercised by the purchasing over the supplying firm. Intermediate product markets are also likely to be internalised where efficient production and innovation requires the close coordination and monitoring of input quality, specifications, inspection and testing procedures, product development programmes, and where a regular exchange of information on future plans will help match the investment capacities of suppliers to those of the users. However, the extent of outsourcing of manufacturing and service activities in the contemporary global economy suggests that the transaction costs for using the external market have declined over time.

Second, the literature on vertical integration emphasises the role of country-specific differences, especially the way in which value-added chains are organised. In Japan most auto assemblers buy from a range of relatively small specialist suppliers, some of whom may service only that company or a limited number of producers. By contrast, in Europe and the US, the leading component manufacturers are likely to be as large as their customers, and will normally produce a wide variety of components for several firms. The relationship between the two groups of firms is very different, and the transaction costs of outside purchasing in Europe and the US are considerably higher than in Japan. One of the reasons why Japanese auto firms originally encouraged their suppliers to follow them to Europe and the US is precisely to avoid some of the institution-related transaction costs they had to incur in dealing with indigenous suppliers.

Third, it is clear that both external production and transaction costs will depend on a country’s stage of development. In some developing countries, for example, foreign affiliates may have to engage in more manufacturing operations along the value-added chain than they would wish, simply because of the lack of an indigenous supply capability, or inadequate institutional safeguards against the adverse effects of market failure. Studies on the determinants of the location of investment by MNEs have frequently stressed the importance of good infrastructural facilities and the presence of related or supporting firms. This is especially the case in some of the technologically advanced industries, which are critically dependent on the content and effectiveness of local innovation systems, the availability of highly skilled labour and good-quality components and parts. Certainly, the relative competitive advantage Scotland had in the 1980s (compared, for example, with South Wales) in attracting new Japanese and US investment in the industrial electronics industry helped to attract a cluster of component suppliers and a skilled labour force, which further improved its locational attractiveness. More recent
examples include a business services and communications cluster in Hong Kong (Enright, 2000c), high-tech services clusters in Kyonggi and Kumi in South Korea (Park, 2000), the promotion of Singapore as a regional headquarters centre for South-East Asia (Yue, 2000), and the software cluster in Bangalore, India (Balasubramanyam and Balasubramanyam, 2000).

Fourth, government institutions and policy may also affect the ‘make or buy’ decision of MNEs. In pursuance of import-substitution policies, governments sometimes offer financial and other inducements to foreign-based component manufacturers to invest or to engage in R&D in their countries. In other cases, similar incentives are provided to domestic component producers to improve their supply capabilities. In the past, however, the main instrument used by governments – particularly those of developing countries – to assist local suppliers has been to limit imports of competitive components and raw materials. While, in some cases, this has forced both domestic- and foreign-owned companies to buy products they could not economically produce themselves or buy from local firms, in others it has deterred new investment in the purchasing sectors altogether.

The ‘import or procure locally’ decision
The previous subsection discussed the choice open to a foreign-owned affiliate as to whether it produces intermediate products or buys them from outside firms in that country. In both instances, value is added in the country, although a priori it cannot be said which of the two is the preferred option. There is, of course, another alternative open to the affiliate, namely, whether to import the product, or buy or make it in the country in which it operates.

Imports may be sourced either from other parts of the MNE, that is, from the parent company or a sister affiliate, or from independent foreign sellers. In some cases, the parent company might purchase intermediate products on behalf of its affiliates. If the affiliates are billed by the parent company for these products, these are classified as intra-firm imports.

Left to its own devices, an MNE affiliate, like any other profit-maximising firm, will procure its intermediate products from the cheapest and most reliable source, that is, where the purchase price plus transaction costs are the least. In the case of imports (whether intra- or inter-firm), additional transaction costs may be involved. Inter alia these include longer delivery schedules, higher transport and inventory costs, increased search, negotiating and monitoring costs, and a possibility of supply disruptions from shipping delays and dock strikes. Some of these costs may be reduced by the parent company (or sister affiliates) internalising cross-border markets. Others, however, such as disruptions to supply flows brought about by exogenous events, will remain.

Some intermediate products will be acquired on the open market at world prices or bought from external subcontractors at negotiated prices. Others may be supplied or procured by the parent company, or by one of its affiliates. Such purchases are particularly likely in the case of idiosyncratic inputs in which foreign suppliers have a unique competitive advantage, where the parent company can monitor quality and prices, where marginal costs are less than average costs, where there are economies of bulk purchase, and where a parent company may wish to use its intra-group transactions for transfer price manipulation. There may be other reasons why the parent company should wish to buy inputs for its affiliates. Some of these are likely to lower transaction costs, for example,
where the parent company crates a set of components and sends them to its affiliates. Others, while benefiting the parent company, may not be as welcomed by the host country, particularly if the internal transfer price of the input improperly reflects its real opportunity cost.

Again, the extent of imported intermediate products is likely to be both product and country specific. It will also vary according to the sourcing strategy of the investing company (for example, the extent to which it engages in single or multiple sourcing), the product’s marketing performance and the age of the affiliate. Previous chapters have shown that most market-seeking FDI begins with the newly established affiliates undertaking simple finishing operations, and importing most of their upstream intermediate products. Gradually, as and when indigenous technological and productive capacity and the prices of indigenous intermediate products become more competitive, the local-content ratio will increase.

An equally important variable is the nature of the FDI. Manufacturing affiliates established to undertake the labour-intensive operations of high-technology products are likely to import most of their intermediate inputs from their parent companies or sister affiliates. Indeed, one of the concerns expressed about EPZs is that they, like some of the natural resource-based investments which preceded them, can so easily be little more than export enclaves. Another is that the positive externalities of such investment are normally limited, as foreign affiliates purchase few of their inputs from domestic firms and do nothing to upgrade indigenous manpower. By contrast, in large industrialised economies, MNEs may be fully integrated into the national value-added chain, producing or buying all their intermediate products, including R&D and professional services, from domestic sources.

In several developing countries and transition economies, however, the evidence suggests that, over the past three decades at least, the most important determinant of the purchasing propensities of both foreign- and domestically owned firms is the quality of a country’s institutions, and the competence of its government to devise and implement a successful development and/or economic restructuring strategy. In the 1970s, for example, most governments in Latin America, Asia and Africa vigorously restricted the import of intermediate products required by foreign affiliates, except where it could be shown that these could not be produced locally. While raising the local-content ratio, this policy also frequently increased the costs of production, especially where domestic firms were protected from external competition. In the 1980s and early 1990s, however, the Chinese and several of the Central and Eastern European governments began to follow a more liberal path. In the early 2000s, this more liberal approach is extending to India and some sub-Saharan African countries as well.

The economic rationale for the earlier policy was clear and, on the face of it, quite plausible. With larger markets, increasing technical competence and greater experience, local suppliers would eventually become competitive with their foreign rivals, especially if foreign affiliates could help them to achieve these goals. And, in certain cases (for example, Japan, Taiwan and South Korea), it would be difficult to argue that in their early stages of industrialisation, protectionism has not helped infant industries to survive and prosper. In others, however, where the institutional and physical infrastructure of a country was inappropriate to the production of the intermediate products, the pressure on firms to use local suppliers has more frequently impeded the upgrading of quality standards and the
introduction of more-efficient production methods. This, in turn, has reduced the ability of the purchasing firms to penetrate international markets and slowed the pace of economic development and restructuring. Although, in the short run, there may be some merit in protecting domestic suppliers or assisting them to become economically viable, in the long run, domestic linkages along a value-added chain are only desirable in so far as they help the producing firms to upgrade their competitiveness in world markets.

Technological change, regional integration and the globalisation of markets are introducing new nuances into both the ‘import or make locally’ and the ‘make internally or buy out’ decisions. Increasingly, not only are governments being compelled to accept the fact that if their firms are to be or remain competitive in world markets, they must be allowed to buy their intermediate products from the cheapest and most reliable sources, but also that as and when they enter into preferential trading agreements, they may have to abrogate their rights to influence the ‘import or make locally’ choice.

Over the past decade, a number of both developed and developing countries have reconfigured their institutions and instituted new policies to encourage backward linkage formation to local suppliers. These countries include Ireland, the UK (as well as Scotland and Wales, separately), Costa Rica, Malaysia, Mexico, Singapore, Thailand, the Czech Republic and Hungary (UNCTAD, 2001). Each has regarded the upgrading of local supply competency to meet the needs of MNE affiliates as an integral part of their competitiveness-enhancing strategies.

Partly in response to such initiatives, MNEs have also fostered their own backward linkage programmes. For example, in the ICT and electronics sectors these include Motorola’s supplier training programme in China and Intel’s supplier training programmes in Malaysia and Costa Rica (ibid.:149). In the automotive industry they include Toyota’s development programme for its 575 first-tier suppliers in Thailand (more than half of whom are Japanese affiliates), which aims at 100% local procurement, and in the food sector they include programmes by Nestlé in China, Unilever in Vietnam and Heinz in Egypt to increase the proportion of raw materials and packaging materials sourced locally (ibid.:146). For example, Heinz ketchup in Egypt is made almost entirely from local ingredients, using a specific variety of tomato introduced by Heinz (El-Shinnawy and Handoussa, 2004:117). Foreign investors have also helped to improve milk storage and hygiene standards at Polish dairy farms, in addition to providing access to key inputs such as animal feed, extending credit and providing loan guarantees (Dries and Swinnen, 2004).

The buyer- and producer-driven production networks that have emerged over the past two decades are also likely to differ in the extent and kind of local linkages they are likely to foster (Gereffi, 1999). Producer-driven networks, such as those in automobiles and semiconductors, might be more amenable to generating indigenous investment and local linkages to support affiliate production. For example, in the auto industry, while Volvo has reduced the number of suppliers it uses to manufacture its range of trucks and buses, its suppliers in China, Brazil and India and Mexico have received extensive technological assistance to meet quality and performance targets (Ivarsson and Alvstam, 2005).

However, specialisation within the MNE network implies that such suppliers are sometimes in global competition with other members of the network. Buyer-driven commodity chains, such as those in apparel or toys, might allow for the development of some local suppliers into OEM producers, as has happened in Taiwan and Hong Kong, for example.
However, the position of such suppliers is largely dependent on the changing tastes of buyers abroad, rather than their own competitive position in the MNE network. At the same time, in countries with limited ability to upgrade the competences of local suppliers, such as Sri Lanka, linkage formation, and the emergence of indigenous OEM suppliers, is much less likely to occur (Kelegama and Foley, 1999).

Examples of the reconfiguration of the supply chain can be found in the international sourcing of fruits and vegetables, as well as within the apparel value chain. According to UNCTAD (2002), in both the food and apparel industries, MNEs that previously processed goods locally for export in developing countries have reduced their ownership of factories and logistics facilities, and have moved towards managing retail trade and brands. The large retailers have become extremely powerful in determining what kinds of goods will be sourced, and which suppliers will be included in their operational networks. Today, retailers such as Wal-Mart and Tesco typically contract with large exporters in developing countries, and expect them to take control of production and logistics according to exacting specifications. In many cases, it is the affiliates of the other MNEs, which may have acquired local supplier firms, that are often best placed to take on the role of exporting within the MNE network.

To summarise, we draw upon the results of a detailed study by UNCTAD (2001), which points to six factors that help to explain the determinants of linkages by MNEs. First, the kind of investment is likely to affect both the motivation and possibilities for local sourcing. Second, a firm’s technology and market position have an influence. Affiliates making standardised products are likely to opt for arm’s-length relationships, while those employing advanced or complex technology might prefer local production and long-term relationships with a few selected suppliers. Third is the decision-making role assigned to affiliates, as the degree of autonomy afforded to the affiliate is likely to affect its ability to form local linkages. Fourth, the age of the foreign affiliate is frequently relevant as the existing evidence indicates that local procurement tends to increase over time due to local experience and knowledge about the sources of supply. Fifth, the mode of entry of an MNE may affect the sourcing decision, as acquisitions allow access to existing networks in the local economy, while greenfield investments have to establish their linkages from scratch. Sixth, the size of the affiliate matters, since local firms might find it difficult to supply the volumes required by larger affiliates, which might also be able to undertake in-house production more readily themselves. To these factors we would add a seventh, namely, the institutional distance between the MNE and its suppliers. The greater and the more embedded this distance – be it at the firm or country level – the more one would expect MNEs to eschew local linkages or an internalised mode of sourcing.

Extent of local sourcing by MNE affiliates
There have been several kinds of empirical studies of the sourcing strategies of multinational affiliates. Here we structure our discussion around four different types of affiliates: market-seeking manufacturing affiliates serving the local market; efficiency-seeking manufacturing affiliates aiming to export; natural resource-seeking affiliates; and market- and efficiency-seeking affiliates producing services.

Market-seeking manufacturing affiliates One of the earliest and most carefully documented investigations on the procurement policies of market-seeking foreign investors
was that undertaken by Lall in 1980 for the UNCTC, which examined the sourcing strategies of foreign affiliates in the auto industry in India, Peru and Morocco (Lall, 1980b; UNCTC, 1981a). He found that in India in 1977, two companies, Ashok-Leyland (AL), 60% owned by British Leyland and 40% by Tata Engineering, and Locomotive Company (Telco), accounted for the lion’s share of commercial vehicle production. In that same year, the local content of the sales of both companies was extremely high – 94% in the case of AL and 95% in the case of Telco. However, over the previous 24 years, this ratio had increased from 35% in the case of AL and 45% in the case of Telco.

Lall argued that Indian institutions and government policy were the key variables in affecting the extent and pace of local procurement, by both firms, along with the size of the domestic market and the level of industrial development. He did not consider that the ownership of the companies was an important determinant of the ‘import or buy locally’ decision. In another part of his study, he found that the same factors also helped to explain differences in the local content ratio of automobile suppliers (all of whom were foreign subsidiaries) in Peru (35% in 1979) and Morocco (15% in 1979) (UNCTC, 1981a:33).

A related study on the auto industry in Nigeria was carried out in 1985 by Landi. Using a similar methodology to that of Lall and the UNCTC, Landi (1986) found that foreign affiliates were more integrated and had a higher propensity to import their intermediate products than their indigenous counterparts. The same conclusion was reached by McAleese and McDonald (1978) and Jo (1980) in their evaluations of the import propensities of foreign affiliates in Ireland and South Korea. However, in both cases, the extent of the difference varied between sectors and according to the age, experience and size of the foreign affiliates. A later study by Kumar (1990), using regression analysis, showed that compared with their indigenous competitors, the degree of vertical integration by MNE affiliates in 49 Indian industries in 1980–81 was significantly higher than that of their indigenous competitors, notwithstanding the fact that both groups of firms displayed about the same import propensities.

This and other fragmentary data on the backward vertical linkages established by market-seeking foreign-owned firms in developing countries pointed to four main conclusions:

1. MNE affiliates established few linkages in small or industrially backward economies, mainly because of an inadequate institutional and subcontracting infrastructure in these countries.
2. The percentage of subcontracting by MNE affiliates was positively correlated both to the sophistication of the industrial infrastructure of the host country and the length of time the affiliates have been operating.
3. In larger and more advanced developing economies, MNE affiliates often forged substantial linkages, but often only as a result of government import restrictions and the imposition of local performance requirements.
4. As a result of such government policies, the linkages established were often excessively costly and uneconomic.

Turning now to more recent studies, Barnes and Kaplinsky (2000) have shown that the removal of local purchasing requirements and a significant lowering of tariffs in the 1990s – both features of the imperatives of globalisation – caused the South African automobile
assemblers to increasingly substitute imports for local sourcing. Local suppliers are also at a disadvantage, because automobile assemblers are increasingly looking to integrate their operations into the global production networks of their parent companies. In developing countries, this can sometimes involve a leap of three technological generations to the newest model. In manufacturing the updated models, the assemblers are increasingly unwilling to engage with local firms employing local technology, or even local firms employing licensed foreign technology. Rather, the assemblers prefer to be supplied, either via joint ventures or wholly owned subsidiaries, by firms that can become first-tier or core suppliers, and are able to work together with the assembler on the design of a new vehicle. Furthermore, the assemblers are looking for suppliers that are able to commit themselves to global sourcing and ‘follower supply’, that is, expanding component production and co-locating to the proximity of significant new assembly operations, including abroad, when necessary.

In electronics manufacturing, the degree of local content in Japanese manufacturing affiliates in 24 developed and developing countries in 1992 was investigated by Belderbos et al. (2001). The local-content ratio in this study was defined as the sales of the affiliate minus components and materials imported, divided by affiliate sales. The ratio thus included both the value added created by the affiliate as well as the value of local procurement. The authors found evidence that keiretsu members had higher levels of local content, but this was sourced largely from locally established Japanese suppliers. In general, Japanese greenfield affiliates recorded significantly lower local content than did joint ventures or acquired affiliates. The operating experience of the affiliates was shown to have a positive but relatively small influence on local sourcing. This conclusion would lend some support to the idea that the relative newness of Japanese outward FDI might partially account for their lower share of local linkages. However, the fact that, to date, the majority of Japanese FDI has been of a greenfield variety, and that much of it has been in sectors subject to either overt or covert local content requirements, helps explain the low levels of local content generally observed in Japanese affiliates.

The definition of linkages employed by Chen et al. (2004) to study the local linkages formed by Taiwanese MNEs was considerably broader, and included arm’s-length as well as collaborative non-equity relationships. Specifically, in their research, the authors focused on six kinds of local linkages: supplier, marketing, R&D, labour, subcontracting and financial linkages. They found that Taiwanese firms were more active in pursuing local linkages in the US than in South-East Asia and China, that investors in producer-driven networks were more active in building local linkages, that large firms were more active than small firms in forming local linkages, and that entry by joint venture rather than wholly owned subsidiaries seemed to encourage more local linkages.

As a complement to the case studies and industry-specific studies on linkage formation, Scott-Kennel (2004) presented a country-specific study on the quality and quantity of the linkages between multinational parents and their New Zealand affiliates, and between these affiliates and local firms. The comprehensive sample included 515 foreign affiliates in New Zealand, which were relatively well established as, on average, they had been operating in New Zealand for 28 years. In general, the author found that the greater the difference in the resources and competences transferred from the parent to the affiliate, the more likely it was that these, or complementary resources and competences, were also transferred by affiliates to local firms through direct and collaborative linkages. In the study, direct linkages were defined as transactional relationships involving the sourcing of inputs, and the
supplying of local firms with intermediate products. In addition to an exchange of such products, direct linkages were often found to involve the transfer of enabling technologies, product specifications and market information. Collaborative linkages with local firms involved alliances in technology sharing, development agreements or management contracts. In the New Zealand case, direct backward or forward linkages with local firms had been formed by 52% of the affiliates in the 12 months prior to the survey, while collaborative linkages had been established by 29% of the respondents over the last three years.726

A subsequent analysis used cluster analysis to group affiliates based on the patterns of linkages they had formed with local firms (Scott-Kennel, 2007). This analysis found that only 14% of the foreign affiliates in New Zealand engaged in a range of different types of linkages with local firms, and the seven clusters identified in the analysis differed notably in the extent and quality of the linkages formed. Although the study did not directly assess the competitiveness of the local partner firms, the results seemed to confirm that local firms that were more competitive, and possessed higher absorptive capacity, were more likely to partner with a foreign affiliate.

Export-orientated manufacturing affiliates A second group of studies has been concerned with the linkages established by foreign-owned firms in export-orientated manufacturing industries. Early research (Reuber et al., 1973) had noted that the backward linkages formed by non-resident investors in these sectors were far fewer than in the case of import-substituting affiliates. Also, by far the larger proportion of their purchases of intermediate products were imported – often directly from their parent companies. In their analysis of the consumer electronics industry in South-East Asia, Lim and Pang (1982) found that these linkages were ‘non-existent’ in Malaysia and ‘miniscule’ in Singapore. Yet five years later, another survey of 30 electronics foreign affiliates in Singapore revealed that, on average, they bought out 58% of their intermediate goods and services from local suppliers, and that indigenous (that is, Singaporean) and smaller foreign firms made the most prolific use of such services (Lim and Pang, 1991). By then, Singapore had become a high-tech hub of a regionally integrated electronics industry. It provided technical support, material inputs, marketing and other services for MNE subsidiaries elsewhere in Asia.

The earlier research tended to confirm that the key variables influencing the propensity of both foreign- and domestic export-orientated firms to source locally were the types of products supplied, the quality of local institutions, supporting industries and government policy. For example, within the electronics sector the nature of the production process, the complexity of the technology, the opportunities for scale economies and the rapidity with which changes in technology or customer preferences take place, all made for more inter-firm linkages, mainly, it seems, because purchasing firms preferred to devote their own resources to technology development and marketing efforts rather than to backward integration. In so far as export-orientated foreign affiliates do behave differently from indigenous firms in their ‘make or buy’ and ‘import or produce locally’ decisions, it is likely to be for one of two reasons. The first is that they, or the MNE of which they are part, have better information about worldwide prices and the content and quality of parts and components, and are able to acquire these intermediate products on more favourable terms. The second is that in the promotion of their global objectives, MNEs choose to pursue distinctive procurement strategies.
Governments that pursue export-generating rather than import-substituting policies usually impose fewer controls on the sourcing policies of foreign affiliates. This is mainly because they perceive that, unless such firms are free to obtain intermediate products on the best possible terms, their ability to export will be adversely affected. While Asian governments have done their best to encourage local sourcing by foreign-based firms, in the export-orientated sectors, at least, market forces have prevailed. Indeed, Lim and Pang (1982) showed that the development of local suppliers in South-East Asia owed much to the encouragement and patronage of the MNEs themselves, who found it in their long-term interests to foster a strong indigenous capability. At the same time, because they are likely to be more specialised in their product or process profiles and to be part of a cross-border network of activities, such affiliates may engage in a lower degree of vertical integration than their indigenous competitors. Certainly, Cohen (1975) found this to be so in the case of MNE affiliates in Taiwan, Singapore and South Korea.

In Singapore, upgraded institutions and government policies to upgrade local plants from basic component manufacturing and assembly work towards higher value-added activities have played a critical role in increasing linkages and enabling the development of local contract manufacturing firms. However, since many of the foreign affiliates in the electronics industry in Singapore today are themselves first-tier suppliers to global assemblers, many of them have relatively little strategic autonomy, and thus less incentive to increase local linkages. Consequently, it is conceivable that the locally developed contract manufacturers might in fact offer higher potential for linkage formation and indigenous growth in the future (Brown, 1998).

In Thailand, the government instituted policies in the 1990s both to increase the number of linkages between exporting foreign affiliates and local firms, and to support the development of indigenous suppliers, and, more especially, the growth of SMEs. Since local content requirements were disallowed following the adoption of the TRIMs (trade related investment measures) agreement, the government focused on upgrading their institutions of information provision and services to match foreign MNEs with local suppliers (Lauridsen, 2004). In the well-known cases of Singapore, Ireland and Costa Rica, however, the role of the government has gone beyond information provision and matchmaking to include such institutional measures as a substantial investment in education and infrastructure, a tightening up of legislation relating to IPR, and the offering of a variety of incentives to actively court specific MNEs. Furthermore, substantial efforts were made in these cases to sustain high-level interaction between the MNEs, the government and local firms in the building of linkages and the encouragement of supplier co-location. However, according to Lauridsen, in Thailand, the policies lacked high-level involvement in implementation, which was thought to have been critical to success in other countries. Moreover, although high-technology exports grew impressively from the mid-1980s to the mid-1990s, these exports were based on the simple labour-intensive assembly of high-technology components imported into Thailand. Finally, although policies were introduced to encourage backward linkages from existing MNEs, as well as to develop indigenous suppliers, priority was given to encouraging Japanese SMEs to follow their lead firms to Thailand, rather than to the development of genuinely indigenous capability.

In Ireland, in spite of institutional improvements and policies directed to encouraging linkage formation, Barry and Bradley (1997) found some evidence that such efforts were
relatively unsuccessful in the case of export-orientated foreign manufacturing affiliates. Specifically, they discovered that imports represented 65.6% of gross output for foreign-owned firms, as compared to only 21.7% for indigenous firms, although this comparison did not take into account any differences in the industrial distribution of domestic and foreign manufacturing activity. Indeed, if measured in terms of the employment generated in upstream industries, they cited some evidence that foreign affiliates may have induced more upstream service jobs than their indigenous counterparts.\(^{728}\)

These results are in line with a report by UNCTAD (2001:134) which reviewed the evidence on the extent of backward linkages. This review indicated that in the UK and Ireland, for example, foreign affiliates sourced between 10 and 25% of their inputs locally, and there was some evidence that local procurement had been increasing over time. In developing countries, local sourcing was estimated to be particularly low in the garment industry – for example, between 5 and 10% in the case of the Dominican Republic, Costa Rica, and Morocco. Other findings indicated that in 2001, foreign affiliates in the colour TV industry in Mexico sourced 28% of their inputs locally. In 1994, the local sourcing of electronic components in Malaysia was 62% of exports and 40% in the case of Thailand. Some examples of high levels of local sourcing were found in Central and Eastern Europe. For example, in Poland, a survey of 30 MNE affiliates had found that up to 75% of their inputs were sourced from local firms, while in the Czech Republic, roughly the same proportion of inputs were sourced locally by Volkswagen-Skoda (from both foreign affiliates and domestically owned firms).

Finally, a survey by Giroud and Mirza (2006) on the degree of local sourcing (in 2001) by affiliates in the electronics and garment industries found that local sourcing accounted for 35% in Malaysia and Thailand, 20% in Vietnam, and was entirely absent in Cambodia, where the affiliates were concentrated in the garment sector.\(^{729}\)

**Natural resource-seeking affiliates** A third group of studies has examined the backward linkages created by MNE affiliates in the primary product sector. It is often argued that foreign firms in this sector – especially the oil and hard mineral companies – create few vertical linkages with local producers. This is because they import most of their inputs from their parent companies (or countries), and export their output in its raw state for processing in other (and usually their home) countries. A number of empirical studies have measured the extent of backward linkages from such enclaves using the concept of retained value (Mikesell, 1970; Jenkins, 1987). The generally accepted definition of retained value \((RV)\) is:

\[
RV = W + L + P + T,
\]

where:

\[W = \text{local wages of the foreign affiliate};\]
\[L = \text{local inputs};\]
\[P = \text{profits accruing to local shareholders};\] and
\[T = \text{local taxes}.\]

By expressing retained value as a percentage of the value of exports of foreign affiliates, it is possible to get some idea of the contribution of the affiliates to local value added. If
the percentage is low, then the foreign affiliates may be viewed as export enclaves. This situation is illustrated by some historical data on oil and mineral investments in less developed countries. For example, in the late 1920s, the RV ratio of foreign affiliates in Chilean copper mines was as low as 17% (Mamalakis, 1970 in Jenkins, 1987). However, by 1950 the RV ratio had risen to 50%. Mikesell (1970) estimated that, in the mid-1960s, the RV ratios in mineral and petroleum industries in various developing countries was averaging between 60 and 70%. Later estimates by Brown and McKern (1987) put the proportion of bauxite processed to the first stage of aluminium product in 1982 as 55%; the corresponding figures were 81% for copper and 38% for iron. Most of the tin mined in Bolivia and South-East Asia was also processed locally.

Among the many reasons cited for the reduction in the processing gap, perhaps the most important are the indigenisation of many mineral sectors, the increase in taxation levied on the profits of foreign corporations, the reduction of tariffs on imports of processed metal, the considerable improvement in the local technological infrastructure and developmental capabilities, the development of energy-saving processing methods, and the tighter environmental controls imposed by developed countries over processing activities. However, efforts by primary producers to develop secondary processing have not always been successful. Sometimes this is because of the inadequacy of local complementary resources and capabilities (for example, energy and trained technologists, engineers and managers) and sometimes because it is not perceived to advance the global strategic interests of the investing companies. Sometimes it reflects the failure of government to devise and implement the right kinds of institutions to encourage MNEs to set up local processing operations.

In a study of the natural gas industry in Trinidad and Tobago, Mytelka and Barclay (2004) found that the host government had failed to encourage foreign affiliates to engage in innovatory activities, as it had made little effort to increase investment in education or in the development of local capabilities. Consequently, the industry created few local linkages, with the exception of low-level services geared towards maintenance activities. Indeed, there was even evidence that some of the primary petrochemical producers had internalised more of the maintenance functions, and effectively de-linked themselves from the local economy.730

By contrast, in a study of suppliers and foreign affiliates in the Scottish oil and gas and electronics industries, Raines et al. (2001) found that some of the suppliers had used the international experience of the investing companies to piggyback into new markets, or by engaging in FDI themselves. For example (p. 971): ‘a Scottish oil field surveyor and oil production management firm was invited into Venezuela, Nigeria and the former Soviet Union markets separately by a number of Scottish subsidiaries concerned about these regions’ poorly-developed local supply bases’. However, this effect was found to be much stronger in the oil and gas industry. Linkages in the electronics sector were more geared towards high-volume, low value-added sourcing, while those in the oil and gas industry were more specialised, and involved higher value added. Similarly, the South African mining, minerals processing and energy sector is supported by a large number of indigenous and foreign firms undertaking tasks in project engineering, and in supplying the various inputs required, including ventilation and pumping equipment, drill consumables and so on (UNCTAD, 2007).

In the agribusiness sector, the degree of local processing rests mainly on the nature of the product and the access of producer countries to the markets of developed countries.
With the advent of globalisation, the consequential reduction of some tariff barriers and the introduction of a variety of trade and investment agreements, such access has marginally improved over the past two decades. For example, in Chilean salmon farming, the top three exporters were all foreign affiliates in 1999, while in Kenya, MNEs controlled about 90% of the horticultural production, the output of which was the second most important export product in 2001 (UNCTAD, 2002). In Brazil, in 1998, the MNE share of exports was 90% in tobacco, 48% in soybeans and 40% in pork (FAO, 2003:128). In the same year, the six largest multinational coffee traders accounted for 50% of the global market (FAO, 2005:277).

As we discussed earlier, a major change in the food processing sector has occurred in response to the enhanced role of the large multinational retailers such as the Dutch Ahold, the French Carrefour, the British Tesco and the US-based Wal-Mart. The global retailers seek local suppliers who can deliver large volumes, and follow exacting specifications with respect to appearance, consistency of quality and food safety standards, which means that they often contract with affiliates of multinational food producers in the host countries. Large multinational food processing firms, such as United Fruit, Libby, Del Monte and Unilever, which have traditionally dominated the international sourcing of fruits, nuts and vegetables, have established affiliates to deal directly with the large retailers.

For example, according to UNCTAD (2001), in Argentina, the French retail giant Carrefour relies on centralised procurement at the national level or even at the regional level for processed foods, while fresh and staple foods are likely to be sourced locally. McDonald’s sources the majority of its food supplies from local firms. However, in some countries many of these latter firms are themselves foreign affiliates that have taken over local agribusiness firms. For example, in Argentina, 87% of the food products used by McDonald’s are sourced locally, while the American company McCain has established a large plant in Argentina to produce frozen potatoes. As in other sectors, the requirements attached to becoming a ‘preferred’ supplier to an MNE are such that small producers, particularly in poor areas, are finding it increasingly difficult to gain access to the local retail market.

**Backward linkages in services** The fourth type of backward linkage, that of multinational service producers, used to be dominated by the activities of trading and agribusiness companies and hotel chains. For example, over their long history, the Japanese Sogo Shosha have both invested in foreign primary and secondary value-added activities and concluded long-term contracts with foreign producers. Multinational buying groups from Europe and the US used to account for a sizeable proportion of the exports of consumer electronics, cameras, textiles and clothing and leather goods produced in East Asia. Indeed, some well-known trading companies, such as the Hong Kong-based Li & Fung, are still very much a part of the global economy. In the hospitality sector, the demand for furniture and fittings and foodstuffs by hotels owned or run by MNEs, and that for souvenirs by the foreign tourist, have also made a big impact on local craft and agricultural sectors in some tourist-dependent economies. However, in addition to these traditional sectors, the internationalisation of a variety of service sectors, including retailing and business services, is of increasing importance to a wide range of developing and developed host countries.
In the previous subsection, we described how the internationalisation of large retailers has transformed the local supply market for many agricultural goods. Of course, the internationalisation of the retailing function has also had a considerable impact on the structure of the domestic sector, particularly in developing countries, where local food retailing is shifting from traditional markets to the supermarkets. As lower-income consumers are increasingly targeted by supermarkets, the traditional division between lower-quality agricultural goods aimed for the local market, and those aimed for export, is also beginning to disappear.

For example, in 2000, the supermarket share in national food retail in Latin America was as high as 75% in Brazil, 50% in Chile and 45% in Mexico. While still not reaching the US level of 80%, these levels are considerably higher than only a decade ago (Reardon et al., 2005:48). The retail sector in developing countries is often highly concentrated, and in most Latin American markets today it is estimated that four of the top five supermarket chains are MNEs. In 2000, about 30% of food expenditures in Mexico was captured by Wal-Mart, and the percentages were similar for Ahold in Costa Rica and Carrefour in Argentina (ibid.:49). In South-East Asia, the share of supermarkets in national food retail is still somewhat lower, but it is growing rapidly.

To serve an ever larger share of the market, the large retailers have instituted several changes in the way they manage the value chain, such as centralising procurement, and outsourcing logistic operations. For example, the ‘buying arm’ of Ahold in Central America called Hortifruti, is a majority-owned joint venture with two local retail chains, one from Guatemala and one from Costa Rica. In Thailand, the logistics of the Ahold distribution centre for fruits and vegetables is operated in partnership with TNT Logistics of the Netherlands.

In the past, service companies (for example, banks, insurance companies, accountancy firms, advertising agencies and management consultancies) have followed their customers overseas. Indeed, the ability to offer their multinational customers a global network of capabilities and services is one of the O-specific advantages claimed by the large advertising, market research, professional services and hotel MNEs.

What is new, is the growth in offshoring of various back-office service functions, such as claims processing, payroll processing and customer call centres, as well the growth in the offshoring of other core services such as computer programming and R&D. While some forms of offshoring involve FDI, many are contractual, and, in principle, no different from the sourcing of intermediate inputs by a manufacturing firm, except that the jobs displaced tend to be white- rather than blue-collar jobs (see Chapter 13). The best-known location for such activity must certainly be India, both for computer programming and call centres, but such activities are being directed to a growing number of locations, including Poland, the Czech Republic and Hungary, as well as Bulgaria and Romania, where a multi-lingual and well-educated workforce is available (UNCTAD, 2004). In the Bulgarian case, for example, it is interesting to note that in addition to the skills of the workforce, they perceive their competitive advantage to be that they are closer to the ‘Western business mentality’ than competitors in, say, India. This suggests that there may be some issues of institutional distance involved in the delivery of digital services that extend beyond the most obvious differences, such as regional accents, the masking of which has been encouraged by some call centre operators. Indeed, the locational aspect was a strong motivation in the ‘reverse’ investment made by an Indian
outsourcing company HCL Technologies to buy and operate a former BT call centre in Belfast, Northern Ireland in 2001.\textsuperscript{733}

16.2.2 Forward Linkages with Customers

Some general observations

The linkages established between the affiliates of MNEs and their business customers may also affect the latter’s competitiveness and innovatory competences. These effects will depend, first, on the output produced by the affiliate and, second, on the proportion of this output which is sold to external buyers rather than used by the affiliates for further value-adding activity. As in the case of backward integration, these magnitudes will vary between countries, sectors and firms, as well as over time.

Some of these reasons for forward linkages, particularly those to do with the ‘make or sell’ decision, are similar to those of backward linkages, although the nature of the costs and benefits of internalised and external transactions may be different. For example, the assurance of markets and the maintenance of quality control are the major motives for most kinds of forward integration. Moreover, while MNEs will normally sell their finished products whenever and wherever it is profitable to do so, in cases where the quality and price of subsequent downstream value-adding activities are critical to their own reputation, they may well wish to own their wholesale or retail outlets. Obvious cases include the location and ownership of sales and after-sales servicing, maintenance and repair facilities.

There are several kinds of forward linkages which multinational affiliates may forge with their customers. Those most commonly discussed in the literature are:

1. The secondary processing of primary value-added activities, such as agribusiness, oil refining and metal production.
2. Linkages established with industrial buyers of technically complicated products (where, for example, advice on how to use and maintain machinery and equipment may be valuable in influencing the products’ value to the buyer).
3. Linkages established with marketing outlets where, for example, the affiliates may provide information and offer functional guidance about the technical characteristics and usage of the products being sold and their software and servicing requirements. Examples include motor vehicles, domestic electrical appliances and agricultural machinery.

In fact, although there is a good deal of anecdotal evidence of the kind of linkages fashioned by multinational affiliates with their customers, there has been little substantive research work on this, or on the extent to which such linkages are unique to MNEs. One exception is in the secondary processing of minerals and agricultural products, which we shall discuss shortly. Chapters 4 and 6 have cited examples of the reasons why exporting companies might wish to possess their own marketing and distribution networks. Indeed, one of the earliest examples of a manufacturer integrating forward into retail sales and post-sales servicing was that of the Singer Sewing Machine Company, which did so because it was not confident that independent retailers could provide its customers with the service Singer felt they merited (Davies, 1969).
Dunning (1958) gave several other examples of the way in which US firms helped their customers to make the best use of their products. He quoted the case of the British United Shoe Machinery Company which set up a shoe factory organisation department in 1920 to advise its industrial customers on the layout of machinery and the introduction of production control systems (ibid.:268). He also found that US affiliates were more apt to provide training facilities for their customers and for their customers’ staff than were their domestic competitors. In the auto industry, the Ford Motor Company has helped to introduce new service techniques and upgrade the efficiency of their dealers (ibid.:270).

There is much other casual evidence which supports the proposition that foreign affiliates maintain close linkages with their industrial users. We have suggested that in some cases, notably in the auto and electronics industries, the parts and components suppliers of the parent company – not to mention a range of service companies – might follow their customers overseas. One then has additional value added created in the local economy shared by both foreign affiliates and local firms. However, it would be unwise to conclude that such linkages arise exclusively from the foreignness of the supplying company, although undoubtedly this is true to some extent. One of the advantages of inbound FDI is that it may bring with it management and organisational practices, incentive structures and production processes which have proved successful when implemented elsewhere in the world. As we have stressed before, at least the larger and more-efficient indigenous firms in developed countries should be aware of the competitive advantages associated with those linkages. This is especially the case in the industrialised nations, where the competitors to foreign affiliates are themselves likely to be international companies. Nevertheless, the evidence, scattered as it is, does suggest that by helping to raise the standards of downstream activities of both intermediate and final consumers, foreign firms have gained a good reputation. Again, this may be partly because they are accustomed to such standards in their home countries, and partly because they perceive that, by upgrading the quality of the output of their industrial purchasers, they can create new O advantages for themselves. Repeatedly, the emphasis on downstream quality control by Japanese auto and electronics firms in the US and Europe confirms the sense of this strategy.

With increased outsourcing and the ‘modularisation’ of manufacturing, there has been an increasing emphasis on the service element associated with manufactured goods, including various forms of after-sales service and upgrades (Phillips et al., 1999). At the same time, many of the maintenance and repair functions previously carried out by manufacturers are likely to be outsourced, creating new possibilities for local firms. While some product-related services might be provided over the internet, in other cases a local presence might be needed. In the luxury segment in particular (although by no means exclusively), the desire to provide ‘experiences’ for customers has encouraged investment in own stores (Pine and Gilmore, 1999). In addition to providing retail space, the stores can also act as listening posts which, along with internet-based means of gathering customer information, provide insight into local preferences, and suggestions for improvements to the products and services on offer (Barua et al., 2001; Selden and MacMillan, 2006).

**Forward linkages in processing activities**

The local value-added chain may be extended by forward linkages forged by MNEs in the primary sector. Thus, the development of an oil-refining capacity by foreign affiliates may
make possible a (downstream) petrochemicals industry, the output of which might be supplied by other foreign affiliates following in the wake of the oil-refining companies, or by the oil refineries themselves, or by new linkages formed with local suppliers.

The extent to which downstream-processing activities follow FDI in upstream activities depends on the configuration of country-, industry- and firm-specific characteristics. Many developing countries have asserted that in the non-renewable resource and agricultural sectors, far from assisting the development of secondary processing activities, MNE activity has impeded it. This is because MNEs find that the marginal cost of undertaking the processing in their home countries is less than that in the host country plus or minus any differential in the cross-border costs of transporting the primary and the processed product. Even though the latter costs may fall as output rises, those of producing in an unfamiliar environment and the setting-up costs (the training of local labour) may be too much for the MNE to bear.

In this instance, there is considerable evidence on the extent to which foreign affiliates in the mineral and agricultural sectors engage in, or promote, local processing activities. In the early 1970s, for example, only about one-third of the non-fuel minerals extracted in developing countries were processed in these countries (Bossom and Varon, 1977). While, in 1975, some 39.2% of the copper extracted in the world originated from developing countries, these same countries accounted for only 19.2% of the refining capacity (UNCTC, 1978). A year later, the six largest bauxite/aluminium MNEs on average mined 42.2% of their bauxite in developing countries, but only 6.3% of the production of primary aluminium was supplied by these countries (UNCTC, 1981b). In the mining industry in Peru, due to improvements in education and skills, local firms have been able to participate in projects such as the setting up of power generation facilities and the provision of technical and feasibility studies. As a result, over a half of the goods and services used in the mining industry were able to be acquired locally in 1998 (UNCTAD, 2001:138).

The amount of secondary processing of raw materials and agricultural commodities undertaken in developing countries is highly product and country specific. Several large developing countries, for example, Brazil, Indonesia, Thailand and Zimbabwe, operate tobacco processing plants. Rubber is processed in Malaysia, India and Nigeria, and there are both foreign-owned and indigenous pineapple canning plants in Thailand and Kenya. R&D facilities have been set up in several of the larger developing countries to improve growing techniques and to develop new seed varieties suitable for the local growing conditions. Recent examples include investment (by MNEs and local firms) on research in the agricultural and horticultural sectors in Kenya, and by Pepsi on varieties of chilli peppers in India (ibid.:145). The output of MNE-related processing affiliates is generally either auctioned at national or international markets, or sold under contract to large multinational retailers that are increasingly dominating food distribution, also in developing countries (FAO, 2005).

Variations in the degree of forward integration by MNEs partly reflect the strategy of individual firms. Such a strategy may include a desire to exploit the economies of scale in the processing of primary products, the avoidance of sinking large sums of capital into high-risk countries, and the maintenance of maximum flexibility over the sourcing of inputs and their systems of production. Also, any savings in transport costs – at least, for raw materials and minerals that lose weight during the production process – and lower
energy and labour costs are frequently outweighed by the lack of institutional support, technological competence and infrastructural (especially transport) facilities of the host countries, and the fact that most of the customers of downstream value activities are located in either the developed countries, or large industrialising countries, notably China.

The real issue, however, is the extent to which, by dint of their O-specific advantages, MNEs can and do promote more or better local value-added activities than do indigenous firms. Also, where indigenous firms do not exist, how might foreign affiliates be encouraged to develop downstream activities where and when it is in the host country’s long-term economic interests to do so? Here the evidence is mixed. In developed countries (for example, Canada, Australia, Germany and the UK), the presence and stimulus of foreign companies has generally helped to promote the emergence and growth of such sectors as petrochemicals, pharmaceuticals, auto and electronic components. In some developing countries, such as the Philippines, Malaysia, Thailand, Indonesia, Cameroon and the Congo, fish, tropical fruit, palm oil, tobacco and timber processing have followed primary production. Bauxite (alumina) and phosphate processing plants have been set up in Jamaica by the leading alumina companies. By contrast, because of the high investment involved and the relatively low transportation costs of the end products, the oil majors have been reluctant to establish petrochemical plants in developing countries. One exception is in Saudi Arabia where several MNE oil companies (including those from South Korea and Taiwan) have formed joint ventures with SABIC – a local firm – to produce a range of bulk petrochemicals and thermoplastics (Oman, 1989).

In other countries, where the non-renewable resources are exclusively owned by local firms or state-owned corporations, MNEs have helped to initiate secondary processing facilities. Often these developments have involved government assistance. In some cases this has been wisely given, for example, where it has been accompanied by appropriate training programmes and the setting up of ‘clusters’ of excellence. In others, this assistance has not had the intended effects simply because the necessary institutional infrastructure and ‘created’ factor endowments for successful processing have not been available.

In the mining sector, we can point to recent examples of both successful and unsuccessful efforts at forward linkage creation. In South Africa, extensive interrelationships between the mining, minerals processing and energy sectors have been created, with the metals sector receiving about 15% of the output of the mining sector. Supported by investments in processing capacity by foreign and domestic investors, in the 1990s South Africa moved from being a simple commodity exporter to being a major exporter of processed minerals (for example, steel, aluminium and titanium). Furthermore, South African firms have developed capabilities in knowledge-based activities such as technology development and consulting in specialist areas such as shaft sinking and hoisting, and the cooling of deep mines (UNCTAD, 2007).

By contrast, in Guinea, which has considerable mineral deposits and hydropower resources, and processes a large share of the world’s bauxite, the mines have operated largely as enclaves. There has been little cooperation between the major companies, which have procured the necessary capital inputs from outside the country, and provide most of the necessary services in-house. However, there is some indication that the situation might change in the future as Alcoa, which is the major foreign investor in Guinea, and operates in partnership with the government, has reached a basic agreement to develop a large alumina refinery locally (ibid.).
Historically, as Chapter 6 has shown, one of the main advantages of MNEs investing in the primary goods sectors has been their favoured access to finance and foreign markets. To a large extent, MNEs still control the international marketing and distribution channels for both non-renewable and renewable resources. In effect this also gives them control over the location of the downstream activities of primary production (for example, the boxing and ripening of bananas, the smelting of tin and the processing of hardwoods). In some cases, this has worked to the benefit of the resource-producing countries; in others, the dominant position of MNEs as intermediate purchasers in the supply chain has resulted in their maintaining established processing and distribution outlets. With the lack of local technological capacity, or even the capability to absorb imported technology, it is difficult for local processors to break into the market. Where they have succeeded, as in the case of south-eastern US log producers, this has usually been achieved by the formation of a producers’ or exporters’ association which has provided some degree of countervailing power against the large international buyers (McKern, 1993).

16.2.3 Effects on the Productivity of Local Suppliers

As important as any impact that foreign affiliates may have on their suppliers as a result of the quantity of output that they buy, is their contribution to upgrading the quality of output, and the efficiency with which it is supplied. Indeed, where the activities of foreign affiliates substitute for those of their indigenous competitors, this is likely to be their main impact. It is perfectly reasonable to expect that at least some of the O-specific advantages of MNEs will have to do with their knowledge about the latest product and production techniques and/or about the sourcing of raw materials, components and parts. These are transferable to their foreign affiliates, giving them a competitive edge vis-à-vis indigenous producers. Box 16.1 outlines the different kinds of benefits that local firms in a linkage relationship with an MNE affiliate might receive.

In a perfectly functioning intermediate product market, there would be no need for firms to establish any of the linkages described earlier. In the real world of market failure, however, enterprises are faced with various kinds of transaction costs, which sometimes can be best circumvented by concluding a variety of formal or informal collaborative arrangements with their suppliers. The precise forms of these arrangements are likely to be context specific, and to vary in their content, scope and terms. At the one extreme, as illustrated by many East Asian MNEs, the supplier, to all intents and purposes, is regarded as a member of the family of the purchasing firm. At the other, the relationship is confined to a formal and well-defined agreement between the two parties which details the specification of the products to be provided and the terms of their supply.

Quite naturally, the dominant question of interest to host countries is the extent to which foreign affiliates are better able to overcome vertical market failure by the arrangements they make with their suppliers, than can indigenous firms – be they involved in some form of contractual agreement with foreign firms, or not. Here the evidence is mixed. On the one hand, the existing relationships which MNEs may have with suppliers in other countries (including their home country) might make them less inclined to establish new linkages, especially where the initial transaction costs of setting up these arrangements are high. On the other, they may welcome some additional diversification in their
**BOX 16.1 TYPES OF LINKAGE BENEFITS**

In addition to being a source of technology transfer, e.g., by licensing (see Chapter 11), and by providing specialised education and training (see Chapter 13), we can identify eight main types of linkages which purchasing or ‘lead’ enterprises (be they foreign or domestically owned) may form with their suppliers:

1. **Information linkages** These include exchanges of information on regional or global market characteristics and trends, on future investment intentions, on host government institutions and policies, and on foreign suppliers of machinery, parts, materials and components. Information might also be provided to the suppliers, by the parent company of the MNE, of the experience gained by linking with local firms in other countries (see also (5)).

2. **Technical assistance** This includes help given or received on such matters as innovation and product design, proprietary product specifications, design and layout of R&D laboratories, production facilities and offices, tooling, quality control, labour training, inventory management, machine maintenance, inspection and testing procedures and so on. It might also include the provision of (used) machinery and specialised tools and equipment.

3. **Financial assistance** This may embrace repayable loans or concessional contributions to the subcontractor’s risk capital, terms, grants, prefinancing of machinery and tools, and special price agreements, assistance in accessing foreign capital markets and investment guarantee schemes, and financial help to local suppliers in visiting their opposite number in the home country of the parent company.

4. **Procurement assistance** This covers help, other than noted in (1), to suppliers in sourcing capital equipment, raw materials and other intermediate products at competitive prices. In some cases, the affiliates’ suppliers might receive direct assistance from the suppliers of their parent company.

5. **Location** This includes advice given to potential suppliers (particularly those of foreign origin) on the siting of a new plant or an existing establishment.

6. **Managerial and organisational assistance** This includes help given on a range of financial, accounting and management control procedures, and on how organisational structures and processes might be adapted to meet the requirements of global customers, including obtaining certification for, e.g., quality standards.

7. **Pricing assistance** This covers technical advice about the costing of products; and of contractual and bargaining procedures in order to determine prices.

8. **Other assistance** This includes helping suppliers to obtain sales to third parties in the open market; assistance in exporting to markets, which are
familiar to the MNE; advice on diversification strategies, dealing with foreign suppliers; etc.

To these linkages we may add a ninth namely, institutional assistance, in which the investing company helps to provide and/or upgrade the incentive structures and enforcement mechanisms, which in turn affects how well the local partner is able to benefit from and efficiently utilise the other forms of assistance on offer.


sourcing strategies. As we have already seen, they do have the knowledge, information and finance either to upgrade the quality of many of their suppliers’ products and production methods, or to put them in touch with firms that can do this. Where the improvement of local supply capability is critical to the competitiveness of the purchasing company, and where external contracting is considered superior to either importing the product or internalised production, then it may pay the company to invest resources in upgrading the efficiency of its suppliers.

Early research by Dunning (1958), Brash (1966) and Safarian (1966) into the operation of US affiliates in British, Australian and Canadian manufacturing industry all pointed to their having substantial linkages of the kind identified in Box 16.1 above, and particularly in areas 1, 2, 4, 6 and 8. In the majority of cases, these were perceived to work to the advantage of the suppliers, but some concerns were expressed. To quote from the conclusions of the earliest of these studies, which was based on interviews within some 45 UK suppliers of intermediate products to US affiliates:

Of the forty-five component and raw material suppliers which gave us information, fourteen thought there was no reason to distinguish American owned affiliated firms from any other of their British customers. The majority, however, noted such a difference. Sixteen felt that the former’s purchasing thoroughness had been to their ultimate benefit in some way or another though ten argued that too many unnecessarily rigid and impractical demands were made of them. Twenty-nine considered that some specific gain in the form of materials formulae, manufacturing or processing methods and machinery design, etc. had been acquired, and one-half of these that the knowledge in question had been applied in other directions. Twenty-eight thought that the demands of US firms had stimulated the application of new knowledge from which other, e.g. British owned, companies were now benefiting; twenty-six suppliers had visited their counterparts, or the parent companies of their US customers in America, and of them seven had subsequently concluded licensing agreements. (Dunning, 1958:224)

The findings have since been echoed and expanded on in numerous other surveys, notably Reuber (1973), Halbach (1989) and JETRO (1990). They are still very relevant half a century later, not withstanding changes in the global economic scenario and the strategies of MNEs. However, more recent research has revealed that the extent and form of backward and forward linkages are likely to vary with (a) the nature and form of the investment (Lall, 1978; UNCTAD, 2001), (b) the size, nationality and competitiveness of the investing companies (Gonçalves, 1986; Kotabe and Omura, 1989), (c) the host country in which the investment is made, (d) the nature of the product and the value-adding stage (or stages) of the affiliate (Dunning, 1986b; UNCTAD, 2005c), (e) its age and experience,
(f) the number and characteristics of the supplying firms, and (g) the global sourcing strategies of the parent company of the affiliate.

Historically, there is considerable evidence of the role the multinational processing companies have played in providing information, advice and credit to the suppliers of plantation crops, such as pineapples, bananas, tobacco, tea and coffee, as well as to those engaged in contract-production arrangements, such as the supply of dairy products, vegetables, poultry and pigs (Oman, 1989; UNCTC, 1987). Such guidance and information has extended to growing techniques, the introduction of new crops or strains, the establishment and explanation of quality standards, and even the choice of land and the scheduling of harvest to minimise crop spoilage. Financial help has included the provision of capital for seeds and seedlings, loans for capital equipment, and credit to hire labour to clear, irrigate or drain land.

Today, access to the distribution chains of major retailers or multinational food processing companies requires an ability to meet exacting standards both in respect of the physical features of the product, and various safety considerations. In addition to the standards pertaining to the products themselves, suppliers to MNEs may also have to meet standards for quality and environmental management practices, such as ISO 9000/14000, or certification on labour standards. For example, in China, Nestlé began a programme of supplier development in 1994, which consisted of providing information, technical assistance and occasional financial support to enable local suppliers to meet quality and safety requirements. By 1997, nearly all its needs of agricultural and dairy products, as well as packaging materials, were covered by local suppliers. Nestlé also undertook a programme to help local growers of coffee to upgrade their product (UNCTAD, 2001:141).

In export-orientated manufacturing, there is considerable evidence of technology transfer and supplier assistance, including training programmes, as discussed in Chapters 11 and 13. For example, in Kenya, there is recent evidence that foreign manufacturing affiliates have engaged in extensive upgrading of human resources in the food and beverage and machine and engineering sectors (Gachino, 2006a), as well as in the MNE-dominated electronics sector in Malaysia. Evidence concerning the development of the supplier networks linked to Intel’s investment in Costa Rica is provided by Monge (2004), while Rasiah (2004b) has explored the effects of MNE affiliates on the productivity and export propensity of local firms, paying particular attention to the role of indigenous human resources and technological capabilities in Kenya, South Africa, Uganda, Indonesia, Malaysia and Brazil.

There is as yet less evidence of the degree to which local firms have benefited from the offshoring of MNE service activities. Nonetheless, there is little reason to suppose a priori that it would be any less in the interest of the MNE to provide training and assistance to the local partner, in improving the quality of the services they provide. The current wave of the offshoring of business services has certainly been facilitated by the widespread use of standardised software platforms supplied by companies such as Oracle and SAP for human resource management, customer relationships and logistics (Dossani and Kenney, 2006). In the future, as higher value-added service activities in the medical, legal and financial sectors, for example, are likely to become increasingly mobile, the need to ensure quality and consistency is likely to be even more critical, and to require more, rather than less, coordination between the MNE and the local partner.
In the case of the software cluster in Bangalore, there is certainly mounting evidence that local firms have moved up the value chain, but how far this is due to investments in education and local entrepreneurship, rather than a specific MNE influence is still subject to debate (Patibandla and Petersen, 2002). According to Khanna and Palepu (2004), obtaining access to the global product and talent markets has acted as a driver for Infosys to become a benchmark of good corporate governance in India, although the spread of these standards to other Indian firms has so far been limited.

Similar effects were also found by Zhou and Xin (2003) in the Zhongguancun ICT cluster in Beijing, which is home to 39 universities and 213 research institutes. The authors show that the development of local firms in this cluster has been facilitated by their collaboration with foreign investors such as Intel, Microsoft, Cisco and Sun. *Inter alia*, such firms have helped indigenous firms to develop applications that were based on their platforms, and have provided training to local engineers and users towards this end. Some MNEs have also established R&D centres in Beijing, although such centres have so far had relatively little contact with local firms.

We would make one final observation. For the most part, this section has concentrated on the impact of MNEs on linkages with their suppliers within countries which are host to its affiliates. However, the creation and sustenance of similar linkages in home countries may be no less important for the competitiveness of the purchasing firms. This, of course, is not an MNE-specific issue. Nevertheless, since MNEs frequently have a much greater flexibility in their sourcing strategies than their uninational counterparts, the competitiveness of related and supporting industries is likely to play a more decisive role in fashioning the locational decision of such companies.

**Econometric evidence on the existence of linkage externalities**

In addition to the survey-based evidence discussed in the previous subsection, which is extremely useful in documenting the extent and type of linkages that are formed in host countries, a growing number of econometric studies using large firm-level datasets have sought to evaluate the impact of MNE linkages on the productivity of local firms. These studies are mostly grounded in neoclassical economic theory, and tend to adopt a rather narrow definition of linkage effects, which are typically assumed to arise either out of increased demand, or from a combination of increased demand and increased competition. The effects of learning are presumed to be reflected in the level of productivity of local firms. Methodologically, these studies share many similarities with those on spillovers discussed in the next section.

Building on the seminal work of Hirschman (1958), many empirical contributions in this vein have based their analysis (to a varying extent) on the theoretical model of Rodriguez-Clare (1996), which seeks to explain the conditions under which MNEs from a developed home economy might generate linkages in the developing host economy. The increasing demand for intermediate goods is the definition of backward linkages used in the model. By increasing the demand for intermediate inputs, it is argued, the MNE helps to bring about a greater variety of specialised inputs; and in so doing, by the efficiencies achieved, generates positive externalities to other final goods producers. Consequently, in the model, forward linkages are a possible outcome of the creation of backward linkages. Proximity of the supplier to the user is essential for the use of these inputs, and the size of the market supplied is assumed to determine the available variety of specialised
inputs. It is also assumed that specialised inputs are non-tradable, but that the MNE in the home country can transfer such inputs within the firm, as well as providing headquarters services that are used in the production plant located in a developing country.

The linkage potential of the MNE is thus related to the variety of specialised inputs in the home country, as well as to cross-border transportation and other costs, which could tip the balance towards sourcing in the host country. The potential for linkages is predicted to be highest when the good produced by the MNE uses intermediate inputs intensively; where there are high spatially related costs; and where the home and host countries are not too different in the variety of intermediate goods they provide. An implication of this conceptual model is that MNEs with a lower linkage potential are more likely to locate their value-added activities in LDCs, while those with high linkage potential are less likely to do so. This is because the firms that would be attracted to less developed regions are firms that do not depend on a wide variety of local inputs. However, the hypothesis that investment from more developed countries is less likely to generate positive linkage effects needs some qualification. For example, the model assumes that the variety of goods available in the home market is a substitute for that in the host market, which need not always be the case.

Making a passing reference to the Rodriguez-Clare model, the empirical analysis by Smarzynska Javorcik (2004b) found robust evidence for spillovers from FDI through backward linkages with domestic suppliers from Lithuania. The author used a large panel of firm-level observations from 1996 to 2000, separating intra-industry (horizontal) effects from inter-industry (vertical) effects on output. Her main result was that backward linkages within the industry of the MNE affiliate exhibited positive spillovers as a result of increased demand. This was true of both domestic- and foreign-owned suppliers, and the effect was not simply a reflection of increased concentration, either in the supplying industry, or in the industry being supplied. When the sample was split between minority- and majority-owned affiliates, the basic results remained unchanged, but wholly owned affiliates failed to show a spillover effect, as compared to partially owned affiliates.738

Another useful attempt to evaluate the linkage effects of MNE entry is the three-stage model of Markusen and Venables (1999). In this model, the authors first identify a competition effect, where foreign MNEs, which are assumed to be more efficient, compete with domestic final goods producers, leading to a reduced market price, and the exit of some domestic firms. Second, it is assumed that the MNE presence creates additional demand for intermediate goods, which, in an imperfectly competitive industry, results in lower costs and increased profits, and induces entry into the intermediate sector. The entry into the intermediate goods sector causes the third effect, which is a fall in the price of the intermediate good. This is postulated to favour the customer firms, which can be either domestic or multinational. Thus, in this model, the entry by an MNE may induce the entry of domestic intermediate goods producers, as well as domestic final goods producers.

Görg and Strobl (2002) applied the Markusen and Venables model in their study of Irish firms, using plant-level data for 1974–95 from Forfás, the industrial development board for Ireland. They modelled the linkage effects by way of gross and net entry rates of domestic plants as a function of the growth rate of the industry, minimum efficient scale, the size of the industry, the average age of existing plants, and the presence of foreign MNEs. They found that there was a significant positive effect from such a presence on the entry of local firms into the same sector. Although the results for inter-industry
effects were not as robust, they suggested that in downstream industries, there might be positive effects on domestic entry as well. The same authors also argued that due to the dominance of MNE affiliates in many industrial sectors in Ireland, and their strong export orientation, the displacement or competitive effect in the product market was not likely to have been very important.

However, in this, and in many other cases, while the theoretical model is concerned with linkage effects, the empirical specification is not able to distinguish between linkages and spillovers, since the extent to which local firms are linked to MNE affiliates, either through equity, contractually, or by some other means, is not known. To obtain a more direct measure, Driffield et al. (2002, 2004) used input–output tables for the UK to determine the extent of linkages between foreign MNEs and domestic buyers and suppliers. Contrary to most other studies, they found that externalities were most evident when foreign manufacturing firms sold goods to local firms, rather than procured inputs from them. In particular, they found significant results when domestic firms were purchasing within an industry that had high levels of foreign involvement, but where the MNE and the local firms were located in different geographical regions. They also found significant effects when domestic firms purchased from different industries with a high foreign involvement in the same region, although the results were sensitive to the specification of the model.

16.3 THE SPILLOVER EFFECTS OF MNE ACTIVITY

16.3.1 Some General Remarks

We now turn from linkages to the second type of indirect effect of MNE activity, which comprises spillovers to local firms not connected to them or their affiliates. Since such local firms are not likely to gain pecuniary externalities resulting from the increased demand induced by the inbound investors, the most notable effects are likely to arise due to non-pecuniary externalities associated with their unintentional transfer of knowledge, and the direct competitive effects induced by them (see Figure 16.1, above).

Aside from any spillover effects, perhaps the most widely acknowledged effects of MNE activity are its impact on the competitive position of the industry (or strategic group) of which it is part and on the performance of individual rival firms. The first aspect has already been discussed both from the viewpoint of an industry's innovatory capacity (Chapter 12) and from that of market structure (Chapter 15). Provided that there is strong competition (or potential competition) from indigenous firms and supportive institutions, inward foreign investment is likely to stimulate innovatory capacity and encourage a market structure in the host country conducive to the promotion of dynamic comparative advantage.

Without such competition, and without an appropriate institutional infrastructure, inward investment may lead not only to more industrial concentration, but, wherever rival indigenous firms are driven out by unfair business practices, to a reduction in the innovatory capacity of the industry. This latter scenario is particularly likely in the case of smaller and/or less industrialised economies where the investing enterprises perceive that their global interests are best advanced by the centralisation of R&D activities in their
home countries (UNCTAD, 2005c). Even in these instances, however, the presence of foreign companies may still be a better solution than any alternative. Much will depend on whether the motivation and strategic behaviour of these companies is fashioned by competitive dynamics or monopolistic strength.

16.3.2 How Might Indigenous Firms Be Affected?

The impact of the entry of foreign-owned firms into a particular industrial sector on the existing producers in that sector will depend first and foremost on the existing characteristics of the sector. These include:

1. the number, size and nationality of the constituent firms;
2. the composition of their output and the geography and character of the markets served;
3. their innovatory capacity;
4. their existing and potential economic performance;
5. their entrepreneurial ethos and incentive structures;
6. the market prospects for the industry and whether or not existing firms are operating at surplus capacity; and
7. the extent to which the industry is protected from competition (by import controls, subsidies and so on).

In its turn, each of these variables will be affected by the specific characteristics of the host country in which the industry is located.

Second, the impact will depend on the nature and extent of the O advantages of the foreign firms vis-à-vis those of local producers, and also whether or not the products of the investing companies are currently being imported and under what conditions. Obviously, the more MNEs possess O advantages which can be effectively transferred or developed in a foreign location, the greater the potential impact on competitors. But, the nature of these advantages – for example, whether they mainly arise from more effective incentive structures, from the possession of intangible assets, or from the coordination and integration of cross-border activities – may be no less relevant. As previous chapters have shown, these advantages are likely to be country, industry and firm specific.

Third, the impact will depend on the raison d’être for the FDI, and the form of entry into the host country. Asset-augmenting FDI, for example, might not confer as beneficial spillover effects to the host country as greenfield asset-exploiting investment. The acquisition of one or two large oligopolists in a technologically advanced and fast-growing sector is likely to have a very different competitive impact on the rest of the firms in that sector from the setting up of a completely new venture or the purchase of a small and relatively insignificant supplier in a traditional and declining sector. The formation of joint ventures or strategic alliances is likely to have different consequences on the actions of competitors not party to these ventures, than is that of a wholly owned affiliate. Similarly the extent to which a foreign affiliate is part of a network or cluster of related firms is likely to affect the spillovers of knowledge and institutional practices.

One of the recurrent themes of this volume is that the impact of inward direct investments on the economies of host countries will be most felt when the O advantages of the
investing firms (including those which derive from their multinationality) are the most pronounced, and where the firms possessing these advantages perceive that FDI is the best modality by which they might be protected or advanced. The nature of such O advantages has been explored at length in previous chapters. The question which arises here is, by what means and under what circumstances are these advances likely to promote a positive response by their domestic rivals, and hence upgrade the competitive status of the sector?

A positive response on the part of competitors, or potential competitors, presupposes both an ability and a willingness to improve economic performance. The former rests on the content of their existing innovatory, productive and marketing capacity, and on the competence of their human resources. The latter rests mainly on the quality of their institutions, their entrepreneurial ethos, the attitudes of their workforce and their future strategic focus in the light of the presence of foreign firms. Clearly, this reaction will vary between firms in the industry according to the features identified earlier. Certainly, one response to inward investment – particularly if the O advantages of the foreign affiliate arise from its being part of a larger and more geographically diversified organisation – is to conclude a merger or some kind of cooperative agreement with one or more of its competitors.

In other cases, patent protection may inhibit a local firm from producing an identical product to a foreign (or, for that matter, a domestic) competitor. Instead, by reverse engineering (or its equivalent in the services sector) and knowledge derived from its own R&D, a firm has to try to develop a substitute or break into an entirely different segment of the market.

Of course, domestic firms, or the industry of which they are a part, may be technically so far behind their foreign counterparts that, left to themselves, they cannot hope to respond positively or constructively. This is the technology gap argument we discussed in Chapter 12. A large technology gap can represent potential gains to local firms as they approach the technological frontier (the catching-up argument). At the same time, a gap that is too large makes it very difficult for local firms to move towards closing it, due to their inadequate absorptive capacity (the technology accumulation argument). In this case, which is particularly likely in industrialising developing countries, there are three options open to them. The first is to conclude some kind of cooperative or technical service agreement with one or other of their foreign competitors. The second option is to try to obtain some kind of help from their own governments, either to reduce their production or transaction costs, or to protect or enlarge their markets. The third option is for local firms to accept a reduced share of the output of the industry or exit the industry altogether.

De facto, the responses by domestic firms are likely to vary according to country-, industry- and firm-specific circumstances. Applying some of the variables identified earlier, indigenous firms are most likely to react positively to the presence of foreign affiliates when they already compete with these firms, and where the advantages enjoyed by the affiliates are not so unique that they cannot be acquired, copied or recreated. This suggests a market structure and competitive environment which encourages innovation by local firms and cross-border strategic M&As. By contrast, where indigenous firms have few distinct competitive advantages, or have not previously competed with MNEs; where they are unable or unwilling to conclude alliances with other firms; or where the
advantages of their MNE rivals stem from the economies of size and geographical scope – then it is unlikely, except by becoming MNEs themselves, that they can ever compete effectively with inbound investors.

However, as previous chapters have shown, in cases where goods and services need to be tailored to local market needs and resource capabilities, and where these needs and capabilities are particularly idiosyncratic, indigenous firms may well be able to hold their own against foreign-owned investors. In such cases, the most probable outcome of inbound FDI is to stimulate local firms to upgrade their resources, capabilities and incentive structures, and be more aggressive in their marketing strategies. Examples in the services sector include: improvements in the quality of business services, hotel accommodation and fast food restaurants in several developing and transitional economies; and the widening nationality of advertising, market research and executive search firms in Western Europe, which, at one time, were the exclusive province of US-owned firms. Within the manufacturing sector, one of the main competitive spurs of FDI has been the introduction of a new range of products, and more-efficient production and organisational methods. Indeed, in the last resort, it may be that the pressures of competition to modify and improve a product range, reduce production and/or transaction costs, and to introduce new marketing and distribution methods, are the most significant positive influences of inbound MNE activity.

16.3.3 Some Issues of Measurement

In Chapter 15, we reviewed the empirical evidence confirming the positive productivity gap between MNEs and local firms, as well as the consequent positive impact of MNE entry on average productivity in the host economy. Our focus in this subsection is on a related, but separate issue, which is the extent to which any of the productivity advantage of the foreign affiliates might spill over to indigenous firms.

However, since spillovers cannot be directly measured, they present great empirical difficulties to the researcher. In practice, scholars have had to settle for available data on changes in labour productivity, growth and export market share as indirect indicators of spillovers. Much of the recent literature has concentrated on trying to capture the effects of spillovers on the productivity of local enterprises. These studies share three common methodological concerns. The first arises from the difficulty of accurately measuring all the components of TFP. This is not unique to studies on spillovers, but it has resulted in the use of labour productivity as a proxy. The second is that the analysis of spillovers has generally been confined to the industry of the investing firm, and has thus ignored inter-industry spillovers, which can be substantial. The third concern is the sensitivity of the analysis to sample selection, for example, to what extent does including the very smallest firms, or firms that engage in exports, or firms of very recent origin, affect the results. The empirical evidence indicates that each of the above choices can significantly affect the form and content of spillovers.

More generally, in any study of spillovers, the level of aggregation used in defining the industry sector, the geographical area and the time-frame of the study has an impact on the results. At a higher level of aggregation, spillovers are more likely to be found, as one is casting a wider net, but this benefit has to be set against the problems caused by averaging, as the likelihood that positive and negative effects may cancel each other out will
increase with the level of aggregation. Data considerations have often precluded the consideration of inter-industry spillovers, since evaluating them requires knowledge of the use of inputs and outputs between the relevant sectors. Similar considerations have also often led scholars to restrict their analysis to local rather than regional spillovers, in spite of the potential importance of both inter-industry and inter-regional spillovers. A time dimension in the data allows the researchers to examine effects not just on levels of productivity, but also on changes in productivity, and the extent to which one-time adjustments or continuous upgrading takes place. To the extent that productivity changes in domestic firms in response to foreign inbound investment are likely to be one-time adjustments rather than continuous processes, the studies would also need to be able to account for the timing of entry of MNEs, in order to avoid yet another averaging problem within the time dimension.

Aside from the issues of measurement and sample selection, there is also a question of attribution. An assessment of spillover effects is plausible only if other known effects, such as those due to increased competition or linkages, have already been accounted for. If spillovers are measured as a residual, that is, an otherwise unexplained increase in productivity, what may appear to be spillovers may be due to deliberate transfer through linkages, or indeed, better performance due to increased effort in response to competitive pressure. While such factors are difficult to control for in an empirical study, if they are not taken account of, our understanding of the causes of productivity improvements may be seriously impaired.

Given all the possible permutations of these factors at different levels of analysis, it is not surprising that the empirical studies have revealed a mixed bag of evidence on the spillovers generated by MNE activity. Indeed, it is not entirely clear why one would expect widespread spillovers to be present in the first place. Let us take the example of universities. Top-tier universities do not simply radiate excellence to anyone who enters the campus area. While externalities from the academic qualities and enthusiasm of one individual can clearly flow to another individual, this tends to require a learning process involving collaborative work and/or some form of regular contact. Similarly, there is little reason to expect that any local firm within the radius of an MNE affiliate would automatically benefit from its presence. At the same time, local firms forming some type of linkage with the affiliate, or the network of which the affiliate is part, would be far more likely to show signs of improved performance. However, even in the latter case, the net benefit may be only mildly positive, while the unaffiliated local firms may experience considerable negative effects from increased competition.

Whether any productivity improvements are likely to involve a one-time adjustment or a continuous process would depend as much on the source as on the recipient. If the MNE affiliate is both willing and able (within the confines of its role) to introduce new technological innovations or management processes to the host country, there is no reason why these might not induce several rounds of positive productivity adjustments. However, if the MNE is unable to introduce such improvements on a continual basis, the productivity benefits to the local firms would almost certainly decline over time. We would suggest that a large part of the answer to the question of what kinds of local firms are most likely to benefit from MNE spillovers is found by answering the question of what kinds of local firms are most likely to form some type of linkage with the MNE.
16.3.4 Earlier Econometric Evidence of Productivity Spillovers

Among some of the earlier studies that attempted to measure the impact of inward direct investment on the productivity of indigenous firms are those of Caves (1974b) for Australia, Globerman (1979) for Canada, Blomström (1986, 1989) for Mexico, and Haddad and Harrison (1993) for Morocco. Each of these hypothesise that such spillover effects should stimulate the productivity or performance of rival firms by:

1. increasing competition;
2. enhancing human capital (via more and/or better training of labour and management, and/or through recruitment of such resources from foreign-owned affiliates); and
3. speeding up the cross-border transfer of resources and capabilities – including organisational technology.

More particularly, they postulated that if there was a positive statistical relation between the productivity level of the domestically owned sector in an industry and the share of foreign-owned companies in that sector, then inward direct investment may be assumed to be a productivity-raising force. It was further hypothesised that, over time, the productivity of domestic- and foreign-owned firms would tend to converge.

Because of data limitations, the Canadian, Australian and Mexican studies took labour productivity, or changes in labour productivity as the variable to be explained. Only the Moroccan study was able to source data on TFP. The number of sectors for which data were obtained varied between 22 in the case of Australia, 49 for Canada, 215 for Mexico and 18 for Morocco. This variable was then regressed on a number of explanatory variables which were hypothesised to influence such productivity, including the presence of foreign-owned firms. These included:

1. capital intensity,
2. labour quality,
3. degree of concentration in the industry; and
4. extent of scale economies.

The consensus of these cross-sectional studies was that the presence of foreign-owned firms in a particular industry (measured by the share of the local labour force or output accounted for by these firms) was positively associated with the labour productivity of that industry. This association proved the strongest in the Blomström study. In the Haddad and Harrison study, the authors found that in sectors in which there was a high foreign presence, there was a lower dispersion of productivity between foreign- and domestically owned firms. They also established that the main impact that inward investment had on the productivity of domestic firms was the more pronounced competition it engendered, rather than of any new technology or management practices they may have transferred.

Each of these exercises, however, dealt only with intra-industry externalities, and each concentrated on the possible impact of only one indicator of spillover efficiency. They did not, for example, concern themselves with the long-term competitiveness of the industry,
which might well be affected by the extent to which foreign affiliates helped to promote local technological capacity or institutional upgrading. Moreover, the studies used only cross-sectional data. Ideally, to compare the impact of one group of firms on another, one should lag the dependent variable (that is, compare the efficiency of domestic firms in time ‘$t+1$’, or another suitable lag, with the foreign presence in time ‘$t$’). As an alternative to this measure, the Moroccan study tried to estimate the extent to which the presence of foreign firms influenced the growth in productivity of the sectors in which they participated. While the authors found some modest, but statistically insignificant, evidence for this hypothesis, they could not attribute this to the dynamic externalities arising from inward investment.

16.3.5 Recent Econometric Evidence of Productivity Spillovers

The empirical literature on productivity spillovers resulting from MNE entry in both developed and developing countries has increased considerably since the 1990s, and several excellent reviews have been published in the last decade (Blomström and Kokko, 1998; Lipsey, 2002b; Barba Navaretti and Venables, 2004).\textsuperscript{744} The earlier cross-sectional studies on productivity spillovers highlighted the importance of accounting for industry-specific effects due to the tendency of FDI to cluster in the more-productive sectors. By contrast, recent studies have emphasised the need to use longitudinal data in analysing spillovers. Indeed, a meta-study conducted by Görg and Strobl (2001) showed that while the earlier industry or firm-level cross-sectional studies yielded positive spillovers, the newer firm- or plant-level panel data studies have tended to yield negative or insignificant results.

As the quality of firm- and plant-level data gathered from national industrial surveys has improved in recent years, so then has the focus of research shifted from cross-sectional to panel data studies. However, in addition to presenting new methodological issues due to, for example, endogeneity and survival bias, the new generation of studies have also revealed that the results can be quite sensitive to differences in the composition of the sample. In the following subsections, we review some recent empirical studies dealing first with the productivity spillover effects associated with MNE activity in developed and developing countries, and second with other forms of spillovers. In addition to presenting the results, we pay particular attention to the different kinds of methodological issues that are highlighted by these studies; consequently these sections are of a somewhat more technical nature than the preceding discussion.

**Productivity spillovers in developed host economies**

It could be argued that, due to the institutions and policies adopted by the Irish government, and some specific attempts to encourage linkages between local firms and MNE affiliates, Ireland should be an exemplar of the positive productivity spillovers from inward FDI. Ruane and Uğur (2005) investigated this empirically by using comprehensive panel data based on the Census of Industrial Production, which covered all industrial units with three or more persons engaged during the 1991–97 period. They estimated labour productivity in the customary way, at two-, three- and four-digit sector levels. They found no evidence of spillovers from the presence of foreign firms: nor did the level of aggregation make any difference to their results. They also experimented with measuring
foreign participation not as the proportion of local employment, which is quite invariant over time, but in absolute levels of employment; again this did not materially change the results. They concluded that these somewhat surprising findings might reflect the fact that, in spite of the acknowledgement by the Irish government of the need to create and sustain linkages between local firms and MNEs, the productivity gap between them has remained substantial. This they believe may have made the creation of linkages difficult or impossible, and encouraged more reliance on imports by foreign MNEs in Ireland.

However, there is another possible explanation, which arises from the fact that the measurement of spillovers is sensitive to the composition of the sample. While a broad coverage of data is generally desirable, in the event that spillovers are not captured from thin air, but generated from linkages, not every local firm might be expected to have the same chance to appropriate spillovers. Consequently, a comprehensive sample would include a long tail of very small firms that might not have realistic possibilities of becoming linked to MNE affiliates, or of benefiting from any spillovers generated by them. If this was the case, simple averaging of all the positive and negative effects would be likely to remove any evidence of positive spillovers from the sample. One possible way to solve this problem would be to compare changes in the productivity of local firms that are known to have formed different kinds of linkages with MNEs (that is, buyer–supplier or collaborative technology linkages) with the performance of non-linked local firms. Ideally, one would also need to separate out domestic firms that have formed linkages with domestic MNEs, and domestic firms that have formed linkages with foreign MNEs.

Another country where there have been significant changes to the competitive environment of local firms due to MNE entry and institutional change is Spain. Barrios and Strobl (2002) analysed TFP spillovers in Spain in the period following its accession to the EC in 1986. To capture the changes not related to MNE entry, the authors used changes in the degree of concentration (the Herfindahl index) and the exposure of firms to foreign markets (the value of imports and exports scaled by sector sales). Their sample, while embracing only 22% of all Spanish employment in manufacturing, covers almost all manufacturing companies with more than 200 employees. It also includes a representative sample of smaller manufacturing firms in the 1990–98 period.

They found that when industry-specific effects were controlled for, the spillover effects from the presence of foreign affiliates appeared to be positive. Adding a measure of economic openness did not change the conclusions, but adding a measure of concentration made the foreign spillover variable insignificant. This suggested that foreign firms might be attracted to more-concentrated markets, and/or those where firms were already more productive. In further analyses, the authors used dummies to split the sample into firms that conducted R&D, and firms that engaged in exports. They hypothesised that such firms were more likely than others to possess the absorptive capacity to appropriate spillovers. In the end, they did not find spillovers for local firms that conducted R&D, but they did find positive spillovers for firms that were engaged in exports.

By contrast, a study by Dimelis (2005), using data from a comprehensive manufacturing directory, found that in Greece, positive labour productivity spillovers from foreign participation in 1992–97 were dependent on the technological capabilities of local firms. Dimelis and Louri (2004), using the same data, also discovered that spillovers in 1997 were positive for small firms in minority joint ventures with a foreign partner. However, when Barrios et al. (2004) constructed comparable datasets to measure labour productivity
spillovers in Ireland, Spain and Greece, positive spillovers were present only for Ireland and Spain. In the latter study, the cut-off point of firms in terms of size was somewhat higher, and the foreign participation was restricted to majority-owned ventures. This again suggests that results of this kind are likely to be quite sensitive to the composition of the sample.

In a study on the impact of MNE entry on TFP in US manufacturing between 1987 and 1991, Chung (2001) concluded that, at the aggregate level, foreign presence had an insignificant impact on domestic productivity. However, he also found that this impact was likely to vary according to the market structure in which the foreign affiliate operated. When there was little competition, for example, when the price mark-up was high, the net effect was positive, that is, technology spillovers occurred. Conversely, when the level of competition was high, no technology transfer occurred.

In contrast to many earlier studies, Keller and Yeaple (2003), using Compustat data, found that in the 1987–96 period, spillovers from FDI may have accounted for as much as 14% of the productivity improvements of US manufacturing firms, once competitive effects and time-related effects (economic cyclicality) were controlled for. They also found considerable differences in productivity growth and spillovers across industries, with the high-technology sectors accounting for most of the improvement. They attributed the high estimates of spillovers to improved measurement of MNE presence, which, in their study, was the foreign employment share in a given industrial sector. However, unlike earlier investigations, which tended to measure the employment share based on the affiliate’s main line of business, the Keller and Yeaple measure used the number of employees engaged in particular activities within an affiliate, aggregated to the industry level. Indeed, they found that if the conventional measure of MNE presence was used, the spillover effects disappeared.

In one of the several recent studies on productivity spillovers in UK manufacturing using establishment-level Annual Business Inquiry Respondents Database (ARD) data, Haskel et al. (2002) found a significant positive correlation between domestic TFP and foreign share of employment in the industry (but not in the region) in the 1973–92 period. Their results suggested that a 10% increase in foreign presence would raise productivity in domestic plants by 0.5%. Also using ARD data for 1973–93, Oulton (2001) found that US ownership of UK manufacturing firms had increased productivity by as much as 20%, with higher capital intensity and better labour quality (proportion of white-collar workers and higher wages) explaining more than half of this advantage.

At the firm level, Girma et al. (2001) investigated the extent of the productivity gap between foreign and domestic firms, and the degree to which spillovers to domestic firms were evident. They used a large panel dataset of almost 4,000 domestic and foreign firms in UK manufacturing in the 1991–96 period, drawn from the One Source data base. They limited their analysis to a sample of domestic firms and foreign subsidiaries, to avoid comparisons between domestic MNE parents and foreign subsidiaries, which they considered might be misleading.

Overall, their study confirmed that US affiliates were the most productive, while Japanese affiliates actually had lower TFP than domestic firms, although their labour productivity was higher. The authors found no evidence of general wage or productivity spillovers to domestic firms as a result of the presence of foreign firms (measured as the sector share of foreign employment), or any impact of such a presence on domestic
productivity and wage growth. However, they did discover that with higher levels of import competition and human capital intensity, the impact of FDI on the productivity of domestic firms increased. This effect was virtually the same for both labour and total productivity, which suggests that the spillover effects on capital productivity were negligible. Firms with a low technology gap benefited from spillovers, as did firms in sectors which were skill intensive and subject to a high degree of international competition, even if they had a larger technology gap. The absence of spillovers in the aggregate was a result of averaging the effects of some firms that were gaining, and others that were losing.

Further analysis on the importance of absorptive capacity using a similar sample of UK manufacturing firms by Girma (2005) suggests that there might be both a minimum and a maximum absorptive capacity level, below and above which productivity spillovers from FDI are non-existent. He found that productivity spillovers tended to be both regional, and to occur in sectors where FDI was of an asset-exploiting rather than knowledge-sourcing kind (for example, where R&D intensity in the sector was greater in the host country than in the home country of the MNE). Furthermore, he found that the overwhelming majority of firms in the technology-exploiting sectors lay between the two critical values for absorptive capacity, and it was these firms that were shown to benefit the most from a foreign presence. By contrast, in the technology sourcing sectors, where only one threshold level of values was identified, 30% of the firms were below that threshold, and the impact of the presence of foreign firms was actually negative.

Finally, using industry-level data from 48 manufacturing sectors in 1991–95, Liu et al. (2000) found both positive productivity spillovers from the presence of MNE affiliates in the UK, and reverse spillovers from local firms to the affiliates. Since it has been established that foreign investors in the UK are generally more productive than the indigenous firms, the expectation would be that any productivity spillovers would flow from the foreign firms to the local firms, and not vice versa. However, the foreign MNE need not be superior to the local firm in every respect. It may, for instance generate technological spillovers, while absorbing useful knowledge about the local market and suppliers. If firms that possessed unique advantages that were not shared by other firms in the local economy were able to form, for example, linkages with the MNE, it would be quite possible for externalities to flow both ways. This is particularly likely to be the case where the MNE is producing in an unfamiliar economic environment. The overall effect would then be a mixture of two effects: one where the local supplier firms benefit from technology transfer and spillovers from MNE affiliates, and another in which local firms are the source of spillovers to the affiliates. Furthermore, it might be that such benefits are mixed within one supplier firm, or that, as a group, some supplier firms are more likely to benefit from MNE spillovers, while others mainly act as a source of spillovers to foreign MNEs.

Productivity spillovers in developing host economies
In developing countries, studies on productivity spillovers have tended to focus on the role of technology gaps and the absorptive capacity of local firms, as well as any differences between majority- and minority-owned affiliates. Specifically, it has been hypothesised that majority ownership of foreign affiliates might imply full internalisation of technology markets by MNEs or their affiliates and few spillovers to local firms, while minority ownership might allow for more-productive linkages to be formed with local firms, giving rise to spillovers. At the same time, however, the kind of technology transferred to the
majority-owned affiliate might be closer to the technological core of the MNE than that transferred to a minority affiliate, which might then reduce the likelihood of any spillover of technology.

The effects of productivity gaps between foreign and domestic firms were analysed by Kokko (1994) in a detailed cross-sectional sample of plant-level data from Mexico in 1970. With firms split into groups of high- and low-productivity gaps, he found that the gaps per se were not important determinants of the appropriation of spillovers, but when a measure of industry concentration (the Herfindahl index) was introduced, concentration seemed to enhance local productivity when the gap was small, but retard it when it was large. The simultaneous presence of large productivity gaps and a large foreign employment share were found to have a strong negative spillover impact on productivity, such as one would expect to find in the case of enclave production by foreign affiliates.

Using another cross-sectional plant-level sample, accounting for about a half of the employment and sales of the Uruguayan manufacturing sector in 1988, Kokko et al. (1996) found that foreign plants’ share of the total output of the industry had no overall impact on local productivity. However, when the technology gap was low, the effect of foreign presence was positive, but when it was large, there did not seem to be any spillovers. Differences in labour quality and the use of proprietary technology were important additional determinants of productivity differences for the firms with a small technology gap, but not for those with a large technology gap. Furthermore, the size of the gap did not seem to be related to any particular industry, as plants from nearly all industries appeared in both high- and low-gap groups, which suggests that it is firm-level factors, such as absorptive capacity, which are most likely to influence the extent and content of spillovers.

In a related study using a larger sample from 1988, Kokko et al. (2001) investigated whether productivity spillovers differed between MNEs that entered into Uruguay before 1973, during the period of inward-orientated import-substitution policies, and those that entered during the period of more outward-orientated policies and trade liberalisation. They found positive productivity spillovers in the former case, but negative spillovers in the latter case. The authors also examined whether the decision of domestic firms to begin to export was related to the foreign presence in their industry. These results were the reverse of the earlier findings, in that foreign firms entering after 1973 had a positive influence on domestic firms’ likelihood of exporting, particularly to outside of the region in which they were located. The export spillovers were mainly experienced by those Uruguayan firms that had been established after 1973.

Based on a cross-sectional study of 16,494 establishments in Indonesia in 1991, Blomström and Sjöholm (1999) found that foreign affiliates recorded higher levels of productivity than local affiliates. Spillovers to local firms, measured in terms of labour productivity, were positively correlated with the degree of foreign presence, but there was no significant difference in the extent of spillovers from minority- and majority-owned establishments. In a further test, the authors checked whether exporting and domestically orientated local firms behaved differently, since the former firms already faced competition from the world market. The results showed that the positive spillovers were restricted to the exporters, which suggested that at least part of the beneficial effects of increasing labour productivity would be in response to the increased competition faced by local firms.
In Taiwan, the cross-sectional data employed by Chuang and Lin (1999) included 8,846 establishments drawn from the 1991 industrial and commercial census. On average, foreign-owned firms had recorded a higher labour productivity, technical efficiency, capital intensity, scale of production, share of skilled workers, export share and R&D intensity than their domestic counterparts. Export-orientated firms were more productive, and had higher R&D intensity and a lower capital intensity than other domestic firms. The study revealed that there were positive TFP spillovers from FDI, as measured by the share of foreign assets at the industry level; these remained unchanged when measures to control for market concentration and market openness were introduced.

One of the first studies using firm-level panel data already referred to was by Haddad and Harrison (1993) on the manufacturing sector in Morocco in 1985–89. They found that, on average, foreign firms had a higher TFP than domestic firms, but that their rate of productivity growth was lower. The authors concluded that while a foreign presence in the industry lowered the dispersion of productivity levels across domestic firms, there was no significant relationship between such a presence and productivity growth in domestic firms. Furthermore, it appeared that inward direct investment was associated with a one-time increase in domestic firm efficiency.

Based on a comprehensive survey of all industrial plants with more than 50 workers and a large sample of smaller plants in Venezuela in 1976–89, Aitken and Harrison (1999) found that a foreign equity participation in a joint venture had a positive effect on the productivity of the local venture partner, but this effect was not robust for small firms. This suggests that MNEs may have been investing in larger and more productive plants in the economy. By contrast, the effect of a foreign presence on purely domestic firms was negative, as measured by the latter’s TFP. Further evidence suggested that an increase in the share of inbound FDI would in fact lead to a decline in domestic output.

In India, Kathuria (2002) investigated whether economic reforms had improved the productivity of local firms, and whether under the more liberal regime, spillovers from FDI had taken place. The sample consisted of 487 firms listed on the Bombay stock exchange, of which 116 had foreign equity participation of 25% or more. In the period after liberalisation between 1990 and 1996, the productive efficiency of all Indian industry improved, but the increase was the most pronounced for foreign-owned firms. The overall effect on domestic firms from the foreign presence was negative, but domestic firms across different sectors did benefit from knowledge spillovers from foreign firms, provided that they possessed sufficient technological capabilities. This was in contrast to the pre-1990 era, when only the group of firms in the science-driven sectors experienced positive gains.

An ambitious study by Wei and Liu (2006) on a panel of more than 10,000 domestic and foreign-owned firms in China considered three possible conduits for spillovers, namely R&D, exports and FDI, along with seven different measures of the foreign presence in an industry (capital, employment, sales, output, R&D, equity weighted by employment, equity weighted by sales). The study also considered intra- and inter-industry spillovers, as well as local and regional effects. Wei and Liu found no FDI-induced intra-industry productivity spillovers across regions, but there were positive spillovers within and across industries within regions. They also discovered that foreign investors from OECD countries, as compared to those from Hong Kong, Macao and Taiwan, had a stronger effect on inter-industry spillovers, but about the same effect on intra-industry spillovers.
The availability of longitudinal firm- or plant-level datasets over the past decade has enabled much more detailed exploration of the productivity spillovers arising from MNE entry, also in developing countries. Local absorptive capacity seems to play an important role, and the results from a number of empirical studies would suggest that the best candidates likely to benefit from spillovers are the larger local firms that have already engaged in exports, certainly in developing countries. However, their experience has to be contrasted with that of local firms that have formed linkages with the MNE affiliates, either via equity participation or contractually. Of all the local firms, it is these firms that generally seem best placed to benefit from any spillovers, in addition to enjoying the benefits from increased demand, and any training or technology transfer they might have received.

**Other types of spillovers**

In addition to the studies on productivity spillovers, some scholars have focused on other kinds of external effects, such as the impact of foreign presence on the total sales or exports of (unaffiliated) local firms, or on local wages. For example, the case studies presented by Patibandla and Petersen (2002) on the development of the software industry in India suggest that there were spillovers from MNE presence (as measured by sales), and that these came from backward linkages with local firms. Based upon their study of a large sample of Indonesian manufacturing firms in 1996, Lipsey and Sjöholm (2004a) concluded that a foreign presence resulted in positive wage spillovers to the local economy at the 2-digit industry level. At a lower level of aggregation, increases in local wages were smaller, but still positive, and they were larger for white-collar workers.

Export spillovers, that is, the inducement of local firms to begin to export, or to export more, is another type of possible externality arising from inbound FDI. Since exporting involves fixed costs, the literature on exporting suggests that firms self-select into becoming exporters, that exporters are more productive than non-exporters, and that their higher productivity precedes the decision to export. Consequently, there are two ways in which MNE presence is likely to induce an exporting effect. The first is that the presence of MNE affiliates improves the productivity of domestic firms, which would allow more of them to eventually expand into exporting. The second is that in addition to improving productivity, the affiliates may direct commercial opportunities to domestic firms, which enables them to increase exports.

In Mexico, Aitken et al. (1997) found that geographical proximity to MNE affiliates increased the likelihood that Mexican firms had begun to export. By contrast, Mexican firms that located close to domestic firms engaging in exports experienced no such effect. In the UK, Greenaway et al. (2004) set up a two-stage model of the decision of firms to export (export propensity), and what proportion of output to export (export intensity). They also controlled for the export structure of the host country, to account for the fact that foreign affiliates may concentrate in more export-orientated sectors. They discovered that the presence of such affiliates in the domestic market was likely to increase the probability that an indigenous firm would become an exporter, whether MNE presence was measured by expenditures on R&D, or by the foreign affiliates’ share in sector exports or in sector employment. However, the export share of the foreign affiliates did not seem to influence the export intensity of domestic firms. The authors also suggested that the competition-inducing effect was more important than the spillover effect in affecting the export propensity of local firms.
Reverse spillovers

Finally, some scholars have applied the same methodology that has been used to measure the productivity spillovers from the entry of MNEs to a host country to evaluate so-called ‘reverse’ spillovers, which accrue to foreign affiliates in the host economy.760 In addition to the study by Liu et al. (2000) that we discussed earlier, Driffield and Love (2003) have investigated the existence of reverse spillovers in the UK. In their study, the productivity spillovers were measured by value added, and they were argued to result from the extent of capital investment by domestic firms (rather than their volume of output or employment). The authors suggest that spillovers of this type would be consistent with asset-augmenting investment by MNEs; consequently, such externalities would be more likely to arise in technology-intensive fields. And, indeed, their results confirmed that in high R&D sectors, reverse intra-industry spillovers to foreign affiliates were positive, and that foreign enterprises in high R&D sectors benefited from agglomeration economies, as measured by a regional concentration coefficient.761 By contrast, in low R&D sectors, there was little evidence of either spillover or agglomeration effects. The importance of learning by doing (as measured by lagged productivity) was also found to be important in low research-intensive sectors, but not in research-intensive sectors.

Of course, studies on reverse spillovers represent but one part of the accumulating literature on asset-augmenting investment. To the extent that MNEs pay the full market price for the access to the knowledge, resources and markets they seek, as is most clearly seen in the case of M&As, this is not an argument for spillovers. However, to the extent that MNE affiliates, whether by linking with local firms, or by virtue of being able to extract knowledge that is ‘in the air’, obtain valuable knowledge concerning local market conditions, or methods of production and supply, reverse transfer and spillovers can take place. This is particularly relevant in connection with the increasing outflow of MNE activity from emerging markets, but it can also take place when, for example, large retailers aim to establish distribution channels in low-income markets ‘at the bottom of the pyramid’ (Prahalad and Hammond, 2002; UNCTAD, 2006). Importantly, reverse spillovers may and do arise as a direct result of the internationalisation of R&D, and the efforts by MNEs to tap into localised clusters of knowledge in multiple locations around the world (Doz et al., 2001; UNCTAD, 2005c). The importance of localised knowledge spillovers is discussed further in the final section of this chapter.

16.3.6 Some Policy Considerations

Returning to Figure 16.1, in spite of the great deal of attention that knowledge spillovers have attracted in the literature, there is no reason to expect, a priori, that they would be among the most important effects of inward FDI on local firms. Indeed, unless the competitive effects are accounted for, and one is aware of the extent of linkage relationships, any productivity improvements in the domestic economy could be falsely attributed to spillovers arising from the presence of MNE affiliates. At the same time, the focus on knowledge spillovers is understandable, because they represent the proverbial ‘free lunch’ – something useful that is received without full compensation having to be paid.

The knowledge that might spill over to the local economy from an MNE affiliate might have been transferred from the parent to the affiliate, or it might have been generated in the host location by the affiliate’s own innovatory efforts. We have argued that much of
this knowledge is likely to be deliberately transferred to local firms, rather than merely spilling over. Such relationships can be of a buyer–supplier kind, within which various types of process or product knowledge are exchanged, or they can be collaborative technology relationships. In addition to the regulated transfer of knowledge, undoubtedly some useful information will also spill over. However, the evidence would seem to suggest that the most likely local firms to benefit from such spillage are those already involved in linkage relationships, as they are more likely to possess the requisite absorptive capacity (Giroud and Scott-Kennel, 2006; Scott-Kennel, 2007). Outside such relationships, productive knowledge may spill over through demonstration effects, reverse engineering and labour market transactions, but the magnitude of these effects is likely to be curtailed by any efforts by the MNE to protect its knowledge, and by the inability of local firms to make use of the inadvertent spillovers.

While, in one sense, it may not matter whether intangible assets (and institutions) are acquired by local firms through deliberate transfer, or whether they incidentally spill over to local firms, the distinction is important from a policy perspective. If one were to devise policy measures to encourage productivity increases in local firms, the distinction between competitive effects, linkages and spillovers is an important one. If potential spillovers are predominantly appropriated from something ‘in the air’, one would need to both welcome inbound FDI, and strengthen the ability of local firms to absorb the spillovers by increasing their absorptive capacity (see Chapter 11). The fact that positive spillovers are more commonly found in economies with well-developed and efficient institutions, would seem to lend some credence to this suggestion. On the other hand, if what appear to be spillovers are, in fact, largely caused by linkages between local firms and MNE affiliates, efforts to target the capacity of the former to form linkages with the latter would seem more appropriate. Evidence of successful FDI-led development in Costa Rica, for example, lends support to this approach (Moran, 2002).

Indeed, the two approaches are not contradictory, as increasing local absorptive capacity would almost certainly make local firms better candidates to form linkages with MNEs. However, in order to provide a solid basis for policy recommendations, in addition to needing more of the sector-specific and case-based studies discussed in Section 16.2, we believe that separating productivity improvements that arise because of deliberately formed links between MNEs and local firms, from those generated by more general spillovers, is a key challenge for empirical research.

16.4 CLUSTERING OF ECONOMIC ACTIVITY

16.4.1 Introduction

In Chapter 5, we discussed the general determinants of the geography of FDI in terms of the locational component of the OLI paradigm. In this section, we extend this discussion by briefly reviewing the growing literature on the agglomeration of MNE activity both between and within countries. We focus specifically on the clustering of knowledge-intensive activities, and the geography of R&D and innovation, as it is particularly in respect of these activities that the role of MNEs in both exploiting, as well as adding to the knowledge base of local clusters, is apparent.
As we discussed in Chapter 8, entrepreneurial affiliates develop capabilities that allow the MNE to enhance its stock of knowledge-based and institutional assets. Such affiliates are attracted to locations where the historical co-evolution of firms and extra-market organisations, such as universities and research centres, has encouraged the development of channels for the transmission of tacit knowledge. The internationalisation of corporate R&D, as discussed in Chapter 11, is predicated on the linkages between MNE affiliates and local firms, research institutions and other organisations leading to the acquisition and absorption of new knowledge and competences by the MNE affiliate from the host location, whether directly or indirectly. While such reverse knowledge transfers form the *raison d’être* of asset-augmenting FDI, they may also be important in market-seeking investment, as knowledge about local tastes and other kinds of market information may be shared throughout the MNE network.

The political scientist Anthony McGrew (1992:23) has suggested that the defining characteristic of globalisation is ‘the multiplicity of linkages and interconnections between the states and societies that make up the present world system’. Accepting this perception, the seemingly paradoxical trend of the world economy becoming at the same time more global, yet increasingly concentrated in localised clusters, is not really a paradox. Globalisation and localisation are two sides of the same coin: they are complementary rather than substitutable to each other. Each is part and parcel of the cross-border interconnectedness and the comparative economic advantage of nation states or regions within nation states (Dunning, 1997a; Dunning et al., 2007).

For scholars interested in the process of economic growth and restructuring, the formation of linkages between MNEs and local firms, and the dynamics of local clusters of value-added activity, are at the centre of efforts to understand the workings of the global economy. Similarly, according to a prominent group of scholars, the complex ecology of places, institutions and the motives and behaviour of firms forms the foundation for the future study of IB strategy (Ricart et al., 2004). The growth in knowledge-seeking FDI, and particularly some types of asset-seeking M&As, and the increasing attention being paid to the reverse spillovers appropriated by MNEs due to their presence in different institutional environments and knowledge clusters, are all indications of the continued importance of location in the global economy (Dunning, 2006b).

However, before moving to our discussion of the geographical dimension to knowledge spillovers, we wish to briefly review the factors that underlie the agglomeration of MNE activity in particular locations, and the self-reinforcing nature of localised clusters.

### 16.4.2 MNE Location Choice and Agglomeration

The study of the concentration of economic activity in geographical space has long intellectual roots, leading back to the industrial districts identified by Marshall (1920) and Adam Smith (1776). In addition to the extensive contributions made by economic geographers and regional and urban scientists, the influential work of Krugman (1991, 1993, 1998) on economic geography and the role of large cities, Porter (1990, 1998, 2003) on the role of clusters of related activities for regional competitiveness, and Dunning on the importance of location in MNE theory, has regenerated a great deal of interest in the locational aspect of cross-border economic activity.

Although globalisation can remove some of the disadvantages related to a fixed
location, and facilitate a more-efficient geographical distribution of value-added activities, such benefits are in principle available to all firms, and do not, in themselves, favour MNEs per se. By contrast, the benefits derived from particular regions or clusters, where firms have important linkages to their suppliers and customers, and where they share information externalities with other firms or local research centres, have become ‘sticky places in slippery space’ (Markusen, 1996). Access to such regions or clusters allows MNEs to build unique competences by leveraging the location-bound resources with firm-specific resources, and by integrating the dispersed knowledge within the firm.

Traditional location theory was mainly concerned with the firm’s need to achieve economies of scale, while simultaneously minimising cross-border and other transportation costs. Although such models still account for the location decisions of much of resource- and market-seeking activity by MNEs, efficiency-seeking and asset-augmenting investment require adjustments to be made to these explanations. In particular, the transportation costs of the classic location model are often better interpreted as the costs of communication relating to the transfer of intangible goods such as knowledge and institutional practices.

Incorporating the importance of co-location (and spillovers) into a model of location choice yields three broad categories of factors that influence the location of MNE investment. These have been described in the economic literature as ‘endowment’ effects, ‘agglomeration’ effects and ‘policy-induced’ effects. Endowment effects are drawn from trade theory, and explain why particular economic activity would be ‘naturally’ drawn to a given location. Endowment effects in this instance refer mainly to the presence of natural resources, such as agricultural growing conditions (for example, in the wine industry), mineral or oil deposits, or the availability of cheap electricity (such as in the early 19th-century re-location of aluminium producers near large hydropower facilities at Niagara Falls). They can also include the presence of a large low-cost labour force. However, it is important to note that endowments also include the created endowments that form the basis for the competitiveness of most developed economies (see our discussion in Chapter 4 on the L-specific factors).

To the extent that the ability to exploit a particular resource is not restricted to a single firm (such as in the case of a mineral concession), firms will locate in the proximity of the geographically bound resource, and consequently in proximity to each other. Co-location will be beneficial until diseconomies in the form of congestion or overexploitation set in. Such diseconomies might include the bidding up of the price of a non-renewable resource, pollution, or excessive depletion of the resource. Additionally, minimum efficient scale (and consequently market structure) in a given industry will limit the number of possible competitors that can co-locate using the same natural resource. If the minimum efficient scale is very large, it may be possible for only one or two firms to exploit the resource in a given location. If the minimum efficient scale is lower, more firms can co-locate, but they may still do so in spite of the presence of each other rather than because of it!

The second type of effects influencing location choice are agglomeration effects, which, following Marshall, may be classified as arising from three sources: the availability of specialised labour, easy and cost-effective access to other specialised inputs, and knowledge spillovers. In our earlier discussion on linkages and spillovers we distinguished between pecuniary and non-pecuniary externalities, that is, those effects that arise due to changes
in demand for intermediate goods or factors of production, and those effects that arise because information that is economically valuable spills over, or is otherwise transmitted to firms within the same area. The key to agglomeration economies, as distinct from endowment effects, is that the attraction of one firm will generally make it more attractive for another firm to co-locate in the same region. While the self-reinforcing tendency related to agglomeration effects can be due to simple imitation, it is more likely to arise because the presence of other firms provides a signal that some external economies are present in a given location. 

In reality, spatial clustering is often the result of a combination of endowment and agglomeration effects. Spatial co-location can result from MNE affiliates simply siting their activities where important customers are located (an endowment effect), but the resulting agglomeration might also draw in other firms to the area because of the potential for linkages and spillovers (an agglomeration effect). In industries where interpersonal relationships are important to competitiveness, for example, the benefits from clustering are likely to be based mainly on knowledge spillovers, such as in the case of the financial services in the City of London or in New York City, but, even in these cases, traditional locational factors continue to play a role. 

The third factor attracting investment to a given location is policy intervention, and the institutions which both underpin such policies and help to implement them. We can distinguish between two broad groups of policies: the first are those aimed at improving the economic attractiveness of the region in general; the second are policies geared specifically to reduce the institutional distance between home and host countries (Dunning, 2006b). General policies, such as investment in education and infrastructure, or the provision of funds for start-up firms and for R&D, are aimed at improving the motivation, conduct, creativity and resource usage of all firms in a given area. By contrast, by ensuring the presence and quality of institutions required by foreign investors, tax holidays, training grants and international investments agreements (IIAs) are specifically aimed at influencing the location choice of MNEs. 

The difference between the two kinds of policy can be illustrated by the example of taxation. Taxation, like other institutional instruments of national governments, such as environmental regulation, can have a negative, neutral or positive effect on the economic competitiveness and attractiveness of the area under their jurisdiction. Higher rates of taxation (or environmental protection) are not necessarily detrimental to further FDI, if they result in greatly improved public services and infrastructure, and coincide with strong or improved economic performance. By contrast, as we discussed in Chapter 17, while tax reductions or holidays aimed at foreign investors might affect the location choice between two similarly endowed regions, they are unlikely to lead to cumulative investment agglomeration in the absence of the underlying fundamentals. 

What has been of particular interest to academics and policy-makers alike have been clusters where MNEs both contribute to the development of the cluster, as well as benefit from their presence in the area. From a regional perspective, such clusters are highly desirable, as they give rise to a diverse range of economic activities that are likely to increase the demand for skilled employment. Such ‘learning regions’ are among the fastest-growing regions in many developed economies, and sustaining, or even attempting to create, such locations is high on the list of priorities for national and regional policy makers (Florida, 1995; Cooke and Morgan, 1998; Scott, 1998). Furthermore, as a cluster
of activity begins to develop, the process is self-reinforcing, so that the presence of large and successful MNEs will serve to attract other foreign investors to the area. It is particularly this signalling property that has made cluster-based development one of the most attractive forms of regional economic policy.

16.4.3 Measuring Agglomeration

A definitional issue that complicates the analysis of agglomeration effects has to do with the distinction between intra-industry agglomeration effects, and those between firms in different industrial sectors. The difficulty lies in deciding where the boundaries of the cluster should lie, as interactions occur between firms in different industries, and they also often occur between firms across specific spatial boundaries, such as county, state or national borders. For some types of economic activity, the broader the geographical scope, the greater the likelihood that some agglomeration will be apparent; while other activities may appear dispersed at a high level of aggregation, but clustered at the local level.

Another question one might reasonably ask is ‘To what extent is clustering a pervasive phenomenon in the global economy, as compared with being confined to specific regions and industries such as Silicon Valley and Route 128?’. We have argued that some endowment-based clustering of economic activity is likely to appear in the absence of any agglomeration economies. Conversely, other clusters are likely to flourish where their primary attractions are various learning and other benefits derived from the presence of other firms, including MNEs and their affiliates, rather than any underlying endowments. There are also activities where co-location will hardly ever take place, mostly due to very large minimum efficient scale. Once again, any assessment of the importance of clustering must rest on the counterfactual position that is adopted, that is, what one assumes would have happened in the absence of clustering.

The counterfactual scenario of no agglomeration does not imply that investment is uniformly distributed across space. Natural resources are concentrated in space, as are the created resources that draw on the natural resources. Institutions and policies also tend to be location specific. In addition, minimum efficient scale varies across industries, and constrains the extent to which any activity can be spread in an economy. To construct a more realistic counterfactual, Ellison and Glaeser (1997) adopted the idea that in the absence of either natural advantages or spillovers, location choice could be reduced to throwing darts at a map, where the map is scaled to account for differences in the economic size of states, and the scale intensity of the industry. In their empirical study of manufacturing location in the US, they found that most industries are more concentrated than the random model would suggest, but strong clustering, such as that found in Silicon Valley or in the automotive industry in Detroit, are not the norm. In a subsequent study, the authors attempted to estimate the relative importance of natural advantages (as opposed to spillovers) in location choice (Ellison and Glaeser, 1999). Using relatively simple proxies for natural advantages, such as the cost of electricity, average wages and population density, they found that about one-fifth of the concentration is due to natural advantages. However, acknowledging that their measures for natural advantages are likely to be imperfect or incomplete, they suspect that the true value might be closer to one-half.

Another empirical issue that is relevant to the locational choice of MNEs concerns any possible differences between the patterns of agglomeration of domestic firms, and those
of MNE affiliates. Empirically, this issue has been investigated by Head et al. (1995), who compared the locational patterns of Japanese manufacturing investment in the US to that of US firms across different states. Their sample consisted of 751 greenfield investments by Japanese investors in over 200 different industrial sectors since 1980. Their proposition was that the clustering of investment by indigenous US firms should account for the endowment bases of investment location (as well as any pre-existing agglomeration effects), and therefore could serve as the benchmark against which the agglomeration pattern of Japanese investment might be assessed. They found that Japanese investment was located in regions in which there were relatively large numbers of US establishments in the same industry. However, in addition, the location of Japanese investment was found to be significantly influenced by the location of previous Japanese investment in the same industry.\footnote{774}

Furthermore, simulations based on the location model indicated that unattractive states that had received little investment based on endowments, also received little benefit from the presence of a new investor. By contrast, states that were already attractive to investors experienced higher cumulative gains from such a presence. The authors also found that state boundaries did not adequately define the contours of agglomeration, which extended to the bordering states. These results were repeated in a later study of 931 foreign ventures into 54 cities in China in 1984–91, where simulations involving policies favouring different cities only served to magnify the attractiveness of otherwise desirable locations over time, while doing little to draw investment to less-favoured areas (Head and Ries, 1996).\footnote{775}

A concern raised by Shaver and Flyer (2000) is that most of the previous studies on the effects of agglomeration had ignored their possible diseconomies, which include not only congestion, but also the unintended spillage of technological knowledge. They argued that clusters are subject to adverse selection, so that firms with the strongest technologies, human capital and supplier relationships will find it less useful to locate in clusters, while firms with relatively weaker technologies will find it more advantageous to co-locate with other firms. Indeed, at the extreme, if there were only two kinds of firms in the economy – good ones and bad ones – agglomeration would be rare, since any clusters formed would be of poor quality. However, over a wide continuum of firm-specific capabilities, there would be room for agglomeration to occur, even if some of the best-performing firms would choose not to agglomerate.

Shaver and Flyer tested this proposition by studying the location choice and survival of foreign investments in the US. Their sample included 101 greenfield entries in manufacturing, which represented nearly all such entries in 1987. Overall, they found that firms entering industries with a greater proportion of existing incumbents were the ones most likely to fail, which lent some support to their contention that clusters were likely to attract the relatively weaker firms. They also discovered that firms with pre-existing operations were more likely to survive, as were investments in industries where US firms had strong international connections.\footnote{776} Furthermore, in the sectors that were the most geographically concentrated, the negative effect on survival was the strongest.\footnote{777}

In a related study, Nachum and Wymbs (2005) extended the argument, linking firm heterogeneity and external economies to a study of financial and professional service MNEs that entered the markets of New York or London by way of mergers and acquisitions between 1981 and 2001. Most previous studies on location had focused on greenfield
entry, the assumption being that when a firm enters by merger or acquisition, location is of minor interest, as it is determined by the selection of targets. Instead, the Nachum and Wymbs study, drawing on the location models of Hotelling and Lancaster, suggested that firms compete through both price (product differentiation) and location. In other words, firms choose their location both in product and geographic space. They found that with greater product differentiation, the benefits of geographic proximity decreased, which is consistent with the findings of Shaver and Flyer.

Furthermore, the fact that firm size and cultural distance were insignificant in the analysis suggests that product differentiation might play a role in explaining the results previously attributed to these factors. On the other hand, these results may also be due to the nature of New York and London as global cities, where cultural (and especially institutional) distance plays a lesser role. This is reinforced by the finding that there were no significant differences in the results between the two cities.

16.4.4 Knowledge Spillovers and Agglomeration

At the national level, the characteristics of NIS and the protection of IPR define the conditions for innovation across all economic sectors within national borders. However, differences in the underlying technologies and forms of knowledge creation would suggest that there are likely to be considerable differences in the geography of innovatory activities between different industrial sectors. Indeed, based on an analysis of the patterns of European patenting, Breschi (2000) finds that the geography of innovation is primarily sectoral, while displaying considerable similarity across national borders within the same sector. At the level of the firm, there are a number of reasons that can explain why foreign investors would be inclined to locate their R&D facilities where competing firms already have such facilities. This could be because the already established firms signal the attractive quality of the location, or it could reflect follow-my-leader behaviour. It could also be the case that a successful NIS and/or the presence of university-linked science parks draws several firms into the area independently of each other.

As an empirical matter, just as it is necessary to consider the effects of both endowment and agglomeration on location choice, there is a similar need to distinguish between knowledge spillovers and other agglomeration effects. In many existing studies, knowledge spillovers are treated as something ‘in the air’, but we would suggest that, before turning to such ethereal explanations, it is necessary to acknowledge and try to control for other possible ways in which knowledge can be transferred in a geographically confined area (Breschi and Lissoni, 2001; Lundan, 2003a). For knowledge spillovers to be widespread, knowledge would have to be a public good, but we have repeatedly argued that technological knowledge is frequently costly and difficult to transfer. Both a deliberate and accidental transfer of knowledge can involve substantial transaction costs, and therefore it would seem reasonable to assume that at least some of what shows up in the models as spillover effects might well be better described as deliberate transfers.

Indeed, even if all knowledge in local clusters was exchanged through deliberate means, either contractually, or through interpersonal networks, there might still be benefits of locating within a confined geographical area, but this would largely be due to the benefits of linkages, not spillovers, as discussed earlier in this chapter. Of course we do not need to assume that all the knowledge exchanged within a cluster is done in a deliberate, let
alone contractual, manner, but nor do we have to assume that it is simply all ‘in the air’. Given the importance of linkages, it would seem reasonable to assume that knowledge sharing in localised clusters is likely to be structured more like a club than a knowledge commons.

Empirical evidence of cases that appear to involve spillovers, but are actually explained by personal and/or contractual relationships, is being uncovered in the growing literature that traces the movement and linkages of key personnel within corporate knowledge networks. To the well-known examples of the clusters in Silicon Valley and Route 128, as documented by Saxenian (1996), others have been added, such as the Hsinchu area in Taiwan. Here indigenous entrepreneurship, fostered by a favourable institutional milieu, mixes with the influence of global MNE sourcing networks, and the skills and knowledge of US-educated engineers who maintain linkages between Silicon Valley and Hsinchu (Saxenian and Hsu, 2001). Similar linkages forged by foreign-trained engineers have also helped the development of the software industry in Ireland, India and Israel (Arora and Gambardella, 2004). In Penang, Malaysia, too, the inter-firm movement of trained personnel from MNEs has played a significant role in upgrading the capabilities of local firms (Rasiah, 2002).

A different methodology is employed by Almeida and Kogut (1999), who investigated whether the knowledge needed for the design of semiconductor devices was localised in particular geographic areas in the US, and if so, what accounted for the clustering. They found that knowledge in the semiconductor sector, as measured by citations to patents issued in 1980/1985 and cumulated up to 1995, was localised, but only in some regions, namely in Silicon Valley and, to a lesser extent, in New York and Southern California. By examining the inter-firm mobility of key patent holders, they also concluded that much of the clustering of knowledge was related to the mobility of engineers.

The importance of individual scientists was also highlighted by Zucker et al. (1998) in a study of the birth of US biotechnology enterprises. The authors found localised effects which prima facie could be characterised as spillovers or externalities, but, on closer inspection, reflected distinct patterns of recruitment of star scientists in the area. Furthermore, Powell et al. (2002) found that both the research-intensive biotechnology firms and the venture capital firms financing them tended to cluster together. They attributed this to the importance of personal ties between firms and financiers on one hand, and firms and universities on the other. In a related study involving a comprehensive sample of biotechnology firms in the US in 1978–96, Stuart and Sorenson (2003) found that, while the co-location of high-technology entrepreneurs and venture capitalists was necessary for the emergence of new biotechnology ventures, the same conditions that gave rise to clusters of entrepreneurship did not necessarily promote the further growth or performance of these initiatives. Thus, they suggested that while social networks are local, the importance of their geography might diminish over time as the venture matures.

16.4.5 Regions and Innovation

Whether due to linkages or spillovers, in the most knowledge-intensive sectors such as computers, instrumentation, electronics, semiconductors and pharmaceuticals, innovative activity tends to cluster spatially. Industries that use the same base of scientific knowledge have a strong tendency to cluster both production and innovation at the same
location (Audretsch and Feldman, 1996). At the same time, Feldman and Audretsch (1999) have shown that economic activities that are diverse, but complementary, are likely to yield greater innovative output than a specialisation of economic activity in one area. The potential for knowledge-intensive activities to generate agglomeration effects, and therefore to be geographically clustered, has led to extensive research on the innovative characteristics of regions in the global economy. We shall highlight just a few interesting findings here.

In Chapter 11 we presented evidence that the R&D activities of MNEs have become more internationalised over the past two decades. While this is primarily a facet of the increasing globalisation of economic activity, it is nevertheless industry and activity specific. In complex science-based fields such as ICT, biotechnology and new materials, the core technologies appear to require spatial proximity and face-to-face interaction (Cantwell and Santangelo, 1999). The same sectors also benefit from publicly funded research programmes, which may or may not be confined in terms of their location. Consequently, science-based industry-specific core technologies have traditionally been concentrated in the home country of the MNE.

Another characteristic of the technological development in the past few decades has been the increasing interrelatedness and complementarity of different areas of science and technology, and the role of IT in facilitating further integration of knowledge from previously separate fields. Indeed, due to the central role played by IT in new knowledge acquisition, development efforts in this sector are no longer limited to firms in ICT industries, but extend to firms from many industries clustering in locations where advances in IT are being made.

As regards the location of innovation of the ICT firms themselves, Santangelo (2000) tested whether European companies that specialised in the same ICT technologies (divided into six subfields) located their R&D activities in the same regions in Germany, Italy and the UK. Using US patent data on the geographical distribution of their patenting activity within the standard European regions, she found that such activity was concentrated in a few regional centres, such as Bavaria and south-eastern UK. However, within the ICT subfields, European firms did not concentrate in one region, but rather in a few regions that have become host to a range of complementary activities within the ICT sector.

More generally, Cantwell and Iammarino (1998) hypothesised that there is a hierarchy of regional centres in terms of their attractiveness as a location for innovation. They suggested that the differences in the technological specialisation between foreign investors and local firms would be the greatest in the highest-order regions, and declining as one moves towards lower-order regions. Higher-order regions would attract firms from a number of technological subfields who enjoy the benefits of complementarity, while lower-order regions would attract firms that are more narrowly specialised, and thus more similar to the local firms.

The authors tested these propositions using data for the regions of Piemonte and Lombardia, which accounted for 77% of the total research activity of large Italian firms. Overall, the MNE share in US patents related to large firms performing research in Italy grew from 19.1% in 1969 to 59.7% in 1995. However, Lombardia accounted for 57.1% of the patenting by foreign subsidiaries (as compared to 50.3% for Italian firms), while in Piemonte the MNE share was only 11.3% (as compared with 31.8% for Italian firms).
Consequently, they concluded that Lombardia had the characteristics of a higher-order region, while Piemonte had those of a lower-order region.\textsuperscript{783}

16.4.6 A Note on Policy

The implications of adopting a spatial or regional dimension to assessing the consequences of MNE activity are significant. If growth originates in regional clusters, it may be more appropriate to consider issues of growth and development simultaneously at the national and regional levels. Acs (2002:192) has suggested that explaining economic growth requires combining the new (endogenous) growth theory with scholarly advances in economic geography and the economics of innovation. We would simply add that in the global economy, it also requires an understanding of the motivations of MNEs, the institutions underpinning them, and the consequences of their activities at a local and regional level.

Experience with performance requirements and other restrictions imposed by host countries on MNE activity suggests that such policies can prove difficult to implement in practice, and induce unintended results. The process whereby inbound FDI contributes to local economic development objectives is market led, and, as such, it is likely to reinforce existing local strengths, and exacerbate any gap between the existing strengths and weaknesses. Global competition tends to expose the vulnerabilities of the host economies, but does little to change these fundamentals, unless host country governments are prepared to address such issues as education, institutional reform, infrastructure development and the encouragement of local entrepreneurship.\textsuperscript{784} The experience of the erstwhile communist countries in Europe over the last two decades provides ample testimony to this fact (Holland et al., 2000; Bevan et al., 2003).

One also needs to be clear in distinguishing between the benefits that accrue to the host country firms from linkages, spillovers and spatial agglomeration, and those that are captured by the MNE itself. What emerges from our discussion of linkages and spillovers is that although knowledge does spill over unintentionally from one firm to another in a particular region, growth and restructuring of that region is most likely to be stimulated when indigenous firms are in a position to engage with the MNE affiliates as suppliers, and when local entrepreneurs can best absorb and utilise the knowledge, institutions and managerial practices from the MNE. The formation of linkages also depends on the willingness of the MNE to engage local firms in its network of activities. Research suggests that this may not always be the case; indeed it may even be prevented by its parent. This is most likely to be so in the case of ethnocentric MNEs, and where FDI takes the form of enclave production, which is located in an area where the institutional and infrastructure conditions are not conducive to local sourcing, or the development of linkages.

For business and management scholars, the role of MNE affiliates in implementing policies emanating from their parent companies, as well as contributing to the technological and managerial knowledge of the firm of which they are part, lies at the heart of understanding their role in the coordination of economic activity. Sölvell and Birkinshaw (2000) have distinguished between ‘practices’ and ‘activities’, or the ‘what’ and ‘how’ of what MNEs affiliates do or are allowed to do. They argue that it is not only the coordination of dispersed economic activities across a network of equity-based and contractual linkages that characterises the 21st-century MNE, but also the harmonisation and/or
integration of practices adopted by its affiliates (or other network partners) that add to its global competitive advantages. Both the internal and external network of the MNE serve to link the locally or regionally based, but interconnected clusters of activities and practices. Whether an MNE affiliate can gain new investment within the MNE network depends on its relationship with the rest of the organisation of which it is part, and the extent to which affiliates are able to pursue their own agendas and to develop regional capabilities.

One neglected issue in the context of cluster dynamics concerns the (cumulative) impact of repeat investment in MNE affiliates. In one of the few studies on this issue from a managerial perspective, Phelps and Fuller (2000) distinguish between open and managed competition, which can be led either by the MNE parent or by its affiliate. The authors follow the idea of Birkinshaw (2000b) that there are three types of internal market within the MNE: for intermediate products, for product mandates and for functions or capabilities. They suggest that intermediate products and services are likely to be the most mobile and contestable by a wide range of affiliates, and are consequently most readily subject to parent-led competition. By contrast, internal markets for product mandates and functions and capabilities are less mobile, and thus tend to be more influenced by the entrepreneurship and abilities of the local affiliates. Affiliate-led open competition is likely to offer the greatest potential for generating direct and indirect benefits for the local region, as the affiliates seek to gain or to renew their mandates, and to make their capabilities known to their parent companies. Managed competition between parents and affiliates is prone to set limits to the accumulation of capabilities, and the local embeddedness of individual affiliates.

Consequently, Phelps and Fuller suggest that enclaves would be most probably associated with peripheral geographical locations; embedded affiliates would be associated with core or semi-periphery locations; and semi-periphery locations would be most likely to contain the extended enclave affiliates of managed competition. The empirical case studies documented by the authors concentrate on established industries in a peripheral location (Wales), and illustrate the difficulty of affiliates in winning new investment and engaging in upgrading in such a location. The cases also point to a possible conflict between national-level policies that have focused on minimising the cost of entry and exit to MNEs, and regional policy that has sought to embed MNEs in a specific location.

16.5 SUMMARY AND CONCLUSIONS

The extent, form, pattern and effects of inter-firm linkages and externalities associated with the presence of MNE activity are likely to depend on eight main factors:

1. the extent and nature of the O advantages associated with particular kinds of MNE activity;
2. the economic and social objectives of home and host countries, and the appropriateness of the macroeconomic and micro-organisational policies in the pursuance of these goals (including those policies specifically directed to MNEs or their affiliates);
3. the existing supply capabilities and absorptive capabilities of indigenous firms in host economies, and their reactions to inbound direct investment;
4. the host country’s human and physical environment, and in particular its institutions for absorbing, disseminating and accumulating new knowledge, technology and organisational competences;
5. the competitive position and market structure of the sectors in which there is foreign participation prior to any new FDI;
6. the characteristics of the markets for intermediate products;
7. the type of inbound foreign investment (for example, asset exploiting or asset seeking); and
8. the institutional characteristics and global strategies of the MNEs.

In larger industrial economies, such as the UK, the US, France, Germany and Japan, the contribution of multinational investors to the formation of inter-firm linkages would seem to have been positive and, in some cases, substantial. For example, technical and allocative efficiency has been raised by the additional knowledge of markets and higher-quality standards passed on to their suppliers through backward linkages and by entrepreneurial and competitive stimuli to competitors.

In several developed and developing countries, governments have instituted policies to encourage linkage formation and the development of local suppliers. While these programmes have met with success in countries such as Costa Rica, Singapore and Mexico, the move towards global production networks, particularly in the automotive and electronics industries, has, more often than not, reduced the number of suppliers with whom the MNE assemblers are willing to contract. While, in some cases, this has created opportunities for developed and developing countries to become export platforms for component production, in others it has made it more difficult for local producers to integrate themselves into the global economy. Similarly, in buyer-driven networks, such as in the food and apparel industries, the concentration of buying power in a limited number of retailers has made it more difficult for local producers to qualify as suppliers, while those that do, gain access to a global market.

Aside from the training and technical assistance that accompanies such supplier relationships, the evidence of general spillovers to the local economy is mixed. While partly this is due to measurement issues, it also reflects the differences in the willingness and/or ability of local firms either to become integrated into MNE networks, or to otherwise appropriate spillovers from their presence. Indeed, part of the inability or reluctance of MNEs to establish linkages arises from the perceived inadequacy of the local market, inappropriate or ineffective institutions and underdeveloped technological and educational infrastructure in the host country; not to mention the inability of local suppliers to meet the expectations required of them. However, much depends also on the type of inward investment and whether the global or the local market is served with the final product.

Indeed, in the case of linkages and spillovers, the available evidence at the micro and macro levels tells a rather different story. At the micro level, there are plenty of examples where technology transfer, training and financial support provided by MNE affiliates have helped to upgrade the capabilities of local suppliers. However, at the same time, at the macro level the magnitude of the impact of linkages on productivity has varied considerably. This suggests that while the benefits to the local economy can be substantial, they tend to be confined to particular sectors, and to the subset of local firms that are large,
and possess the human and technological resources to participate successfully in supplier training and development. These are also the local firms most likely to be able to appropriate any externalities (spillovers) arising from the presence of MNE affiliates in the local economy. While the micro-level evidence strongly suggests that the benefits from linkages and spillovers should not be underestimated, the macro-level evidence confirms that their benefit to the economy as a whole cannot be assumed as a matter of course. This is particularly likely to be the case where the positive linkage or spillover effects on local firms are likely to be offset by any negative competitive effects which arise from a foreign acquisition of an indigenous firm, or from greenfield investment.

Finally, this chapter has paid some attention to the issue of economic agglomeration. We have suggested that the agglomeration or clustering of economic activity encourages the development of specialist supply firms and thicker markets for specialised types of labour. In addition to the linkage externalities related to the production of goods and services, we also examined the role of agglomeration in the patterns of knowledge sourcing by MNEs. We have shown that MNE affiliates are drawn to local clusters of activity where knowledge spillovers are likely to be present, while, at the same time, their presence contributes to the vitality and dynamism of such clusters. Once again, while MNEs can contribute substantially to the development of local clusters, the actions taken by governments to raise the productivity of their physical and human resources, and to foster the kind of institutions and market structure that encourage dynamic upgrading, are of critical importance in sustaining regional economic growth.
17. Distribution of the value added created by MNEs

17.1 INTRODUCTION

Previous chapters have been primarily concerned with the contribution of MNEs, and/or their affiliates, to the output, growth and employment of the countries in which they operate. This chapter deals with some of the factors influencing the distribution of the wealth created by MNEs between the stakeholders responsible for that creation, and in particular, between the parent companies of MNEs and the countries which are hosts to their affiliates.

Elsewhere in this volume – and we shall take up the point in more detail in Chapter 19 – we have suggested that governments have a variety of expectations of MNEs. However, ceteris paribus, most governments welcome inward or outward FDI wherever, over a defined period of time, it raises their GDP, or growth in GDP, of their countries or regions more than any alternative disposition of resources. From the viewpoint of a particular host country, the contribution of a foreign-owned affiliate to its GDP is measured by the value added generated by its activities (that is, gross output less imports), less the amount of profits, interest and rents (net of tax) accruable to the parent company. In addition, any secondary or spillover effects on domestic output, resulting from the presence of foreign affiliates of MNEs, should be considered net of any payments made to its foreign stakeholders.

Thus the national value added resulting from MNE activity in any particular country may be summarised as follows:

\[
R - M = DVA, \\
DVA = F + (T - S), \\
NVA = DVA - Pf, \tag{17.1}
\]

where:

- \( R \) = receipts from the output generated;
- \( M \) = imports of goods and services;
- \( DVA \) = domestic value added;
- \( F \) = factor payments (wages, salaries, interest, rent);
- \( T \) = payments (for example, taxes to host governments);
- \( S \) = receipts (for example, subsidies from governments);
Earlier we suggested that one of the major goals of any country is to maximise $NVA$ from the use of any given amount of resources and capabilities. However, to do so requires a series of actions geared towards maximising sales revenue ($R$) and minimising the import content of those sales ($M$) and profits accruing to the foreign MNE ($P_f$), as these represent a drain on $NVA$. The problem is, of course, that $R$, $M$, $T$, $S$, $F$ and $P_f$ are likely to be interdependent. In particular, MNEs that engage in intra-firm, cross-border specialisation are likely to both import and export a substantial share of their output; profits $P_f$ earned may be positively correlated with $R$ and efficiency $R/F$. Moreover, in some cases it may be highly desirable to import foreign factor services as, in the long run, these may help to improve gross domestic product more than their indigenous equivalents.

The distribution of the revenue created by a firm to the contributing stakeholders is partly determined by the real opportunity cost of the resources (as perceived by their owners) and partly by the bargaining power of the suppliers of these resources. In situations other than perfect competition, this primarily boils down to the distribution of economic rent and organisational slack between the stakeholders. As far as domestic value added is concerned, the only question of importance is the distribution of that rent between foreign and local stakeholders.

The local stakeholders include the consumers of the output of the affiliate, the (domestic) suppliers of intermediate products, the factor inputs (workers, landlords, investors, and so on) and the government. The stronger the persuasive or bargaining power of any, or all, of these stakeholders, relative to that of the foreign MNE, the more likely it is that profits earned by it will approach the opportunity cost of the capital invested. The weaker the MNE’s negotiating strength, the nearer the value added retained in the country is likely to approach the opportunity cost of the indigenous resources deployed.

As Chapter 19 will discuss in more detail, the negotiating strength of the various stakeholders in the prosperity of the MNE is likely to be positively related to their knowledge and understanding about both their own opportunity costs and those of the MNE. There is ample casual evidence to suggest that local stakeholders in host countries, especially in the smaller and least developed countries, neither possess sufficient knowledge nor have the economic power to extract even a portion of any economic rent which may accrue as a result of inbound foreign investment.

In many countries, as Chapter 13 has shown, unskilled labour is comparatively plentiful and/or unorganised, and is unable to capture a wage rate above its opportunity cost. Chapter 15 has demonstrated that some producers, particularly those supplying idiosyncratic or particularly scarce resources and intermediate goods or services, may be able to charge above competitive prices for their products, while others, which supply standard and homogeneous products in atomistic markets may not. Thus, depending upon the nature and purpose of inbound MNE activity, its expected benefits, and the locational options open to the investing companies, host governments can offer a range of institutions and policies, which usually consists of both penalties (taxes and unwelcome performance requirements) and incentives (tax breaks, investment allowances, intellectual property protection, training grants, export subsidies and so on), which in toto are
intended to garner some of the current (or future) economic rent earned by the foreign affiliate.\textsuperscript{789}

In this chapter, we shall concentrate on just two factors influencing the distribution of the value added by MNEs and/or their affiliates. One is the package of government measures which determines, directly or indirectly, their share of the net output produced by these companies. This share might be negative, at least for a period of time, when the tax and other receipts of home and host governments collected from the companies are less than the payments made to the companies. We shall not be concerned with describing or measuring the impact of particular policies and institutions in any detail. That topic is dealt with in Chapter 19. Here we are simply interested in recording – and where possible evaluating – some of the main instruments used by governments that can and do affect the share of local value added created by MNEs which contributes towards their GDP.

The second determinant of the distribution of national value added we shall consider is that of disguised cross-border intra-firm payments, better known as transfer pricing. While the term ‘transfer pricing’ is itself a neutral one, it is often used to convey that intra-firm prices are other than those which would have been charged for goods or services had they been sold to an independent buyer or bought from an independent seller in the open market. Furthermore, since it is also (and, often, unjustifiably) assumed that arm’s-length prices are necessarily competitive prices, manipulated transfer prices are normally seen to operate against the interests of countries. Indeed, at one and the same time, both the exporting and importing countries may argue that a price charged for goods traded within an MNE may operate against their interests – a situation which, over any period of time, is highly improbable.

In our analysis we shall describe the ways in which transfer price manipulation (TPM) may affect the local value added of MNEs or their affiliates; the conditions under which firms may engage in such practices; and some of the institutions and policies which governments may introduce, or have introduced, to minimise or counteract TPM wherever it is perceived to work against their own economic interests.

17.2 THE IMPACT OF GOVERNMENT POLICY ON NATIONAL VALUE ADDED BY MNEs

17.2.1 A Host Country Perspective

The income received from the taxes or duties paid by MNEs or their affiliates represents a gain to the national value added of a host country, which might otherwise have accrued to other parts of the MNE network. While in a given country, an MNE (like a uninationals firm) will normally seek to minimise its net tax liabilities,\textsuperscript{790} in its pursuance of its global strategy, it may positively prefer to incur taxes in one country rather than another. For example, \textit{ceteris paribus}, there are obvious incentives for MNEs to record higher sales or lower costs in countries where corporate taxes are low, and to overprice dutiable intra-firm imports from high-tax countries. In addition to its ability to shift profits across borders, one of the unique advantages of an MNE is its ability to also switch value-added activities between countries, a fact which governments need to be aware of in their efforts to attract and retain inward direct investment (and hence the tax revenue generated by it).
Chapter 5 touched upon the relevance of government-induced incentives and disincentives as L-specific variables influencing the ‘where’ of MNE activity. Chapter 19 will give more attention to institutions as a bargaining strategy of host governments. In the present context, this means that, if the net payments to one host government from income earned exceed those which would have to be made to another host government, then, *ceteris paribus*, an MNE would prefer not to produce (or produce as much) in the former country. Hence all the tax revenue which might have been received by the government of that country would be forgone. Where this means the national value added by the MNE is lower than that which would have been produced by the next best alternative use of resources by them, then the host government may be prepared to accept the situation. Where, however, there is a possibility of at least some economic rent accruing to the host government, then it may choose to reduce the net payments it receives from the MNE.

Unfortunately, the matter does not end there, as the actions of host governments may affect the level of profits which an MNE or its affiliates may earn as well as the share of the pre-tax profits. Thus, a foreign affiliate may be prepared to accept an increase in tax rates (that is, a lower share of profits) if it is able to earn higher revenues or incur lower production or transaction costs than it would if tax rates were lower. This might be facilitated by governments in various ways, including the subsidising of energy or labour costs, lower interest rates, reduced sales taxes (to encourage demand), import protection, less-stringent environmental regulations, and the promotion of a favourable industrial climate (Dunning, 1991). As Chapter 10 has demonstrated, the content and quality of a country’s incentive structure appears to be a major influence on the location decisions of MNEs. A good institutional environment, including secure property rights, well-functioning financial markets and a transparent, predictable and effective legal system, lower the costs of transacting and are consequently attractive to MNEs. To the extent that higher rates of taxation may accompany such markets, MNEs are likely to weigh the indirect benefits they receive against the increased burden of taxation.

Any government policy towards inbound direct investment, which is designed to increase the share of the value added retained in the taxing country, must take into account the extent to which and the ways in which MNEs may wish to counteract these attempts, wherever and whenever it perceives that they will adversely affect the long-term profitability of its investments. The government must also bear in mind the effect that any taxation changes may have on the global or regional strategies of the MNEs operating in its territory, and the level, structure and geographical composition of their output and sales. Finally, taxation (as a policy designed to maximise the national value added of foreign affiliates) should not be considered in isolation to the various other fiscal and other measures that might be used to achieve similar goals, and of the relative effectiveness of these measures.

The reaction of MNEs to direct or indirect taxation imposed by host countries is likely to differ from that of uninational firms in four main ways. First, because the former operate in multiple locations, they may have more flexibility in the geography of their investment, and hence are likely to be more sensitive to differential tax policies. Second, because MNEs internalise both finished and intermediate product markets, they may have more opportunities (relative to those of their uninational competitors) to manipulate cross-border costs and revenues in a way that enables them to reduce, or avoid, the payment of national taxes (including import duties) and to maximise their receipts of
subsidies and grants of one kind or another. Third, because of their O-specific competitive advantages, MNEs may command more economic rent than non-multinationals, and/or have greater opportunities to engage in extensive tax planning. Fourth, MNEs – and particularly large MNEs – may be a vehicle for transferring knowledge and experience about the tax-related institutional measures of their home government, and thereby possibly influencing those of host governments. These differences may prompt different responses to taxation changes by the two groups of firms. In cases where foreign investors dominate particular sectors of the economy, they may require some modification to existing tax practices and policies.

17.2.2 A Home Country Perspective

There are two main concerns about the impact of outward direct investment on the national value added of the investing country. The first relates to the loss of the taxation of profits earned abroad which might have been recouped by the home country had the investment been made in that country. The second relates to the way in which the home country taxes the worldwide profits earned by its MNEs.

Home or foreign investment?
The answer to the first question rests mainly on the opportunity cost of FDI and the reaction of the home government to that cost. From the perspective of the home government, rather than that of the MNE, outward direct investment is likely to be acceptable as long as the perceived marginal benefits which accrue to the investing country (for example, the foreign profits of the MNE less taxes paid to the host countries plus any benefits to the dynamic comparative advantage, innovatory capacity and other economic or social objectives of the investing country) are at least equal to the comparable gains of domestic investment (gross of tax).

Research conducted on this question presents a mixed picture. In the 1960s and early 1970s, the consensus of opinion was that, assuming full employment in the home countries, the marginal social rate of return on foreign MNE activity was almost certainly less than the marginal private rate of return. In the 1980s, partly as a result of the changing character of FDI, and the growing complementarity between the home and foreign activities of MNEs, this was no longer a primary concern. However, in the late 1980s and 1990s, with the assumption of full employment in the capital-exporting countries difficult to justify, some commentators again argued that there is a stronger case for discouraging the foreign activities of MNEs, and diverting the resources saved to stimulating domestic production and economic restructuring. With globalisation and rapid technological change, the contemporary emphasis has shifted to view many kinds of outbound FDI as ways to augment the competitive advantages of the investing firms and of the investing country (see Chapters 3 and 5).

Indeed, irrespective of the merits of these views, it is highly questionable whether a discriminatory policy should (or could) be used for this purpose. We believe that it is far better for the national authorities to devise the appropriate institutions and employ the most cost-effective macroeconomic and structural adjustment policies. In so far as these affect the profitability of the domestic activities of both foreign and domestic MNEs, they are likely to be market supportive rather than market distorting. Indeed, in times of severe
domestic inflation (or stagflation), a relocation of value-added activities from foreign to domestic factories could exacerbate an already difficult macroeconomic situation.

**Taxation of the foreign income of MNEs**

The second taxation issue of interest to home countries surrounds the tax treatment of the income and remittances of foreign MNE activity. Although the host country has priority in taxing earnings of such income, the home country determines the ultimate tax burden of the investing company. In practice, most major capital-exporting countries seek to neutralise the tax levied on foreign income by adopting methods which fall between current taxation at the home country rate, with full credit for host taxes on income and remittances, and complete exemptions from the home tax. The first of these methods ensures *capital-export* neutrality (whereby the tax treatment of income earned by MNEs at home or abroad is identical); and the second that of *capital-import* neutrality (whereby foreign affiliates are taxed in exactly the same way as domestic firms). Most commonly, domestic corporate tax is payable on the foreign income earned by MNEs, but is deferred until it is repatriated to the investing country. Host taxes on income and remittances are then credited against the home taxes, the credit being limited by the home or host tax, whichever is the lower.

Such tax neutrality can be regulated by a variety of instruments employed by home and host countries. These include withholding taxes, taxes imposed on affiliate dividends and deductable remittances by host governments, the treatment of capital cost recovery allowances and tax incentives, and the actions taken to minimise tax evasion and outlaw unacceptable tax-minimising behaviour.

In addition, a number of small countries, known as tax havens, exempt either all income, or income of foreign-owned corporations channelled through them. Some MNEs can, and do, achieve substantial O advantages from the tax deferral mechanism by accumulating income in subsidiaries based in tax haven countries. Indeed, recent studies have found that 60% of US MNEs had operations in tax haven locations, and the ownership of an affiliate in a tax haven location was associated with reduced tax payments elsewhere in the same region (Desai et al., 2006a, 2006b). Tax havens may also be used as a risk-reducing strategy or as a means of gaining interest on relatively liquid capital. According to UNCTAD (2006), a substantial share of the FDI by MNEs from developing or transitional countries between 2000 and 2004 was routed through tax haven countries, the Caribbean in the case of FDI from Brazil and China, and Cyprus in the case of Russia.

Most of the tax policies of home countries towards the foreign income earned by their own MNEs are constructed in conjunction with those of the host countries. The result is a complex network of bilateral tax treaties, each of which is characterised by the principle of non-discrimination, whereby each contracting country limits the tax liability on income earned by its foreign affiliates to the value imposed on its own firms. Such treaties are described at some length in the *World Investment Reports* of UNCTAD.

Two basic systems of taxing MNE affiliates exist, both of which seek to neutralise the effects of any double taxation. The ‘residence’ or ‘credit’ principle holds that all income is taxable by the country in which the corporation is incorporated or engages in value-added activities. The ‘territorial’ ‘source’ or ‘exemption’ principle holds that net income is taxable by the country in which it originates. The system applied by the US and the UK (as well as Japan) is residence based, and credit is applied for the taxes paid by incorporated
subsidiaries in the host country against the tax liabilities of parent firms. Under the credit system, depending on the differences in rates of taxation between the home and host country, either more taxes will be due, or credit can be accumulated if more tax is paid in the host country than is due in the home country. Most credit system countries also allow for tax deferral, so that tax is only incurred if and when income is repatriated to the home country. The territorial system is preferred by most EU countries, with the exception of Greece, Ireland, Spain and the UK, although the extent to which income is fully or partially exempted varies across countries, and is affected by the provisions of bilateral tax treaties. An exemption system is also applied in Switzerland, but only the earnings of branches are exempt, while incorporated Swiss subsidiaries abroad are subject to home country taxation, which again varies by canton (Hines, 1996).

Setting aside any discussion about the relative merits of the credit or source method on the taxation of foreign income earned in a particular country, the question remains: ‘How can a home government be sure that the taxable income declared by an MNE from its foreign operations represents the true income earned in that country?’ The answer is ‘with difficulty’ – particularly where opportunities and incentives for TPM exist, and where the tax authorities in the home country have no access to the books and documents of the foreign affiliates of their own MNEs. This has led the tax authorities of some countries, and some regions within countries (for example, California), to adopt a global or worldwide taxation principle by which domestic rates of taxation are imposed on the income earned by their corporations irrespective of where it is earned. Credit may then be allowed against domestic tax for foreign income taxes paid, or for taxes levied in lieu of income taxes.

At the same time, the global principle of taxation does little to avoid the loss of taxation to the home country which might arise from inter-country differences in the computation of taxable income (that is, the tax base). This has led some commentators to suggest that the geographical distribution of an MNE’s tax bill should be based on the proportion of its sales, assets, employment or value-added activities undertaken in the countries in which it operates (so-called ‘formulary apportionment’). Naturally enough, this suggestion has been strongly resisted by the tax authorities of capital-importing countries. Consequently, the source principle remains the primary basis for taxing the income arising from outbound investment.

Finally, although much of the literature on the taxation of MNEs has tended to focus on its direct effects on the location of their investment, and the distribution of the national value added between MNEs and the countries in which they operate, there are several indirect consequences which, in the long run, may be no less important. They include the impact of different systems of taxation on the methods of financing FDI (for example, between retained earnings and long-term borrowing or between borrowing and issuing new shares), ownership structure (including networking), export strategy, pricing policy and dividend remission. We shall consider these issues in a subsequent section.

17.2.3 Recent Trends in Corporate Taxation

A national government faces three basic taxation problems, namely those of jurisdiction, allocation and valuation. These are roughly the equivalent of its needing to determine
who has the right to tax, what is the tax base and the tax rate, and how revenues and expenses should be priced (Eden, 2001).

As a result of examining the changes in the tax regimes of 18 leading economies in the 1980s and 1990s, Devereux et al. (2002) were able to discern three broad trends in the taxation of corporate income: first, that in most countries, the statutory tax rates fell throughout the period, while the tax base was broadened. Indeed, statutory rates fell from an average of 48% in the early 1980s to 35% in the late 1990s; second, that tax revenues from corporate income in this group of countries had remained broadly stable as a proportion of GDP since 1965; and third, that tax revenues from corporate income had declined as a proportion of total tax revenue in the same period. Another study using OECD data for 1988–97 found that not only had the level of corporate tax rates declined, but so had the standard deviation between them (Gropp and Kostial, 2000). However, the extent to which tax competition among governments has influenced the downward trend in rates of taxation was still considered an open question by the authors of both studies.

While tax competition between national and/or subnational governments has undoubtedly increased during the past 20 years, notably between EU countries and between states within the US, international cooperation in the area of taxation has also become more pronounced. For example, in 1997 the EU introduced a code of conduct in business taxation intended to tackle ‘harmful tax competition’. This initiative shared many similarities with the ongoing efforts led by the OECD, as its focus was not on tax regimes with low general rates of capital income taxation as such, but on special regimes that provide incentives for firms to shift profits between jurisdictions.

The Bolkestein report (European Commission, 2001) further underlined the need to eliminate tax-related obstacles to the creation of the internal market. The report suggested a comprehensive tax reform within the EU, including a consolidated tax base, using formulary apportionment, similar to the system used at the federal level in the US. The taxable profit of an MNE, calculated for the whole of the EU, would be apportioned between member states according to a pre-agreed formula based on factors such as capital, employment or sales attributable to each member state. Consolidating the tax base in this way would not, however, harmonise tax rates across member states.

Which tax rate is relevant for MNE activity?

Before we move on to consider some of the empirical research on the effects of taxation on MNE activity, it is useful to review the different kinds of tax rates that have been used to measure the tax burden of MNEs in the literature. Devereux et al. (2002) identify four types of tax rates: statutory tax rate, average tax rate (ATR) based on micro or macro data on actual taxes paid, and effective marginal tax rate (EMTR) or effective average tax rate (EATR) computed from the tax code. While EMTR measures the difference between pre- and post-tax return on any marginal investment project, EATR applies to any investment project on which the investor may earn economic rent. ATRs based on data are also known as backward-looking or ex post rates, while statutory rates and effective calculated tax rates are forward-looking or ex ante rates of taxation.

Statutory tax rates have the benefit of being easy to use, but the nominal rate of taxation does not often reflect the actual burden of taxation faced by firms due to the existence of different kinds of exemptions and allowances. Average (ex post) tax rates based
on micro or macro data have the benefit of reflecting all the elements of the tax code. At the same time, they are likely to suffer from endogeneity problems, since they are also likely to reflect underlying differences in, for example, profitability or rates of growth between locations. On the other hand, *ex ante* tax rates, calculated from the tax code are based on assumptions about interest rates, forms of financing and so on, which are likely to influence the results.

Regarding MNE investment, Devereux and Griffith (2003) argue that when an MNE decides whether to serve a foreign market by export or by FDI, or when it decides between two locations, such choices are discrete. Furthermore, such decisions are made by firms with market power that expect to earn economic rent on the investment. Consequently, they argue that for the location decisions of an MNE, the EATR is the relevant rate, while the appropriate rate for affiliate reinvestment is more likely to be the EMTR.

### 17.2.4 The Response of MNEs to Taxation Differentials

Since taxation is just one factor affecting the level and distribution of MNE activity, its significance cannot be evaluated without reference to the other determinants. Such survey-based evidence as has been assembled over the years has tended to show that cross-border differences in corporate taxes are rarely a primary motive for MNE activity, but that once a decision is made to engage in FDI or to increase foreign production in a particular country or region, they may play an important role on the siting of activity within that country or region. This is particularly likely to be the case for export platform manufacturing investment and the setting up of regional offices, which are among the most footloose of all MNE activities. Examples include the location of US or Asian MNEs within the EU and that of European and Asian MNEs within NAFTA, or indeed within the US.

In spite of the relatively low importance given to issues of taxation in business surveys, tax-related disputes, such as those currently ongoing between Austria and Germany, and between the EU and Switzerland, continue to attract attention. For example, in 2005, Sandoz, the generics affiliate of the Swiss pharmaceutical firm Novartis, was at the heart of the debate when it was considering the relocation of its headquarters from Vienna to either Basel or Munich.800

Certainly the message so publicised is that governments (at all levels) believe that taxes *do* matter, and that they have the ability to influence MNE activity. However, even in seemingly clear-cut cases, such as the low tax rates offered by Ireland, the tax benefits need to be considered alongside other policy and institutional initiatives, including investment in education and training, that have made Ireland a desirable location for the affiliates of foreign MNEs. Similarly, while tax rates may have been a consideration for the many MNEs that have chosen to locate their regional EU headquarters in Switzerland or Luxembourg, an important pull factor has also been the availability of high-quality legal, financial and consultancy services that are needed to support the headquarters operations of large multinational firms.

Indeed, if corporate tax rates are not of a locational tournament variety (Mytelka, 2000a), but reflect long-run differences in the attractiveness of particular locations for both domestic and multinational corporate activity, eliminating such differences would weaken the ability of local and regional governments to compete on the basis of the
economic and social infrastructure they have created. Consequently, the focus on cross-
border cooperative efforts by governments has not been so much on harmonising tax rates
per se, but on removing elements that distort the institutions guiding economic activity.
In the literature on the effects of taxation on inbound FDI, such distortions generally fall
into two categories: those dealing with the influence of taxation on the choice of location,
and those concerned with the behavioural responses of MNEs to taxation in a given loca-
tion. We shall discuss these in turn.

**Effects on the choice of location**

Since the location decisions of MNEs are frequently complex, the extent to which it is
possible to separate the influence of rates of taxation on cross-border location is limited.
Success in assessing the impact of differences in tax regimes on the choice of siting
different forms of MNE activity rests on the degree to which other determinants of loca-
tion are adequately accounted for in the models. As discussed in Chapter 16, in addition
to factors such as market size, factor cost and availability, institutional content and
quality and the level and character of demand, several factors related to agglomeration
play a role in the choice of location. These factors can be related to the locational
specificity of the distribution of both natural resources and of created assets.801

Overall, the empirical evidence points to a negative impact of company taxes on the
inflow of foreign investment.802 The literature reviewed by Hines (1999) suggested a con-
sensus estimate of –0.6, implying that a 1% higher tax rate would lead to a reduction
in inbound investment of 0.6% (or a semi-elasticity of –2% for a tax rate of 30%).803
However, such literature reviews almost inevitably combine studies that use di-
fferent model specifications, data and methodology. To (partially) overcome these problems, de
Mooij and Ederveen (2003, 2005) conducted a meta-analysis of 31 empirical studies, with
427 observed elasticities that were converted into comparable elasticities. The authors
then examined the characteristics of the underlying studies to see whether these system-
atically influenced the results.

In the latter study, de Mooij and Ederveen (2005) found a mean tax elasticity of around
–3.7, and a median elasticity of –2.9, but there was substantial variation across the observ-
ations, about half of which were significant. Among the four types of study considered,
namely, those using time-series or cross-sectional data on FDI, discrete choice models
where count data on location choice is regressed on the tax rate, and panel data on FDI,
the cross-sectional models had notably higher elasticities than other types of study.
Additionally, differences were observed due to the kind of tax rates used. However, there
were no systematic differences between investors from tax credit countries and tax exemp-
tion countries, although the authors did find a significant difference between reinvestment
and the transfer of funds.804

In addition to these broad results, we wish to highlight the findings of five more specific
studies on MNE location and taxation. The first is by Gorter and Parikh (2003), who
found that a reduction of one percentage point relative to the EU mean in the effective
corporate income tax rate increased FDI from another EU member state by 4%. The
model was a simple one in terms of the location determinants, containing only popula-
tion and GDP per capita as explanatory variables, but it used both backward-looking
rates based on Worldscope data (ATR) and forward-looking rates (EMTR) based on the
tax code.
In a second study of the EU, Devereux and Griffith (1998) employed a very different kind of model of foreign production that included the option of exporting or not serving the foreign market at all. The locational determinants in this study included agglomeration effects, unit labour costs and the cost of capital. They found that the EATR played a role in location choice, conditional on a firm having decided to produce in Europe. According to their results, a one percentage point increase in the EATR in the UK would lead to a reduction in the probability of a US firm choosing to produce there of 1.3 percentage points. However, the EATR did not play a role in the decision of whether to export to Europe, or to engage in local production.

In line with the argument of Devereux and Griffith (2003), in a third study, Bellak et al. (2007) assert that, while the use of statutory rates is relatively easy, it may mask the size of the true effect of taxation on FDI location. In particular, they argue that bilateral effective average tax rates (BEATRs), which are calculated from the tax codes of the home and host countries and include the terms of any double taxation agreements (exemption or credit), are preferable to the use of statutory tax rates. As part of their research, they constructed BEATRs for seven prominent source countries investing into eight host countries in Central and Eastern Europe. Bellak and Leibrecht (2005) employed these rates in a gravity model of FDI, which also included a comprehensive list of other location variables. They found semi-elasticities of −3.3 to −4.6, which are notably larger than those reported in earlier studies.805

In a fourth study, Hines (1996) attempted to evaluate the influence of the differences between tax rates among US states on investment in plant, property and equipment. This study also controlled for the agglomeration factors, such as the inherent desirability of regions such as New York City or Silicon Valley, affecting location choice. The effects he found were large, as a 1% difference in state tax rates was associated with a 9–11% difference in the share of capital invested by fully taxed investors as compared to lightly taxed investors. The lightly taxed investors in the study were those foreign investors who receive home country credits for the taxes paid in the US, that is, investors from Japan and the UK. It must be assumed, however, that such investors are not in a position of excess credit for them to remain neutral regarding the state tax rate. Furthermore, five states had zero rates of corporate tax, and if these states were removed from the model, the effect of taxes on capital ownership was not significantly different from zero.

The fifth study by Desai et al. (2004c) used data on US FDI abroad from the BEA benchmark surveys in 1982, 1989 and 1994 to compare the effects of indirect taxes, namely sales, value-added, excise and property taxes and import and export duties, to the effects of corporate income taxes. They found that the indirect tax burden faced by the affiliates of US MNEs significantly exceeded their foreign income tax obligations, and might therefore be expected to also influence the location of FDI. They discovered that the indirect tax rates were negatively correlated with investment levels (as measured by assets) to approximately the same extent as corporate income tax rates. Their results suggested that an increase in the local indirect tax rates of 10% was associated with a 7.1% reduction in the assets of foreign affiliates, which is similar to the effects of corporate income taxes. Furthermore, they discovered that in response to a rise in indirect taxes of 10%, the output of the foreign affiliate fell by 2.9%, while higher direct taxes typically had more modest output effects. They also found that high corporate income tax rates depressed the capital–labour ratios and profit rates of foreign affiliates, while indirect taxes did not.
The interesting feature of this last study is that since indirect taxes are not a function of corporate income, they are unaffected by the form of financing of foreign affiliates or by transfer pricing. In other words, the measured effects related to indirect taxes are likely to be uncomplicated by any shifting of corporate profits for tax-avoidance purposes, or changes in the form of affiliate financing between debt and equity. The role of indirect taxes is particularly important in countries such as the US that do not permit foreign tax credits to be accumulated on taxes other than income taxes.

Finally, we would point out again that fiscal incentives are but one factor in the MNE’s choice of location. Natural resource-seeking investment tends to be less sensitive to either institutional quality, or differences in fiscal policy, due to the location specificity of particular resources. Similarly, strategic asset-seeking investment is likely to be relatively unaffected by differences in rates of taxation. Market- and efficiency-seeking investment is likely to be more sensitive to tax rates, but even here, the choice of location involves a balance between multiple factors. For example, the location of Nokia’s new $150 million manufacturing facility in a special economic zone (SEZ) in Chennai, India, was motivated by strong demand in the local market, and the ability to obtain faster customs clearance for intermediate imports in the SEZ, but not by tax breaks.\textsuperscript{806}

Chapter 10 demonstrated that institutional quality in the host country is an important determinant of the flows of inbound FDI. Among countries with good institutional quality and an attractive business climate, rates of taxation can influence the location of activity, but this is limited to cases where there are multiple alternative locations available. In other cases, where the MNE faces a restricted choice, rates of taxation are unlikely to influence the location of real activity, but they may influence the behaviour of MNEs in terms of the adoption of alternative financial arrangements, and the use of transfer pricing. This is the focus of the following section.

Effects on MNE behaviour

While the effect of tax rates on the location of FDI is difficult to assess, their impact on the behaviour of multinationals is arguably somewhat easier to come to grips with. Like all forms of regulation, taxation changes the institutional incentives facing firms in ways that may distort their behaviour and induce inefficiencies. The behavioural effects of taxation of US MNEs have been studied extensively using the BEA data source.\textsuperscript{807} This research has uncovered distortions in MNE tax-related behaviour in four main areas: the extent and timing of repatriation of affiliate earnings, the financing of affiliates by debt or equity, the payment of royalties and technology transfer, and JV activity. We shall briefly review each of these.

Taxation might affect both the timing and the extent of profit repatriation, although the magnitude of this effect is difficult to ascertain, since there is little understanding of what constitutes a ‘normal’ level of repatriation by MNEs.\textsuperscript{808} In Chapter 2 we presented data on the share of reinvestment in the flows of FDI from some important source countries. These data showed that reinvested earnings represent an important component of sequential foreign investment. Nonetheless, the determinants of reinvestment have been largely overlooked in the IB literature (Lundan, 2006). At the same time, however, profit repatriation (the obverse of reinvestment) has been examined in the tax literature, and these are the studies we review here. It should be noted, though, that such studies pay no attention to the firm or country-specific factors that might encourage an MNE affiliate to
reinvest its earnings, as they focus squarely on the sensitivity of profit repatriation to differences in taxation.

Desai et al. (2001) concluded that, while a variety of non-tax considerations affected the repatriation decisions of MNEs, lower rates of tax on repatriated profits were generally associated with higher rates of repatriation. They found that higher-taxed foreign affiliates of US MNEs recorded higher dividend payout (repatriation) rates, but if the firm was in a position of excess credit (or if foreign income was exempt), these effects would disappear. By contrast, MNEs with affiliates in low-tax countries might prefer to engage in reinvestment elsewhere within their network of operations (perhaps making use of tax havens) rather than repatriate income. 809

While many studies have focused solely on the repatriation of intra-firm dividends, an argument can be made that the payment of intra-firm dividends should be examined simultaneously with other means of repatriating affiliate income, for example, royalties and interest. 810 One such study by Grubert (1998), based on data from US Treasury corporate tax files for 1990, found that while a higher tax price discouraged the payment of intra-firm dividends, this did not mean an automatic increase in affiliate retained earnings, since the income might be distributed by other means. In particular, he found that royalties and interest were largely substitutable means of repatriation. 811

The study by Grubert is also one of the few to examine in detail how the tax-related costs of repatriation change for firms in position of excess credit. 812 Excess foreign credits arise when firms pay taxes abroad that are higher than they would have been required to pay in their home countries. A tax rate decline in the latter countries, other things being equal, will then make it more likely for firms to be in a position of excess credits. Excess foreign tax credits blur the distinction between credit and exemption countries with respect to MNE behaviour. Consequently, while the sensitivity of firms from credit and exemption countries to high rates of taxation should be clearly different, this is not necessarily the case empirically, because firms in credit countries differ in the degree to which they have excess credit. 813 Firms without excess credit are relatively insensitive to (high) foreign rates of taxation, while firms with excess credits behave more like firms from exemption countries, and are more sensitive to high rates of taxation.

Among the alternative means of repatriation of affiliate income, Desai et al. (2004b) examined the attractiveness of using debt financing for foreign affiliates in high-tax countries and equity financing for affiliates in low-tax countries between groups of affiliates that are controlled by the same US parent. 814 They found that levels of debt were significantly higher among affiliates that were located in countries with higher tax rates. They also found that borrowing from the parent company was more sensitive to tax rate differences than borrowing from external sources.

An alternative to interest payments is for the MNE to repatriate income in the form of royalties. As we saw in Chapter 11, intra-firm royalty payments make up the largest proportion of cross-border royalty transactions. Either this may signal a desire by MNEs to exploit their proprietary technologies within the firm, rather than selling the right to do so to others (through, for example, licensing), or it may reflect a distortion created by the desire to receive income from affiliates in the form of royalty payments rather than that of intra-firm dividends or interest. Evidence that tax considerations play a role in royalty payments is offered by Grubert (1998), who found that royalty payments by US affiliates
to their parents were sensitive to tax rates. (The manipulation of the prices involved in the intra-firm payments of royalties is discussed in Section 17.3.)

Finally, Desai et al. (2004a) offer evidence that US firms reduced their participation in international JVs after the (US) tax reforms of 1986, which imposed penalties on the income received from JVs, and increased the value of international tax planning that is associated with wholly owned foreign affiliates. However, it is difficult to estimate to what extent the decline in US-related JVs and the subsequent growth of contractual alliances was more influenced by other factors, and what was the relative role of the tax considerations.

17.2.5 National Tax Strategy in a Global Economy

Throughout this volume, we have argued that governments should adopt a systemic approach to evaluating, guiding and responding to MNE activity. In the present context, this means that taxation policy of both home and host governments should recognise that in the contemporary global economy, many corporations have a choice of where to locate their income-earning activities, and that this choice, in part at least, will be influenced by the taxation policies of the authorities. In earlier years, when there was much less mobility of corporate assets, these inter-country taxation linkages were relatively insignificant. Hence, in so far as taxation policy did affect the competitiveness of a country’s firms, or the disposition and quality of its domestic resources, it did so without much concern about the possible consequences for foreign firms or other countries.

In the global economy, a new dimension enters (or should enter) into taxation policy. Assuming that one of the main objectives of tax authorities is to collect revenue, then it seems appropriate to consider how a country’s tax policy in time \( t \) might affect the income-earning capacity of the taxed corporations in time \( t + 1, \ldots, t + n \). But, if one country’s tax base or tax rates compares very unfavourably with that or those of its major competitors, then it is highly probable that not only will its own firms seek to earn as much taxable income as they can outside their home countries, but, as a recipient of foreign investment, it will also become less attractive.\(^815\)

In his analysis of the US economy, Hufbauer (1991) pointed out that the then contemporary system of taxing the income of MNEs or their affiliates dates back to the 1920s, and was essentially concerned with the appropriate division of revenue between US and foreign taxing authorities and of upholding the principle of tax neutrality between income earned in and out of the US. But Hufbauer contended – and this contention is no less valid in the early 2000s – that a no less important goal of tax policy should be to uphold the industrial and commercial interests of the country. He argued that this could be done partly by ensuring that the international market system is as free of distortions as it could be; and partly by fashioning and implementing an appropriate set of institutions and micro-management policies, whenever the playing fields of national government behaviour are not level.

Chapter 19 will explore the concept of a systemic macro-organisational strategy, embracing taxation policy, in more detail. While the appropriate strategic tax policy for the US may not be suitable for other countries (though there will most certainly be common elements) it is clear that the regionalisation and globalisation of value-added activity is requiring tax authorities to rethink both the principles and the practice of
corporate taxation, and that whatever changes are made must be in accord with the sys-
temic competitiveness of the economy concerned. Indeed, several contributors to an
NBER conference volume on the impact of recent changes to US tax law emphasised the
need to begin to devise tax-related institutions not as part of a national policy, but as one
that affects, and is affected by, policies adopted by other major economic powers (Hines,
2001b).

In a more recent article, Desai and Hines (2004) also make the case for a comprehen-
sive reform of the US corporate tax system, and highlight the need for the US (and other
open economies) to move from having a tax code which tries to apply the logic of domes-
tic taxation to foreign circumstances, towards adopting a system of taxation that is
placed in an international setting. An important part of this effort, according to the
authors, is to incorporate realistic assumptions about the strategies and activities of
MNEs into analyses of what constitutes efficient (and socially acceptable) systems of
taxation.

The authors’ main argument is that the long-existing concepts of capital-export,
national and capital-import neutrality are based on the idea of FDI as simply a transfer
of net savings between countries. However, if FDI represents not only this form of trans-
fer, but also one which embraces that of a bundle of firm-specific resources, capabilities
and institutions, these concepts can no longer be used to formulate optimal tax systems.816
Instead, Desai and Hines suggest that tax policies should be evaluated on the basis of their
effects on the allocation of the ownership of productive assets. Towards this end, the
authors put forward the benchmarks of capital ownership neutrality (CON) and national
ownership neutrality (NON). CON corresponds to a situation where all countries either
exempt foreign income from taxation, or provide complete foreign tax credits. Under
NON, countries would mostly exempt foreign income from taxation.817

17.3 TRANSFER PRICING

17.3.1 Introduction

The subject of cross-border intra-firm transfer pricing has commanded a good deal of
attention in the literature, mainly, it would seem, because governments of both develop-
ing and developed countries perceive that by manipulating such prices to serve their own
interests, MNEs may adversely affect those of the countries in which they operate.
Although most attention has been directed to the use of TPM to circumvent corporate
taxes, governments may be no less concerned with its use to disguise the true operating
costs and revenues of MNEs or their affiliates, and/or to thwart some of the intended
consequences of macroeconomic policy (for example, exchange and interest rate
changes). Where MNEs or their affiliates play an important role in the external activities
of the economies concerned, TPM may also have some impact both on the structure of
trade and on the balance of payments (Grubert and Mutti, 1991; Schjelderup and
Weichenrieder, 1999).

Although the literature has generally focused on the consequences of TPM for the
economic welfare of host countries, home countries may be no less concerned. While a
loss of value added of one country will usually result in an equivalent gain of value added
to another country, it is quite possible that TPM may result in a loss of value added in one country and a redistribution of value added in another, which is unacceptable to both. On the other hand, where administered prices by MNEs replace non-competitive arm’s-length prices, or where they are used to combat government policies which are market distorting, they may increase, rather than reduce, economic welfare (Rugman and Eden, 1985).

A recent survey conducted by Ernst & Young (2005) confirms that transfer pricing is currently the dominant tax issue for MNEs. This is partly due to increased attention by many tax authorities, which manifests itself in more-extensive documentation requirements, the enactment of penalties, and a more frequent use of pricing audits. Some 63% of the respondents had undergone a pricing audit in the past three years, and an even higher percentage believed that they were likely to be audited in the next two years. Only a minority of MNEs participating in the survey had made use of advanced pricing arrangements with tax authorities, but those that had not done so, indicated they would do so in the future, and the number of firms using such arrangements is rising. The importance of international tax planning had also increased from a previous survey, conducted two years earlier, and there was now clear evidence that tax issues were commanding attention earlier in the corporate planning cycle.

17.3.2 The Motivation for TPM

Let us define TPM as the action of a firm to exchange goods or services (that is, across or along value-added chains) within its organisation at a price different from that at which it would sell or buy those goods and services to an independent firm. Again, we would emphasise that although it is often inferred that arm’s-length prices are competitive prices, de facto this may not be the case. On the other hand, without a knowledge of why a firm may wish to manipulate market prices, there is no presumption that such prices will be higher or lower than administered prices.

MNEs engage in TPM because they perceive it to advance their global interests. Thus, ceteris paribus, and quite understandably, a firm which is a profit maximiser will seek to shift any pre-tax profits it earns away from countries that levy high rates of corporate tax to countries that levy low rates of corporate tax. Suppose, for example, that an affiliate of an MNE located in Country A earns $10 million of taxable income on which it has to pay a 50% tax; another affiliate in Country B earns $10 million of taxable income, on which it has to pay a 20% tax. Suppose, too, that the affiliate in Country A imports goods from an affiliate in Country B worth $25 million at arm’s-length prices and exports goods to Country B worth $20 million at arm’s-length prices. Then, its total tax bill is $7 million ($5 million paid in Country A and $2 million in Country B) and its net profit is $13 million.

Clearly, in this situation, given a free choice, the MNE would prefer to declare all its profits in Country B and pay $3 million less tax. One way of achieving this (if known about and permitted by the authorities of Country A) is for the affiliate in Country A to sell goods or services to the affiliate in Country B at a lower than arm’s-length price and buy goods and services from that affiliate at a higher than arm’s-length price. If, for example, the affiliate in Country A lowered its selling price by 25% and raised its buying price by 20%, this would reduce its revenue by $5 million and increase its costs by $5 million.
million, thus wiping out the profits recorded in that country. At the same time, there would be a corresponding increase in the revenue earned and/or a decrease in the costs incurred by the affiliate in Country B, the net result of which would be to increase its taxable income to $20 million. By such TPM, the MNE is able to reduce its overall tax liability from $7 million to $4 million.

However, the reduction of their corporate tax bill is only one of several reasons why an MNE may seek to engage in TPM. It might, for example, prefer to reduce declarable income in a country in which labour unions or other local stakeholders might otherwise siphon off a share of the surplus profits, and transfer it to countries where its own bargaining strength is greater. Similarly, the declaration of a high rate of return on capital might be regarded by the domestic authorities as a sign of monopoly pricing. In order to save itself the possibility of investigation, the firm may seek to lower its profitability by TPM. Also, since profits earned in a country whose currency is hard (or appreciating) are likely to be worth more than those earned in a country whose currency is soft (or depreciating), there may be an incentive for firms to transfer funds from affiliates located in the latter to those in the former country. Finally, MNEs may prefer to earn their profits in low- rather than in high-risk economic and political environments. We examine these in turn.

The literature on the rationale for TPM suggests that there are several motives for it, which may be both internal and external to the firm.820 It should be emphasised that these are not, in themselves, sufficient reasons for TPM. At the same time, the taxation authorities of home or host countries may take steps to disallow, or counteract the incentives for, TPM.

The three most important internal incentives for TPM are first, a reduction of the global tax burden of the MNE; second, the need to improve control over the performance of and to coordinate cash and income flows from its foreign subsidiaries; and third, to advance the MNE’s strategic objectives.

The first two of these incentives are self-evident. The third has received less attention in the literature although, in the long run, its effects on both the O advantages of MNEs and the economic welfare of the countries in which they operate may be the most decisive. Examples of the strategic use of TPM by MNEs include the encouragement or discouragement of exports by foreign affiliates, a reduction in the (publicised) profitability of the parent company, or one of its subsidiaries, to mollify demands by labour unions for higher wages, the deliberate making of losses to support requests for government financial support or to justify price increases in regulated markets, the limitation of financial risk by reducing cash exposure in unstable environments, the subsidisation of newly established subsidiaries to help them penetrate markets or set up distribution outlets, and the provision of disinformation to competitors about the profitability of particular ventures. When successfully employed, each of these forms of TPM may increase the O advantages of MNEs relative to those of their competitors.

Of the external factors making for TPM (the net effect of which may be either to increase or to reduce the national value added in a particular home or host country), the most significant include the avoidance or reduction of tariffs and taxes, the diversification of economic, political or exchange risk, and the circumvention of restrictions placed on the repatriation of capital or dividends by host countries. Where domestic price increases are regulated by host governments, or higher profits are treated as a sign of monopoly
pricing, MNEs may engage in TPM to protect or exploit their competitive positions. One may then reasonably hypothesise that the more these internal or external factors are present in one country relative to another, the greater the incentive for firms to manipulate transfer prices on cross-border intra-firm transactions.

17.3.3 The Opportunities for Transfer Pricing

So much for the raison d’être for TPM. What now of the opportunities for it? Clearly, these will hinge on the extent to which MNEs find it profitable to engage in the cross-border specialisation of economic activity and, hence, exchange goods and services within their organisations. Obviously, the greater the amount of trade, the more opportunities for TPM there are likely to be, even though MNEs may not always wish or be able to take advantage of these opportunities. Much will also depend on whether the governments of the trading nations permit, or take action to negate the incentives, for cross-border TPM.

The extent and pattern of intra-firm trade (and hence the opportunities for TPM) are likely to vary between types of MNE activity, as discussed in Chapter 14. In particular, the literature distinguishes between vertical and horizontal intra-firm trade. The former consists of three kinds. First is trade in primary products between affiliates in developing countries and their parent companies in developed countries. This is essentially Heckscher–Ohlin-type trade which is internalised within MNEs, and is based upon country-specific differences in the cost and availability of natural resources. Most investment-related trade in such commodities as oil, aluminium, copper, bananas and tea is of this kind. Some of the fiercest critics of TPM by MNEs have been the governments of host countries which are substantially dependent upon these products for their foreign exchange earnings.

The second type of vertical trade is within the manufacturing and service sectors, where MNEs engage in cross-border specialisation along a particular value-added chain and trade products with different factor intensities. Thus, a proportion of intra-firm exports of MNE affiliates consists of labour-intensive intermediate or final goods and services from industrialising developing countries. One of the most recent examples of such trade is that undertaken by call centres and the regional offices of MNEs (UNCTAD, 2004). Third, there is a substantial intra-firm trade in goods exported from MNEs to their foreign sales and distributing outlets, or imported by MNEs from their foreign purchasing agents.

Horizontal intra-firm trade mainly occurs between manufacturing or service affiliates of MNEs located in developed countries. To take advantage of economies of scale, multiproduct firms may choose to specialise their production of one or more products in one country and trade these for products produced in another country. This (as we have already seen) is the main feature of rationalised or efficiency-seeking MNE activity. Such trade is particularly common between countries in a regionally integrated area, such as the EU or NAFTA. Strategic asset-acquiring investment may also lead to intra-firm (sometimes in place of inter-firm) trade, particularly in intermediate products, such as technology, management and marketing competences. Much of this kind of intra-firm trade is also intra-industry trade. Again, it follows that the greater the incentives for specialisation, the more opportunities for TPM.
17.3.4 The Constraints on TPM

Given the motivation for TPM and the opportunities afforded by intra-firm trade, firms may still not actually engage in such manipulation because they perceive that the costs of doing so outweigh the benefits. This, in effect, means that the institutional and other incentives described in the previous subsection are counteracted by disincentives. Disincentives are of two main kinds: those internal and those external to the firm.

In one of the earliest studies on TPM, Lecraw (1985b) observed that in multidomestic MNEs, which largely decentralise decision making to their subsidiaries, TPM may greatly interfere with their evaluation, control and reward systems. Even where the intra-firm transaction costs of TPM are small, those associated with justifying such manipulation to an administration bent on insisting on arm’s-length prices for all cross-border transactions, may make the possible gains not worthwhile. Moreover, if an MNE knows that the attitude of a particular government towards TPM is highly censorious, it may believe that it is better not to engage in the practice. Finally, although we have seen that an MNE which, as a part owner of a JV, might like to use TPM wherever this would increase its share of the economic rent from that venture, the local partner might vigorously oppose such a strategy.\footnote{823}

However, possibly the main constraint on TPM, particularly where there are considerable incentives and opportunities for it, are the actions taken (or the threat of actions which might be taken) by governments to prohibit it or lessen its (perceived) adverse consequences. This usually requires both a strong taxation authority and an agreement by the various arms of government to adopt a coherent and consistent policy both on the detrimental effects of TPM and what might be done to counteract it.\footnote{824}

The next subsection will discuss the various mechanisms open to the tax authorities to identify and address any problems surrounding TPM. For the moment, we would observe that it is rarely the case that TPM is unambiguous in its impact on economic welfare. Moreover, it may affect particular interest groups (for example, consumers, employees, investors) and government departments differently. For example, to reduce corporate taxes in a particular host country, an MNE might overprice its exports to its affiliate in that country. While this might yield less corporate tax and raise the total import bill of a country, it might also produce more import duties and, depending on the increase in domestic prices charged to consumers, and the elasticity of demand for the finished products, realise more revenue from sales or value-added taxes.\footnote{825}

To summarise, the extent to which MNEs are likely to engage in TPM will rest first on the motivation for shifting the geographical incidence of taxable income from where it is earned to some other country, and second on the opportunities for such TPM. The latter will depend on the level and kind of intra-firm trade,\footnote{826} and its transparency,\footnote{827} the motivation for FDI, the transaction costs of engaging in TPM, the pricing strategies of MNEs, and the extent to which governments are willing and able to influence firms in their cross-border trading practices.

The advent of globalisation and the most recent advances in technology have, we believe, had a mixed impact on the extent and content of TPM. On the one hand, the considerable increase in intra-firm trade consequential upon the global and regional strategies of MNEs has extended the opportunities for TPM. On the other, the more competitive trading environment, and the better-prepared national authorities from both
developed and developing countries, have probably reduced the ability of MNEs to engage in TPM. Notwithstanding the difficulties in detecting and measuring TPM, particularly in connection with the intra-firm transfer of R&D-related intangible assets, the net outcome is a question of empirical evidence, to which we now turn.

### 17.3.5 The Evidence for TPM

**Introduction**
While the overall picture seems to indicate either no decline or a modest decline in corporate tax receipts over the past two decades, concerns that tax avoidance and tax competition have resulted in an erosion of corporate tax receipts persists. In part such concerns may be fully justified, particularly in respect of the use now being made of tax havens by MNEs. It is also the case that the aggregate figures hide considerable differences between countries. At the same time, perceptions are also likely to be influenced by a few prominent cases of alleged TPM. For example, in 2004, the IRS in the US demanded $2.7 billion in back taxes from GlaxoSmithKline and $500 million from Motorola. Additionally, companies such as Citigroup and General Electric, although not accused directly of TPM, have come under scrutiny for having aggressively lowered their global tax bill. In the UK, Honda and Nissan faced an investigation by the Inland Revenue in 2004 due to substantial tax losses that have been carried forward to offset any future taxable profits.

Although the evidence for TPM continues to be largely fragmentary, circumstantial, and highly industry and/or country specific, there can be no question that such manipulation does take place (or has done so in the past), and that such manipulation has made a noticeable difference to both the tax revenue and the balance of payments of some of the countries in which MNEs operate. However, the extent and significance of TPM is still a matter of intense conjecture, although there is accumulating evidence of the kind of conditions under which it is most likely to take place. In particular, we might identify three groups of studies: those dealing directly with the prices of intra-firm imports and exports in comparison to unrelated transactions, those which examine the indirect evidence for income shifting, and those dealing with the methods of TPM utilised by MNEs.

**Differences in intra- and inter-firm prices for imports and exports**
A study by Natke (1985) of some 141 manufacturing firms in Brazil, showed that in 76 of 127 product categories considered, the mean price of imports by MNE affiliates was higher than that paid by indigenous firms; in 47 products, the price paid by the latter firms was higher. Intra-firm prices also exhibited greater variability. When a paired means test was performed, it was found that foreign affiliates consistently paid higher prices for their imports, with the degree of overpricing ranging from 21 to 39%. However, Natke also argued that such differences in pricing may have had nothing to do with TPM per se, but may have reflected differences in the quality of the goods or differences in the pricing policies or accounting practices of the firms in question.

Employing multiple regression analysis, Lecraw (1985b) tested the determinants of the extent to which export and import prices of *inter-* and *intra-*firm exports differed. He collected data on the export and import pricing practices of 111 MNEs which operated 153 subsidiaries in six light manufacturing industries in five ASEAN countries. One
interesting finding was that Japanese MNEs tended to use non-market-based prices for both intra-firm imports and exports more than did their US and European counterparts. Lecraw suggested that this may reflect their more centralised control procedures.

In another study, motivated by concerns about import overcharges by affiliates of foreign oil firms in Canada, Bernard and Weiner (1992) found that, if anything, affiliates in Canada paid prices that were equal to or lower than arm’s-length oil prices, when differences in quality were accounted for.830

In an investigation into the transfer pricing practices adopted by some leading US manufacturing firms, Benvenisti (1985) established that cross-border intra-firm transactions (in this case, exports to foreign subsidiaries) were more frequently priced on a non-market basis than were intra-US transactions. He also discovered that up to 85% of variations in the use of market pricing were firm specific, while at most 4 to 7% reflected ‘industry-to-industry’ differences. Using data provided by the Federal Trade Commission of some 674 foreign transactions and 1,380 domestic transactions undertaken by 466 US manufacturing firms in 1975, Benvenisti concluded that of the firm-specific variables likely to lead to cross-border TPM, advertising intensity (as a proxy for product differentiation advantages) was a statistically significant determinant. Benvenisti also discovered that except where FDI took the form of branch plant (rather than subsidiary) activity, the volume of a firm’s intra-firm exports and the number of countries in which it operated, were positively related to its propensity to engage in non-market pricing. However, there was also reason to suppose that larger MNEs, possibly because of their more pronounced visibility to government tax officials and their greater need to avoid conflicting management objectives by non-market pricing, were more likely to supply exports to their foreign subsidiaries at arm’s-length prices than were their smaller counterparts.

Using more recent BEA data on patterns of trade within US MNEs, Clausing (2001) found that a 10% reduction in the tax rate of a host country would result in 4.4% higher trade surpluses with the US parent company. This is consistent with the underpricing of US exports and overpricing of US imports. Affiliates in low-tax countries were also found to have sold unusually high fractions of their output to other affiliates of the same company. In a subsequent study, the author used data on US export and import prices from the Bureau of Labor Statistics, with 38% of the observations being intra-firm (Clausing, 2003). Controlling for other variables that might affect trade prices, and employing both statutory and effective tax rates, her findings confirmed that when foreign tax rates were lower, US intra-firm export prices were lower, and US import prices were higher, which is consistent with income shifting behaviour. A one percentage point lower tax rate in the foreign country was associated with US intra-firm export prices that were 1.8% lower, and intra-firm import prices that were 2% higher relative to goods that were traded among independent parties.

Finally, using product-level data on US manufacturing exports from the US Census and Customs bureaus from 1993 to 2000, Bernard et al. (2006) found that the prices of US exports were higher for arm’s-length rather than intra-firm transactions. The price gap was smaller for commodities than for differentiated goods, it increased with firm size and export share, and was higher for exports to countries with lower corporate tax rates and higher tariffs. The authors also found that an appreciation of the dollar reduced the price gap between arm’s-length and intra-firm transactions.
Evidence of income shifting

Since transfer pricing is difficult to observe by comparing intra- and inter-firm prices due to the difficulty in identifying comparable transactions, another research strategy employed by scholars has been to analyse the determinants of affiliate profitability in order to establish an upper bound on the significance of transfer pricing.

In the early 1990s there were growing suspicions by the fiscal authorities in the US that the low taxable income of foreign affiliates – and particularly Japanese affiliates – was due to TPM. In response to such concerns, Grubert et al. (1993) investigated a range of possible reasons for the low profitability of the affiliates of foreign MNEs in the US. These included a greater reliance by them on debt, a lower cost of capital, fixed costs related to M&As, fluctuation in exchange rates (in the period of the late 1980s) and transfer pricing. They found that the distribution of taxable income to assets of foreign firms was centred around zero within a narrow range, while the distribution of domestic firms was wider, and shifted to the right. This implies that the average domestic firm was more likely to have positive taxable income, although the profitability of foreign-controlled firms did show a rising trend over time. The authors also discovered that exchange rates had a significant effect on the profitability of wholesaling companies, and that the ratio of taxable income to assets was understated for many foreign affiliates due to recent asset re-valuations in connection with acquisitions. At the same time, levels of debt and interest income, or possible poor performance of acquired US firms, did not seem to be explanations for the low level of profitability of foreign affiliates. Cost of capital differences also did not seem to be important; indeed if anything, the parents of foreign affiliates were shown to be more profitable than comparable US companies. They discovered that up to half of the differential between the rates of return on foreign and domestic companies could be explained by factors other than transfer pricing, leading the other half unexplained, and thus possibly accounted for by transfer pricing.

A study by Jacob (1996), focusing on the opportunities for income shifting, found that US MNEs with higher cross-border sales paid less taxes globally than did MNEs with lower internal sales, which is consistent with a global tax minimisation strategy. He also discovered that US MNEs paid lower than average taxes in the US in 1982–84, but higher than average taxes in 1988–90, which is consistent with tax-motivated transfer pricing due to the changes in the US tax code introduced in 1986.

Another way of approaching the issue of income shifting was employed by Harris et al. (1993), who used regional and country dummies to group countries according to whether they were low- or high-tax locations. To capture the fact that the opportunities for income shifting are facilitated by the presence of intangibles due to the increased difficulties in identifying comparable prices, their model also included R&D and advertising spending as proxies for technology- and marketing-related intangibles. The authors found that income shifting does take place, but they were unable to evaluate the size of the effect, since its magnitude was dependent on the scale of affiliate operations. For US manufacturing firms, locating an affiliate in a high-tax region was associated with higher US taxes. The largest MNEs (multinationals with affiliates in more than five regions) appeared to be using income shifting in order to lower their US tax bills, while the typical foreign affiliate of a US firm recorded a higher US tax liability than a similar unational firm. This latter finding could be due to higher earnings, possibly on account of multinationality, or to income shifting in order to avoid even higher taxes abroad.
A later study by Grubert (2003) using the 1996 US Treasury data also investigated the degree to which intra-firm transactions involving parent intangibles (R&D and advertising) promoted larger volumes of intra-firm transactions and consequently income shifting. He found that affiliates on US MNEs in either very high- or very low-tax locations engaged in a greater volume of intra-firm transactions. Based on the empirical results, he estimated that income derived from R&D-based intangibles (but not advertising) accounted for about half of the income that is shifted from high- to low-tax locations. He also found that the shifting of intangible income and the allocation of debt among subsidiaries together accounted for nearly all of the observed differences in profitability between high- and low-tax locations.

**TPM methods employed by MNEs**

Another type of empirical research has focused on the conditions under which, and the extent to which, MNEs actually do engage in TPM, and the methods they use to administer prices. Illustrative of these studies is that of Roger Tang (1979, 1981), who, in the late 1970s, used a questionnaire to ask a group of 145 US, 102 Japanese, 192 Canadian and 80 British firms about their cross-border transfer pricing practices. He found that 92% of the US, 73% of the Japanese, 85% of the Canadian and 79% of the British firms admitted that they engaged in some TPM. The practice was most common in the metal manufacturing and industrial and farm equipment sectors. In general, US and Japanese firms were more prone to base their transfer prices on some kind of cost-plus formula, while Canadian and British companies preferred negotiated prices. The most frequently stated incentives for practising TPM were to minimise the global tax bill and to improve monitoring of the performance of domestic and foreign subsidiaries.

Tang also found that the important exogenous and endogenous variables determining TPM were similar to those identified by Lecraw (1985b). In addition, the competitive position of foreign affiliates (for example, TPM was used as a means of penetration pricing or for charging below full cost to gain a competitive advantage) was consistently ranked the second or third most important variable. None of the sample group of firms thought ‘risk of expropriation’ in a foreign country or performance of inward investors to be important variables – nor, perhaps more surprisingly – ‘the volume of intra-firm transfers’. Japanese firms appeared to place more emphasis on the interests of local partners than did their US counterparts, as they did on the likely repercussions of currency fluctuations. In general, the correlation of motives was strongest between UK and Japanese firms and between Canadian and US firms.

The findings of Tang broadly confirm those of Arpan (1972), who also used a questionnaire to identify country-specific differences in the motivation for TPM among a sample of US, Canadian and UK MNEs. He found that smaller MNEs were less prone to use administered prices, and that non-US transfer pricing systems were generally less complex and more market orientated than their American counterparts. A subsequent project by Al-Eryani et al. (1990), using data obtained from 164 large industrial MNEs, found that of a number of environmental and firm-specific variables hypothesised to influence the selection of transfer pricing strategies, the most important were a cluster of legal factors and the size of the company, both of which were positively related to market-based transfer prices. However, somewhat surprisingly, government restrictions, such as exchange price and import controls, and the stage of economic development of a country, were either insignificant or secondary determinants of a market-based transfer pricing strategy.
Using survey-based evidence from 39 Japanese and 28 US MNEs, Borkowski (1997) found that 40% of Japanese MNEs did nothing to counter the negative effects of transfer pricing on management reporting and evaluation, while only 11% of US MNEs did the same. She also found that while 61% of US MNEs kept two sets of books for this purpose, only 10% of Japanese MNEs did so.

In a later survey of 159 MNEs from Canada, Germany, Japan, the UK and the US, Borkowski (2001) found that the methods used in the transfer pricing of intangible assets appeared to be more harmonised than those used for the transfer pricing of tangible goods. While, in part, this might have been due to the adoption of the OECD and IRS guidelines, a quarter of the firms used methods for transfer pricing that were not condoned by the guidelines. Another survey of US MNEs also noted the rise of profit- rather than transaction-based methods of transfer pricing for e-commerce transactions, which can be difficult to price using the arm’s-length standard (Borkowski, 2003).

The extent to which an MNE adopts a centralised or decentralised approach to setting transfer prices can also be studied from a transaction cost perspective. This approach would suggest that where the coordination problems within the firm are relatively minor, transfer prices can be set on a decentralised basis, whereas high intra-firm costs of transacting might favour centrally set prices. Shelanski (2004) applied this kind of reasoning to the determination of transfer prices among the divisions of a single MNE. He found that the pricing practices adopted by the MNE varied systematically according to the character of the transaction. In particular he discovered that investments in physical and human capital, which might create a situation of dependency, increased the likelihood that the firm would prefer to centrally administer the transfer prices of a division, rather than engage in negotiated pricing.

The particular problems related to assessing transfer prices in the context of Japanese firms have been examined by Buckley and Hughes (1998, 2001). They argued that since Japanese companies aim to reach results at the level of the corporate group, the transfer price mechanisms they employ are best seen as a part of achieving this broader objective. Specifically, firms within the same corporate group are likely to adopt target price costing as their reference for transfer pricing. This method allows for a predetermined amount of profit to be allocated to the individual stages of the value chain. They cite the example of Nissan, which works with its suppliers to help them achieve specific cost targets. Target costing is meant to reduce the end cost of the product while maintaining its quality, and to ensure that profits are generated at the home base and not in the affiliates. However, the authors caution that while Japanese MNEs are actively involved in the setting of internal prices, the TPM used by them is not of the conventional kind, since Japanese firms often face higher rates of taxation at home relative to those in their affiliate locations.

17.4 POLICIES OF GOVERNMENTS TOWARDS TPM

17.4.1 Unilateral Policies

The reactions of governments towards TPM tend to fall into three categories. We shall briefly describe each of these.
The first option open to governments is to change their fiscal or economic policies so as to try to reduce the raison d'être for MNEs to engage in TPM. Such actions include a harmonisation in income tax rates or import duties, a removal of foreign exchange and/or dividend remission restrictions, the lifting of unwelcome performance requirements on foreign investors (for example, with respect to import sourcing), and a greater readiness to accept the costs and benefits of cross-border economic interdependence. There is little evidence that governments have consciously taken actions of this kind – at least not to reduce TPM – mainly because it seems that, considering their effects in toto, they are not thought to be cost effective.

The second, and more widespread, reaction of governments, is to seek means to encourage MNEs to engage in ‘fair’ or ‘reasonable’ transfer pricing within the framework of their (that is, the governments’) economic goals and strategies. While some developed countries (for example, the US) have tended to rely on statutory legislation to control TPM, others (for example, the UK and most developing countries) have preferred to settle any disagreements by discussion with the companies or by administrative or informal institutional procedures. This latter format is especially likely to be chosen whenever and wherever the tax authorities possess bargaining leverage vis-à-vis the MNE and/or its affiliates.

Among the actions that governments may pursue to minimise unacceptable non-market-based pricing, the following deserve particular mention:

- require MNEs and/or their affiliates to provide more information about cross-border pricing practices;
- break the internal transactional links between parent companies and affiliates, or between affiliates, by channelling imports and exports through an independent agency;
- tax the profits of the MNEs and/or their affiliates on the basis that they charge arm’s-length prices for the goods and services traded internally, rather than those actually charged;
- discourage the underpricing of exports by imposing an export tariff, and reduce the overpricing of imports by imposing (additional) import taxes;
- require MNEs and/or their affiliates to charge domestic or international market prices (assuming that such prices actually exist);
- require MNEs to price goods and services internally transacted as if they were selling, or reselling, these to independent buyers. The options for doing so are set out in Box 17.1;
- where none of the pricing methods identified in Box 17.1 is practical or desirable, apportion the profits of an MNE according to the sales, geographical distribution of its assets or employment. Such a reaction to TPM is not so much to determine a fair price, but to establish a fair or proper distribution of the global profits of an enterprise without regard to how the marketplace would operate (Irish, 1987);
- compute a transfer price on the basis of the level of profit which the competitors of MNEs might be expected to earn in the same industry and in similar circumstances (the ‘comparable profits’ method), or on the basis of the ‘normal’ expected return on capital invested by MNEs (the ‘net yield expectations’ method);
- conduct a series of ad hoc internal checks on firms to check the methods of transfer pricing and/or raison d'être for TPM;
BOX 17.1 METHODS OF TRANSFER PRICING

The arm’s-length price is the price two unrelated parties would reach through bargaining in a competitive market. The best methods rule generally assumes that the MNE proves that its method of transfer pricing is the closest achievable to an arm’s-length price. Consequently, it is possible that an integrated MNE, which derives benefits from the internalisation of activities, has to justify the pricing of transactions by reference to firms that are not integrated, and therefore do not share the same cost structure (Gresik, 2001).

Since an actual arm’s-length price may be impossible to determine, the best available proxy is calculated in one of two ways: either by internal comparable prices or by external comparable prices. Lorraine Eden (2001) has identified six acceptable methods, divided into transactional and profit-based methods, for determining transfer prices consistent with the arm’s-length principle. These are briefly summarised below:

1. Transactional methods
   - The comparable uncontrolled price (CUP) method is most suitable where there are external markets and where the goods and services exchanged are reasonably homogeneous.

   Among the methods that can be used in cases where arm’s-length prices are difficult to establish, are the cost-plus method (C+) and the resale price method (RPM). In the C+ method a mark-up is made on unit costs of production based on an appropriate gross profit. This method presupposes that it is possible to identify the costs for a particular product. Because of this, it may be very difficult to use in the case of products involving several stages of production and/or those jointly produced with other products. The second alternative is the RPM, which involves deducting a discount or profit margin (customary in the branch of industry concerned) from the resale price of the end product. Quite apart from the problem of identifying the appropriate discount in a non-competitive market, this method is only suitable as long as the resale price is the market price which is not controlled by governments.

2. Profit-based methods
   - Due to the difficulties encountered by tax authorities in identifying the appropriate prices for intangibles, profit-based methods have become gradually more prevalent. The comparable profit method (CPM) uses the industry average net profit margin earned by comparable firms to arrive at the transfer price. The profit split method (PSM) takes quite a different approach, where the profits related to a transaction are split between the parties based on their relative contribution. The final method is the transactional net margin method (TNMM), which is very similar to the CPM, but instead of comparing firms, TNMM compares transactions (the industry average net profit margin on comparable transactions).
impose restrictions on the local issue of corporate securities and on the degree of foreign ownership of local subsidiaries (Copithorne, 1971), although this is increasingly incompatible with the integrated global economy;

- improve the means by which arm’s-length prices may be identified and/or calculated;
- establish ‘advance pricing agreements’ (APAs) with MNEs, by which, for a stipulated period of time (usually two or three years), they are assured that an agreed method of transfer pricing (or TPM) is accepted by the local fiscal authority. This suggests an ex ante rather than an ex post interface between the tax authorities and MNEs; APA has been introduced with some success in the Netherlands and the US (Plasschaert, 1994); and
- press for supranational control over, or multilateral agreements on TPM (see Section 17.4.2, below).

The third possible reaction of governments arises from the realisation that since TPM is often a response to cross-border market distortions, some of which may be caused by governments in the first place, actions to eliminate or minimise its adverse effects should be considered as part and parcel of other macro-organisational strategies to promote economic efficiency and growth. Indeed, it may be argued that a systemic approach to TPM is the only way MNEs can be discouraged from reacting to specific controls by adopting countervailing measures, which, at the end of the day, are no less acceptable. Moreover, the surveillance and control of TPM is both time-consuming and costly; so much so that some governments believe that there is more to be gained by removing the incentive for firms to engage in non-market pricing than to adopt legislative action to outlaw any unacceptable practices identified.

As with all government policies, the concern with measures to tackle TPM is either that they miss their target, or that the effect is disproportionate to the original problem. One example is provided by Eden et al. (2005a), who used event-study methodology to assess the effects of a US transfer pricing penalty on the market valuation of Japanese MNEs, which were suspected of engaging in unacceptable transfer pricing policies in the early 1990s. The expectation of the researchers was that the firms would lose market value either because they continued to engage in transfer pricing, but risked a loss of value should they be hit with some kind of penalty from the US authorities, or because the firms discontinued their transfer pricing policies, thereby increasing their tax liabilities. In fact, the authors found that a transfer pricing penalty caused a substantial decline in the cumulative market value of all Japanese firms, which represented 12.6% of their market value at the end of the period under study. Although there had only been one major penalty case during the period of study, the threat of a penalty did appear to encourage compliance, but at a cost of a considerable loss of market value, which exceeded the US Treasury’s estimate of the tax revenues forgone as a result of transfer pricing.

The success or failure of national governments in their pursuance of minimising unacceptable TPM will clearly depend on their competence in identifying and implementing the appropriate unilateral actions,835 and on their bargaining power vis-à-vis MNEs engaging, or wishing to engage, in TPM. Once again, this very much depends on the balance between the O-specific advantages of MNEs and the L advantages of the countries concerned. Over the past 20 years, there is some reason to suppose that as far as
cross-border TPM in most goods is concerned, the balance has tended to shift in favour of the countries, mostly because of the more intensive competition between MNEs, and the much improved understanding by governments of the reasons for and the ways in which they might counteract undesirable TPM. However, even the most knowledgeable and sophisticated governments still have some difficulty in entirely removing such TPM practices; while, for their part, MNEs continue to argue that they conscientiously try to comply with the tax laws and government policies of the countries in which they operate.

17.4.2 Supranational Action

Undoubtedly, however, because there is competition for MNE activity both between home and host countries, and between different host countries, the opportunities for MNEs to play one nation against another are enhanced without the establishment of supra-national institutions and harmonised intergovernment action towards TPM. Such action may take the following forms (with variable levels of political feasibility):

- the initiation of international guidelines or codes of conduct. Perhaps the most important of these are the revised transfer pricing rules of the OECD (1995b, 2001);
- the conclusion of bilateral agreements by governments on pricing new products or those which do not normally enter into trade;
- the incorporation of misuse of pricing practices into either a restrictive practices code or a GATT/WTO-type agreement;
- the international standardisation of invoicing and customs procedures of information gathering, statistical definitions and accounting procedures;
- the harmonisation of cross-border corporate and value-added taxes, and of the treatment of asset valuation, depreciation and deductions from income;
- the elimination, reclassification or control of tax havens;
- the establishment of an international convention which requires MNEs to disclose publicly all cross-border internal prices, and to outlaw price discrimination between intra- and inter-firm sales and purchases;
- the collaboration between tax authorities in the exchange of laws, and simultaneously the auditing of cross-border transactions (Plasschaert, 1994); and
- the introduction of arbitration procedures by which inter-country transfer pricing disputes might be resolved.

*De facto*, multilateral action is likely to be more successful at a regional level. Although little research has been conducted on this question, it seems likely that the movement towards further economic integration in Europe and the Americas is acting as a more powerful deterrent to intra-regional TPM than any unilateral fiscal or other policies adopted by individual host governments. Similarly, attempts by the developing nations to harmonise their policies towards restrictive business practices, TRIMs and the liberalisation of dividend remissions or capital repatriation, are likely to reduce the propensity of MNEs to engage in TPM – a propensity which is often motivated by unilateral structural market distortions!

At the same time, it is unlikely that the incentives for cross-border-administered prices by MNEs will entirely disappear. Indeed, it may be argued that many of the transaction
costs described in Chapter 4 will become more important in influencing both the price-fixing policies and strategic management of firms, as well as the fiscal policies pursued by governments. If this is the case, the impetus for TPM may still remain as a feature of the global economy, although its raison d’être and its economic implications may be quite different and require new and imaginative managerial and institutional responses by national governments.

17.4.3 Indirect Economic Effects of TPM

In addition to the loss of tax revenue, and the distortion of management incentives within the MNE, TPM has indirect consequences on national economies, due to the distortions it introduces to economic price statistics. For example, Eden and Rodriguez (2004) examined the case of international price indices (IPIs), which have been used, among other things, to deflate the foreign trade component of national income accounts, and for predicting exchange rates. They argue that just as the information provided by the IPIs has become more important, their quality has eroded as a result of the high share of intra-firm trade, and the transfer prices that apply to the intra-firm transactions. The paradox of IPIs is that while the proportion of trade that is conducted within MNEs is too important to be excluded from the calculations, at least some of it is valued at prices that either inadvertently or deliberately differ from those that would prevail on the open market.

Another possibility is that the use of TPM causes distortions in national output figures. This is illustrated by the case of Ireland, where the high-technology sectors account for an unusually large proportion of manufacturing output, yet the country still lags far behind the OECD average in overall R&D intensity. Barry (2005) suggests that this arises from the fact that the R&D intensity of high-technology sectors in Ireland is considerably lower than that of comparable sectors in other countries. Since, additionally, the R&D intensity of domestic firms is generally higher than that of MNE affiliates in Ireland, this has led to questions concerning the reasons for the latter’s low R&D intensity. Barry suggests that part of the answer lies in the fact that when MNEs take advantage of the low tax rates in Ireland, they overstate their output, and thus increase the denominator used to calculate the R&D ratio. Switching from the output-based measures of R&D intensity to measures based on employment shows that the R&D intensity of foreign firms is more than 2.5 times larger than that of domestically owned firms, while compared with other European countries, the sectoral R&D intensity gap also closes up.

Exploiting the distortions induced by TPM is also used in an inventive study by Bartelsman and Beetsma (2003) on income shifting by MNEs. Their approach rests on the observation that real value-added statistics are contaminated due to measurement issues related to the transfer prices used for intermediate goods, including intangibles, and therefore differ from actual real value added. Since the actual real value added is not observed, the authors try to disentangle the measurement component from the productivity residual when estimating a production function. Based on an analysis of manufacturing sectors in the OECD countries, they find that income shifting is both statistically and economically significant. Indeed, they estimate that more than 65% of the revenue from a unilateral tax increase might be lost due to a decrease in the tax base.
17.4.4 Challenges for the Future

The substantial number of foreign affiliates in some countries (for example, the US and the UK) which report zero profits or losses continue to be of concern to tax authorities. On the one hand, there is clear evidence that the extent of intra-firm trade is increasing. Hence so are the potential opportunities for TPM. On the other hand, there is reason to suppose that the incentives to engage in TPM are less in the case of firms undertaking efficiency- or strategic asset-seeking investment in the Triad – which, as Chapter 2 has shown, is the fastest-growing form of MNE activity – than in the case of those engaging in resource or market-seeking investment in developing countries. At the same time, governments of both developed and developing countries have become much more vigilant and expert in dealing with TPM, *inter alia* by reconfiguring and upgrading the appropriate institutions; while the improving political and social climate towards their activities have lessened the need for MNEs to engage in TPM to counteract unacceptable risks. Finally, the past three decades have witnessed a resurgence in market-orientated economic systems, a movement towards more harmonised macroeconomic policies (at least between the major industrial countries) and a gradual reduction (in the EU, an elimination) of cross-border restrictions on the movement of assets, goods and people.\(^{836}\) All these developments, by helping to erode the gains from TPM, have also reduced the impetus for it.

By contrast, general issues related to governance on the internet, and specifically the jurisdictional issues related to the taxation of internet transactions, provide as yet unresolved complications as regards the tax liabilities of MNEs.\(^{837}\) At the same time, the rise in regionally based tax systems that seek to minimise the number of bilateral disputes might lead to the wider adoption of formulary apportionment models. Nonetheless, there is still some concern that MNEs are increasingly likely to get caught in the middle of disputes between governments about who has the right to tax their income (Eden, 2001).

Particular challenges in this regard are posed by the increasing outsourcing of business services, where there is little guidance on how transfer prices consistent with the arm’s-length principle should be established. An illustrative case of a teleservices firm that provides call centre services through its affiliates in different countries is examined by Eden (2005). What is the appropriate transfer price for call centre services when most of the intangibles are resident in the parent? Her proposed solution is for the firm to rely on a cost-plus method for pricing the products of call centres, if the centres in question are essentially treated as contract service providers.\(^{838}\) This would allocate most of the profit to the MNE parent, while the tax authorities in the call centre locations would be left with lower tax receipts. However, due to the lack of agreed international standards on the pricing of services, it is possible that a home country might apply cost-plus methods, while a host country would apply the resale price method, in which case most of the profit would shift to the foreign affiliate. In such cases, the MNE would be caught in the middle, and be subject to double taxation, although both tax authorities followed the arm’s-length principle.

17.5 CONCLUSIONS

This chapter has examined some of the responses of MNEs to a particular set of L-specific economic and institutional variables – especially those which are tax related – in
their decisions as to how much and what kind of economic activity they might undertake in which countries. It has also looked at the ways in which they might influence the geographical distribution of the resulting value added.

This chapter has confirmed that a combination of inter-country tax (and other) differences and the globalisation of MNE activity may afford MNEs both production- and transaction-related O advantages over and above those of their uninational counterparts. The precise nature of these advantages will depend on the international profile of the firms possessing them and on the institutional incentives and constraints within which they operate. In particular, they are likely to vary according to the type of FDI undertaken by MNEs and the macro-organisational and fiscal policies pursued by national governments.

Thus, for example, we have shown that tax incentives generally play a less important role in influencing the location of FDI than other factors, including the content and quality of country-specific institutions, but that for a given network of affiliate locations, differences in tax rates might influence forms of affiliate financing and transfer pricing.

We have also seen how a change in the depreciation allowances or methods of controlling TPM introduced by a particular country may affect the O advantages of existing MNEs very differently from the harmonisation of tax rates, the removal of import restrictions or the relaxation of performance requirements. We would concur with a recent UNCTAD (2005b) report on technology transfer and taxation in developing countries, which emphasised the need to balance the desire to receive investment and technology with the desire to be able to tax the revenue that arises from the exploitation of technology. Remedies such as tax-sparing agreements or tax exemptions are likely to be less effective than a coordinated macro-organisational policy in encouraging FDI with the least amount of market distortion.
18. Political, cultural and social responsibility issues

18.1 INTRODUCTION

Our focus in this volume on the institutional underpinnings of MNE behaviour has highlighted the fact that their cross-border activities are fashioned by legal, political, social and cultural forces, and that they might influence these forces. In Chapter 10, we suggested that over the past decade of so, the goals of development have become wider, encompassing not only material wealth, but social well-being as well. This being so, it is appropriate that we should give attention both to some non-economic issues surrounding the determinants of MNE activity, and to the ways in which, by their actions, firms might impinge upon the non-economic goals of society, and on the strategies of governments to achieve these goals.

The achievement of most objectives other than those directed at increasing material welfare, affect not only economic goals, but also economic policy. Although it is possible to view many of the functions of government (for example, defence, law and order, environmental protection) as complementary to, or supportive of, wealth creation – particularly that generated by market forces – in the short to medium term they not only redirect resources away from the generation of wealth, but they also have to be paid for by the wealth generators. Sometimes the trade-offs involved are more delicately balanced than is readily admitted. Too much expenditure on non-wealth-creating activities may lower the future capacity of a nation to create output out of which such activities are financed. The same applies to the promotion of social welfare and the protection of the less able or less privileged members of society. Here, the balance between justice, fairness and compassion on the one hand, and economic wealth sustainment and creation on the other, is a fine one. On the one hand, if, through the tax system, national income is redistributed too evenly, the incentive to earn additional wealth or to be entrepreneurial may be blunted; on the other, too wide a gap between the most and least wealthy members of society may lead to a less healthy and less well-educated workforce, and, on occasions, to severe social unrest. Sometimes it is as much a question of inter-generational income distribution as that between the current beneficiaries of wealth and non-wealth-creating activities.

The connection between the above observations and the activities of MNEs may seem a little distant. However, if the two main themes of this volume are correct, namely, first, that MNEs are the primary repositories of the capital, technology and organisational capabilities necessary to promote the economic welfare of societies, and second, that formal and informal institutions play a critical role in influencing such enterprises, and/or their affiliates, in the way they create and utilise these assets, then the amount of resources allocated to non-wealth-creating activities may directly affect the contribution of such
enterprises, not just to creating additional wealth today, but to financing non-wealth activities in the future.

18.2 MNEs AND SOVEREIGNTY

18.2.1 Economic Welfare and Sovereignty

Since most of Part III has addressed this issue, we can be brief. However, from a political perspective, it is not so much the effect of MNEs on economic welfare per se, in which we are interested, but of how that, in turn, may impinge upon the sovereignty and political power of the nation state – particularly as expressed in an international context. Chapter 12 identified one area of concern of some industrialised countries in respect of outward direct investment. If US MNEs, for example, by their export of high-technology products to foreign subsidiaries in industrialised countries increase the economic strength of these countries relative to that of the US, might not this weaken the political clout of the US at the international bargaining table? Even more important, might it not compromise its strategic security, as some forms of advanced technology might be deployed by the recipient countries for military purposes?

However, to suggest that MNEs, qua MNEs, actually operate against the political interests of their home countries as exporters of technology requires at least three things to be demonstrated: first, that the importing countries would not have obtained the technology from other sources; second, that technology is disseminated in the host country outside the foreign affiliate; and third, that the costs, or possible costs, of the technology transfer outweigh the benefits. It is possible to produce a scenario in which all of these three possibilities are likely. Technology might be highly idiosyncratic, it might be disseminated through linkages and other means as described in Chapter 16, and it might be used in a potentially unfriendly way. But beyond this, the economist and business analyst – along with the political scientist – can only speculate on the balance of likely economic gains versus the possible, but uncertain, erosion of political power or influence.

Three things, however, may be said. First, MNEs can and do influence the relative distribution of wealth-creating capacity between countries. This volume has shown that in today's global economic environment, provided that there is adequate competition between MNEs, and governments refrain from market-distorting policies, FDI is more likely than not to raise the absolute economic welfare of both home and host countries. However, there is no presumption as to whose economic welfare they will increase the most. For example, it is generally agreed that US FDI after the First World War helped to raise Europe's living standards relative to those of the US. By contrast, some earlier colonial-type investments by both European and US investors most surely benefited the mother country more than the host nations. Indeed, as Chapter 6 has shown, an important reason for British, French, Swedish and Dutch foreign investments, including those of the early trading companies, was to advance the economic, and hence political, power of the investing countries relative to that of their trading competitors. At the same time, a major contemporary concern of many industrialising and some industrialised countries about the consequences of inward direct investment is the mirror image of that earlier
identified by some home countries, namely, that it may inhibit its own innovating capacity and strengthen that of the investing country, thus redistributing the balance of economic and political power between the countries concerned.

Second, in so far as MNEs may help bind together the trade and investment relationships between nations, they perform a useful ambassadorial act of peace. The more intertwined economies become and the more each nation’s welfare is dependent on the prosperity of the others, the less likely they are to risk jeopardising the loss of this welfare by unfriendly political acts. At the same time, scholars such as Brooks (2005) argue that while the interdependencies created by MNE activity are contributing to increased security, this only applies to the Triad and some advanced developing countries. Indeed, they suggest that the global economy as a whole may have become less secure due to the extreme differences in prosperity brought about by globalisation.840

On the other hand, the misuse of monopoly power by MNEs – particularly where this is accompanied by political chicanery – might worsen the relations between home and host countries to the considerable disadvantage of each. Examples include the behaviour of the Belgian MNEs in the Congo prior to the First World War and that of US MNEs in Chile and French MNEs in Algeria in the post-Second World War era.

Third, the extent to which MNEs can and do affect both absolute and relative economic welfare is very much dependent on the stimuli and pressures provided by the governments of the countries in which they operate, as well as on the bargaining power of the latter to extract the maximum net benefits from the former’s presence. Earlier chapters have stressed the complementary characteristics between the economic and other advantages that MNEs have to offer countries and the advantages that countries have to offer MNEs; and of how, over time, these interact with each other. In particular, we discussed the role of created factor endowments and capabilities and agglomerative economies, vigorous competition and standards of demand forcing an ethos of competitiveness. We concluded that governments had an active and critical strategic and market-facilitating role to play in ensuring that their own MNEs and the foreign affiliates of foreign MNEs were both able and willing to upgrade their L-bound assets. Clearly, this goal is consistent with (or can be made consistent with) that of protecting national economic and social interests. No less important is the enhancement of the government’s own ability to negotiate and bargain effectively with foreign-based MNEs. This ability is an L-specific asset in its own right; we shall consider its significance in Chapter 19.

18.2.2 Economic Autonomy and/or Independence

It is frequently asserted that inward and outward direct investment will reduce the economic autonomy of a country and increase its economic dependence on the rest of the world. We shall suggest that this is not necessarily the case, either in the short or in the long run. Indeed, it is possible to use unbound MNE activity to strengthen one’s own wealth-creating capabilities, institutions and economic independence. This is what Kojima refers to as the ‘tutorial role’ of FDI (see Chapter 4). It does, however, imply that once they have accomplished their tasks, foreign-owned MNEs will (or should!) divest their assets.

There are two obvious ways in which inbound direct investment may reduce economic autonomy. The first is that it provides resources (for example, technology, management
skills and markets) which might be cut off at any time. This reduction in autonomy is best seen in cases of acquisitions and/or where domestic firms may be driven out of business by foreign affiliates. Second, the control exercised by MNEs over the resources and capabilities of their affiliates may not always be used in the best interests of the countries in which they are situated. However, whether or not there is a net loss of economic autonomy to the recipient countries depends on what might have happened in the absence of the investment. If it replaces imports, then it could be said to lessen dependence. In some respects at least, the foreign affiliate is a hostage in the host country. If it replaces domestic investment, then, as far as that investment is concerned, it might reduce autonomy. But again, much will depend on whether, as a direct result of the inward investment, the global competitive position of the recipient country is strengthened, and how far the assets and experiences of the foreign affiliates are embedded in it.

Likewise with outward direct investment. This could clearly lessen economic dependence and uncertainty where it protects the investing firms against supply disruptions, uncertain export markets and the abuse of their reputation by foreign buyers or sellers. Moreover, if investment is diversified, it spreads the risks associated with being dependent on a limited number of markets. On the other hand, if foreign production leads to a greater geographical specialisation of input sources or product markets, this might increase a country’s dependence relative to (say) developing alternative inputs or new markets at home or in other parts of the world.

For both host and home countries, the question is essentially one of goals and priorities – and the trade-off between these goals and priorities. To some countries, a large measure of economic self-sufficiency is valued as an objective in its own right. Under the regime of Indira Gandhi, for example, even if it could be shown that the presence of foreign affiliates in India would benefit the local economy considerably more than any practical alternative, they might still not have been accepted (and certainly not as a permanent feature of the Indian economy) lest they reduced the ability or the flexibility of the Indian government to pursue the policies of its choice.

In the early part of the post-Second World War period, Japan disallowed most kinds of inward direct investment. In doing so, it signalled its willingness to sacrifice the possible short-run gains from such investment, so as to (hopefully) achieve a greater degree of technological and economic autonomy in the longer run. Although rather more open-minded, South Korea followed a similar development strategy. At the other extreme, city states, such as Hong Kong and Singapore, and some small European countries, such as Switzerland and the Netherlands, are almost completely economically dependent on – or as they might prefer to think, interdependent with – the rest of the world. But for most countries, the tolerance for inward direct investment varies according to its perceived economic merits on the one hand, and the relative importance of such investment in the economy, and the openness of the economy to trade and investment, on the other. There are some strategically sensitive sectors (for example, media, defence-related and critical resource-based sectors), in which most countries require complete economic independence, while there are others for which complete economic dependence is accepted.

Again, which strategy a country will adopt depends on the resources and capabilities it possesses, how these are, or might be, galvanised to promote indigenous economic growth, and the balance between its inward and outward investment. Japan’s relatively restrictive policy towards inward investment has been more successful than that of India.
because of the greater emphasis it has given to vocational education and training, its more strongly motivated labour force, a higher savings ratio among its population, the higher standards of demand of its consumers and a more competitively orientated domestic economy. As a result, and due to the imperatives of globalisation, Japan is now (in the early 2000s) opening up to inbound investment without the fear of being critically dependent on it. Several other countries, noticeably the UK and the US, are prepared to accept inward investment at least partly because they, themselves, are strong outward investors. Being economically interdependent is politically preferable to being economically dependent.

In some cases, the structure of dependence may be as important as its level. Diversity in dependence is generally preferable to specialisation in dependence. Thus, for many years, Canada has tried to diversify her economic ties with other countries away from the US. The problem, however, is that throughout modern history, most of the gains to Canada's living standards have come through her association with the US. Similarly, many ex-UK, French, Belgian and Dutch colonial territories have tried to broaden the geographical or industrial composition of inbound MNE activity. For many years, much of Central and Latin America has perceived the heavy hand of US MNEs – and behind that hand, US-style capitalism and culture – controlling their destinies.

There is extensive extant literature on the subject of dependencia. Expressed in a Latin American context, it comes over partly as a concern lest the wealth-creating activities and the direction of their economies should be controlled by foreign (in particular, US) capitalists. However, underlying this disquiet is the more profound fear of any possible loss of political sovereignty or cultural identity which might follow such economic control. The Latin Americans are particularly proud and independent people. However much they may welcome, or even envy, the living standards of the average US citizen, they value their own political systems, religious values and cultural norms more than most. In so far as inward direct investment is perceived to interfere with, or emasculate, these norms, it is unwelcome. Hence the desire either to obtain the resources provided by foreign investors through alternative routes or, if this is not possible, to impose strict conditions on the entry and behaviour of foreign affiliates.

The Latin Americans are not alone in these views. Many Middle Eastern and African countries undoubtedly feel the same way. As regards much of the former, the contemporary resurgence of Islamic fundamentalism is dominating all trading relationships with the outside world. Their unwillingness to accept inward direct investment from countries whose economic policies and cultures are perceived to undermine these beliefs is hardly less great than that of the communist world in previous decades. The position of most sub-Saharan African countries is one of a rich and unique cultural heritage, yet with living standards well below that of their trans-Atlantic neighbours. These, of all countries, are most surely in a ‘Catch 22’ situation. They desperately need the direct investment which the MNEs are able to provide, but, apart from a few resource-rich countries, they have few complementary assets or markets to make such an investment profitable. They are very much in Stage 1 of the IDP illustrated in Chapter 10. In so far as dependence is an issue at all, it is a luxury which the ordinary African can ill afford to pay for.

By contrast, some East Asian countries – notably Taiwan and South Korea – possess enough resources and markets of their own – including the key resource of organisational ability – to be selective in their choice of inward direct investment, while avoiding an
unacceptable level of *dependencia*. At the same time, they seem to be more confident about their competence to protect their political sovereignty and cultural identity than are the Latin Americans, while their institutional infrastructure and economic policies correspond much more closely to those of Western Europe and North America. In general, the geographical origin of inbound investment is fairly diversified, although most East Asian countries are well aware of being too dependent on Japan.

There is one other point that should be made. Chapter 7 suggested that the internationalisation of production might affect not only the level and structure of a country’s economic sovereignty, but also its reaction to that effect. More particularly, the movement towards regional integration in several parts of the world is, in part at least, a response to the globalisation of wealth-creating activities. In essence, such globalisation has increased both the costs and gains of economic independence. To reap the gains, countries have had to incur the costs of relinquishing part of their economic and political sovereignty. However, in some cases, it is more a question of restructuring their existing economic dependence and sovereignty, since the costs of not becoming part of a customs union could be an increase of a different kind of dependence. Not all MNEs welcome such changes, particularly those which were previously producing in protected markets. But in so far as their desire for global or regional corporate integration has any influence, it is forcing countries to collaborate with each other, so that these gains can become a reality and, for the most part, be captured by the citizens of those countries.

We conclude that the impact of MNEs on the economic autonomy of nation states cannot be easily assessed or generalised about. Many – and probably most – of the changes in the sovereignty of nation states which have occurred in the past 30 years have had nothing to do with the action of MNEs *per se*. Instead, the main causes have been technological, institutional and political changes. At the same time, MNEs have helped fashion these changes and have been the instruments in implementing them. To this extent, they have impinged upon the economic autonomy of nation states – sometimes increasing it, sometimes lessening it, and sometimes changing its form. But no less so have the attitudes and policies of national governments, in so far as they have affected the need or willingness of MNEs to enter into cross-border arrangements, and, by doing so, impact on their own freedom of decision taking.

18.3 MNEs AND STRATEGIC INTERESTS

Although operating primarily in the economic arena, MNEs may sometimes have important strategic consequences for the countries in which they operate. By strategic capability, we essentially mean the ability of a country to pursue its political, economic and cultural goals. The fear that outward or inward direct investment may advance the strategic interests of another state is perhaps best articulated in the field of defence-related activities. While the participation of foreign MNEs in these activities is strictly limited by most host countries, lest this could be used to strengthen the military or political strength of the investing country, outbound investment may be disallowed or discouraged lest the defence capacity of a potentially unfriendly power is strengthened.

In non-defence related sectors, restrictions on FDI have historically been imposed by a number of countries in broadcasting, telecommunications and the energy sector, due to
their strategic importance. Other sectors, such as healthcare and education, have often been state run, and therefore also effectively closed to inbound investment. However, in the past two decades, privatisation and liberalisation of the markets where state-run monopolies used to be dominant, has opened up many previously closed markets to foreign MNEs.

Since the entry of MNE investment is likely to have an impact on local culture, some countries have also chosen to exclude FDI from culturally sensitive sectors such as broadcasting, film or print media. For example, the Investment Canada Act has provisions that require foreign investments in the cultural industries, including magazine publishing, to be compatible with national cultural policies. In the Uruguay Round of GATT negotiations, the EU, led by France, argued for exceptions for sectors such as film and audiovisual goods and services, which came to be known as the ‘cultural exception’.

The geopolitical situation following 9/11, high oil prices, and a growing concern over climate change have again served to highlight the strategic importance of the energy sector. In the EU, new concerns concerning energy security were raised in 2006, when Russia temporarily cut the natural gas supply to Ukraine as a political gesture. At the same time, the activities of Chinese MNEs in mining and energy-related fields in Africa have attracted attention, particularly in war-torn countries such as Sudan. In countries such as Venezuela and Bolivia, new leftist governments have pursued policies of nationalisation and renegotiated contracts with foreign MNEs (UNCTAD, 2007).

In the US, the War on Terror has underlined the dangers inherent on the reliance on, or extensive importation of, oil. However, in spite of its strategic importance, there have historically been no restrictions on inward investment in the energy sector in the US, due to the inherently global nature of the industry. Instead, policy has focused on obtaining reciprocal rights of access to the sources of oil and gas controlled by foreign investors (Graham and Marchick, 2006:13). This is in contrast to other sectors, such as broadcasting and telecommunications and aviation, where limits on inward investment have been commonplace.

18.3.1 National Security

Perhaps the most sensitive issue surrounding the effects of MNE activity is its perceived impact on national security. National security means the ability of a country to protect its sovereignty of action, especially in times of aggressive and hostile actions by other countries. Even the most liberal of countries, which otherwise practise a policy of neutrality towards inward investment, impose restrictions on the participation of foreign firms in their security-sensitive sectors. Even before the current focus on security-related issues, such restrictions were quite prevalent, in developed countries such as the US, France, Japan and Israel, as well as in a number of emerging economies such as Brazil, China, India, Russia and Pakistan (Vernon, 1998:46).

In the US, control over FDI for security reasons dates back to the Trading with the Enemy Act (TWEA) of 1917. In spite of its name, TWEA was not restricted to trading activities, but embraced a broad range of interventions, including the sequestration of enemy assets at times of war or a national emergency. The background to the Act was a growing concern over the dominance of German investors, particularly in the chemicals sector, which was central to the production of ammunition. Once the US entered the First
World War, the Act was used to seize German assets, and to place them under the administration of the Custodian of Alien Properties. This seizure of assets also extended to intangible property rights, and the patents held by German firms were sold by the Custodian of Alien Properties to a foundation, which in turn licensed them to US firms (Graham and Marchick, 2006:6).

During the Second World War, the US again used the TWEA to seize German and Japanese assets, although this time there were fewer assets to seize, particularly from Germany, since FDI in the inter-war years had been modest, and had mostly consisted of licensing. Additionally, anti-trust laws were also used to control foreign investment in the US already before the outbreak of the war. In 1977, the International Emergency Economic Powers Act (IEEPA) was passed, which amended the TWEA regarding the seizure of foreign assets, so that such action could only be taken at a time of a declared emergency, and once the emergency has passed, title to the assets had to be returned to the original owners (ibid.:21).

In the 1960s and 1970s, inward FDI to the US continued to grow more rapidly than outward FDI, and by 1984, the US had gone from being a net outward investor to being a net inward investor. In contrast to earlier European investment, Japanese MNE activity, which increased rapidly in the 1980s, was visibly foreign, and involved M&As rather than greenfield investment, thus prompting concerns about diminishing technological capabilities and a ‘hollowing out’ of the US economy.

In response to such concerns, the Exon-Florio Amendment of 1988, in its original form, would have authorised the President to review foreign investments either for economic or for security reasons, if these were deemed to be detrimental to the interests of US business (ibid.:42). However, the provision for a review on economic grounds was removed before the final passage of the bill, and thus the Exon-Florio Amendment only allows the President of the US to block a merger, acquisition or takeover of US persons (sic) by foreign interests, if such actions are perceived to be a threat to national security.

Although the focus of the Exon-Florio Amendment is fairly specific, it does not provide a definition of what constitutes a threat to national security. Various attempts have been made to amend the bill, but the only amendment to have been passed to date is the Byrd Amendment of 1993, which authorised an automatic review of foreign acquisitions that involve government ownership, and that might pose a threat to national security. In recent years, these provisions have been evoked with increasing frequency in connection with inbound Chinese investment, most of which is perceived to be indirectly government controlled (ibid.:104). However, the lack of accurate information makes the influence and extent of government ownership difficult to assess. For example, Lenovo, which successfully took over the PC business of IBM in 2005, is indirectly connected to the Chinese government, due to the links of its largest shareholder Legend Holdings to the Chinese Academy of Sciences (Dunning and Lundan, 2008).

The Exon-Florio Amendment provides for an initial 30-day period for the Committee on Foreign Investment in the United States (CFIUS) to review a proposed investment, followed, if necessary, by a 45-day period of investigation. Recent controversial cases that have come under CFIUS review include the Dubai Ports World takeover of the British firm P&O, which operates ports in the US, and the bid in 2005 for the US firm Unocal by the China National Offshore Oil Corporation (CNOOC). In both cases, the nationality of the foreign investor was a cause of concern. In the case of Dubai Ports World, the issue
was control exercised from the United Arab Emirates, and the strategic importance of port security in the post-9-11 world. Although the takeover had already been cleared following the initial review, in the light of the ensuing controversy, the investor asked for a further 45-day investigation by the CFIUS. As a result of the second review, Dubai Ports World agreed to sell the port terminals to a US firm within six months (Graham and Marchick, 2006:141).

The case of CNOOC is more reminiscent of the late 1980s, when the Exon-Florio Amendment was first being debated. Although the flow of Chinese investment has not yet reached the volume of its Japanese counterpart, both surges in MNE activity took place in the context of protracted current account imbalances, and an undervalued currency of the investor’s home country. While the Plaza agreement of 1985 produced the desired result of an appreciating yen, no substantial adjustment in the exchange value of the renminbi has occurred to date, and consequently, in some US policy circles, China is seen as flouting the ‘rules of the game’ of the global economy. In the end, CNOOC had to withdraw its offer in the light of political opposition, although the security justification was not clear cut, particularly in connection with the established US policy of reciprocal access to energy investment (ibid.:134).

Two other recent cases are worth mentioning here, since they illustrate the increasingly broad scope of issues related to national security. These are the acquisition of Lucent Technologies (including Bell Laboratories) by Alcatel of France in 2006, and a Nokia–Siemens joint venture to supply telecommunications equipment concluded in 2007. Both deals were reviewed and passed by CFIUS without much public controversy, but included the important proviso that the companies agree to restrictions outlined in a ‘mitigations agreement’. In the Lucent case, this concerned specifically the sensitive work that Bell Laboratories conducted for the US government. In the Nokia–Siemens case, which is, after all, a joint venture between two European companies, it concerned the conditions under which foreigners could work on US telecommunications equipment and software.848

Outside the US, recent cases (in 2005 or 2006) where security considerations have been raised include the proposed takeover of a Canadian metals firm Noranda by a Chinese buyer Minmetals, where national security concerns and China’s human rights record were given as reasons to block the sale. Another example was a bid for the UK gas supplier Centrica by Gazprom of Russia, where state ownership was cited as a primary objection. In neither case did the government step in to block the deal. However, in India, an attempt by the Chinese firm Huawei to set up a telecommunications manufacturing affiliate was blocked by the government on national security grounds (UNCTAD, 2006). China’s growing efforts to secure access to key natural resources, and particularly to sources of energy, has also prompted some consternation in the case of its activities in ‘rogue states’ such as Iran, Myanmar and Sudan that face sanctions or embargoes by the US, Japan and the EU (Zweig and Jianhai, 2005).

The basic concern about the security implications of allowing domestic industries to fall into foreign hands are twofold. First, that foreign affiliates – either deliberately or unwittingly – might engage in activities which could be harmful to the security of the host country should it and the home government come into conflict with each other. Graham and Krugman (1989), who investigated this possibility in respect of the activities of foreign companies in the US, concluded that it was unlikely. For example, in the Second
World War they found no evidence that US subsidiaries operated as a kind of fifth column on behalf of their home country.849

Indeed, foreign investment might even be critical to the success of the war effort. In the aftermath of the First World War, the US government imposed security-related restrictions on non-resident investment in broadcasting, telecommunications, aviation, shipping and oil, but not in the chemicals sector, where the knowledge and capabilities of foreign (and most particularly German) firms was thought to be critical to the development of better ammunitions for the US Navy (Graham and Marchick, 2006:8). Similarly, the technological capabilities transferred by the early US investors such as Ford, GM, RCA and Western Electric to Japan are thought to have made it possible for Japan’s military government to pursue autarkic policies in the 1930s (Yamamura, cited in Westney, 2001).

Second, foreign affiliates might be used to impair the military efforts of a host nation. Graham and Krugman (1989) cite the example of multinational oil companies working with the US State Department in the 1930s and early 1940s to prevent Japan from building petroleum reserves.

In most cases, such overt activities by MNEs can be blocked or overcome by host governments. Exceptions include those involving direct extra-territoriality on the part of home governments.850 This is because they are fairly transparent. Much more difficult to deal with are those cases – which often involve friendly powers – in which foreign subsidiaries engage in activities which are welcome on economic grounds, but not always on security grounds. Much FDI in the electronics, telecommunications and automotive industries falls into this category. They are liked whenever they bring new technological or organisational know-how and help to improve the host country’s competitive position. They are less appreciated as suppliers of defence equipment to host governments, in so far as any knowledge gained by them may possibly be used to the benefit of the defence interests of the home country.

The host country is, then, faced with a dilemma. To exclude the foreign firm from defence-related activities may not only weaken its ability to supply products to the private sector, but also (particularly where no local firms are able to supply the defence equipment) weaken the defence base itself. This dilemma is particularly acute where a foreign firm acquires a domestic entity which was previously producing defence equipment, but is no longer able to do so. Even if a foreign affiliate is allowed to supply the host government with the equipment, its position may still not be assured wherever a home government has the power to stop it from supplying a foreign government with security-sensitive products.851

The globalisation of production and markets, and the increasing propensity of MNEs to engage in R&D outside their national boundaries, has forced governments to reappraise their policies towards the participation of foreign-owned firms in strategically sensitive activities. As noted in Chapter 12, opportunities for foreign participation in government-sponsored R&D schemes have greatly increased over the past decade, as it has become accepted that such restrictions were largely counterproductive. In a world in which cross-border direct investment fulfils a similar role to international trade, any attempt to capture only its advantages and eliminate its disadvantages is bound to end in retaliatory action. The only case for such a restriction is where trade flows in technology are distorted by protectionist policies, or where the home government is using the R&D policies of its own MNEs to advance its strategic objectives.
18.4 THE CULTURAL AND INSTITUTIONAL INFLUENCE OF MNEs

In Chapter 5 we introduced a framework within which the institutions influencing MNE activity, as well as those influenced by it, can be analysed. The informal institutions affecting MNE activity include the norms, values, conventions, practices and artefacts derived from the national culture of the home country of the MNE, and those of other countries in which it operates. Such institutions also encompass corporate culture, or the norms, values and practices that are specific to one firm. MNEs act as conduits for the transfer of such institutions across borders, and in doing so, they are likely to influence the culture of their host countries, as well as help to change practices in the home country.

Specifically, an MNE may help to refashion (business) culture in a particular country in two ways. The first is by the deliberate injection of norms and practices from its home country, and those of other countries in which it operates, into the behaviour of its affiliates and in its dealings with local firms and governments. The second route is more indirect, and results from exposing the nationals of the countries in which they operate to the practices of other countries. Consequently, the extent of transformation brought about by MNEs is likely to be related to the extent of MNE activity, which is influenced by the economic openness of the country, and the cultural and institutional distance between the home and host countries. For example, the US in the early 21st century is much less insular than it was 50 years ago. Undoubtedly, part of the reason for this lies in the operations of its own MNEs and those of foreign-owned subsidiaries in the US. Contrast economies such as those of Belgium, Hong Kong and Switzerland, which are heavily involved in international direct investment, with those of China, India and parts of sub-Saharan Africa where the culture is very nationalistic or family orientated.

History is full of illustrations of the impact that foreign cultures have had on national values and patterns of behaviour through colonisation, trade and migration. Although the immediate impact of MNE activity on business culture is likely to show itself in specific functional areas, such as organisation, work methods, incentives and industrial relations, in the long run, it may embrace wider issues such as the ethos of work and entrepreneurship, attitudes towards rewards and authority, concepts of fairness and justice, and the role of government. Examples of the former include the introduction of the multidivisional or M-form of organisation in the US and Europe in the 1920s and 1930s (Chandler, 1990; Kogut and Parkinson, 1998), the transfer of US management models and incentive structures from the US to Europe in the 1950s and 1960s (Kipping and Bjarnar, 1998; Zeitlin and Herrigel, 2000), and the transplantation of Japanese work practices and quality control procedures into the US and Europe in the 1980s (Westney, 2001). Examples of the latter include the introduction of an anti-union culture, centred on individual achievement and individual rewards, and challenges to the traditional work–life balance to host countries (Guillén, 2000b; Peoples and Sugden, 2000).

However, prior to the interest sparked by the Japanese ‘transplants’, there was little research directed at the cross-border transfer of organisational systems, and there is still not very much attention being paid to ‘reverse’ transfer, or the changes that MNEs are inducing in their home countries as a result of their experiences abroad. A recent exception is that of Ozawa (2005:206), who has examined how US MNEs have contributed to the institutional transformation ongoing in Japan. In his words ‘foreign multinationals...
which are now eagerly welcomed in Japan to revitalise its corporate business sector are serving as renovators that can remodel Japan’s inner set of institutions more closely in accordance with the norms of the outer set’.

The well-known work of Hofstede (1980, 2001) has demonstrated how national differences in cultural values, and especially the contrast between Confucian dynamism and Western-style individualism, may affect economic performance. At the same time, national governments have critically influenced the extent to which their countries are open to foreign influences. However, few such changes in government policy have been as dramatic as those that have occurred since the 1970s in Central and Eastern Europe, and in East Asia and China. In both instances, MNEs are playing an important role as transferors and disseminators of business culture, which, over time, may shape institutional and personal values, human motivation and the social organisation of production.

One of the ways in which MNEs may influence culture is through education and training. As Chapter 15 has shown, MNEs have frequently been trailblazers in upgrading vocational training. Another is about values and performance. Many years ago, Gunnar Myrdal (1970) identified the kinds of values or qualities necessary for economic development. Few countries possess all these values, but most, including those which are home to the leading MNEs, enjoy at least some of them.

At the same time, the translation and adaptation of these advantages to a foreign culture may be quite a costly exercise, as there is often a substantial learning process on the part of both MNEs and host countries involved. The successful transplant of cultures by MNEs may sometimes best be undertaken within fully owned hierarchies, sometimes by joint ventures, and sometimes by non-equity contracts. Each route of organisation brings its own benefits but also incurs its own transaction costs.

Many of the conflicts of interest between MNEs and host countries arise from differences in the (entrepreneurial) cultural perspectives of MNEs and recipient countries. Where psychic or institutional distance is great, the more likely it is that both MNEs and host governments will have difficulties in adjusting to each other’s needs, values and aspirations. At the same time, as we discussed in Chapter 5, mimetic pressures cause firms to adopt similar practices as those that prevail in the human or physical environment in which they operate. MNE affiliates seek to gain legitimacy both in the eyes of their parent companies, and within the context of the values and institutions of the host country.

The spillover effects of cross-cultural differences are, however, even wider. In some ways, the social impact is comparable with that arising from the urbanisation of previously agricultural communities. The MNE introduces new lifestyles and new patterns of work, fosters new kinds of loyalties, introduces new institutions and imposes new forms of authority and establishes new social classes. It can lead both to cooperative and knowledge-sharing multi-firm relationships as well as to competitive and largely arm’s-length relationships. The dual economy has long been a feature of developing economies. MNEs, although fashioning new industrial sectors and modernising others, may sometimes exacerbate the cultural differences between these and the traditional sectors, and the resulting social adjustment problems.

None the less, the MNE is likely to be only one of many purveyors of cultural change. Far more important influences have been technological and social advances, which have led to an enormous growth in international travel, tourism and all forms of trans-border communication – notably through the printed word, broadcasting and television.
Whether Coca-Cola is imported into Ghana or produced by a Ghanaian franchisee is not likely to make much difference to the attitudes of local consumers to the image which has grown up around the product. Whether tourists in Thailand stay at a 5-star French managed hotel or a 5-star Thai hotel is hardly going to affect their patterns of behaviour, and how that behaviour impacts on the local population. Such studies as have been conducted on the role of tourist-related MNEs on local culture suggest that there is little which can be specifically attributed to their foreignness or their multinationality, although international airlines, tour operators, car rental companies and hotels are frequently the modality by which the foreign tourist interacts with the local culture. In any event, the amount of FDI in tourist-related activities is relatively small – especially in developing countries.\(^{859}\)

The assertion that MNEs promote income inequality and excessive product differentiation through branding again often fails to distinguish between the presence of a foreign company and the influence it may exert through other means. Kelloggs can still advertise its processed cereal products on Brazilian or Dutch TV, whether or not it produces these products in these countries. Mercedes cars are imported into Malaysia as well as being assembled locally. Many goods sold in India, Nigeria and Mexico with the trademark of a British or Swiss firm may be produced by a locally owned firm under licence. Culturally insensitive sales or marketing practices by foreign companies in the Philippines, Lesotho, or Columbia may be channelled through locally owned distributing agents. At the same time, the very fact that many MNEs trade in ‘lifestyle’ products that affluent consumers value as part of their identity, suggests that, if support for environmental protection or labour rights becomes incorporated into these lifestyles, MNEs will want to supply products that reflect these preferences as well. This point is taken up again later in the chapter.

Of course, it is likely that the presence of MNE affiliates may have its own specific cultural impact, but it is by no means certain that this will be a negative one as is so often assumed. When exports from a German or Canadian MNE to Indonesia are replaced by production undertaken in a joint venture in that country, it could well be that the nature of the product and the practices surrounding its production and marketing become localised. Similarly, a 100%-owned Dutch manufacturing affiliate set up in India to supply the local market may be much more sensitive to the local tastes and work practices than the marketing department of the firm in the Netherlands. In situations where a foreign-owned firm finds it in its interest to develop a culture acceptable to the host country, then its presence would be beneficial. Moreover, to the extent that MNEs are sometimes trailblazers in producing culturally friendly commodities or production methods, their presence is likely to be welcomed by host governments. Recent efforts by MNEs such as Hindustan Lever to reach low-income markets at the Bottom of the Pyramid are a case in point.

18.5 MNEs AND CORPORATE SOCIAL RESPONSIBILITY

18.5.1 Introduction

The idea of associating social responsibility with large enterprises is in itself not new. When Lever Brothers built the company town of Port Sunlight, for example, it was a
reflection of the beliefs of the company founder, as well as the paternalistic view of responsibility characteristic of the late Victorian era. Indeed, while 19th-century Britain introduced many social improvements, such as a ban on child labour, and restrictions on working hours, the context of CSR was very different from that we see today. As was discussed in Part II, 21st-century MNEs control a wide range of activities that cross national borders, some through equity ownership, and others through cooperative and contractual means. In the contemporary global economy, the products and services offered by MNEs provide the building blocks for shaping the identities and lifestyles of consumers in affluent countries. Indeed, one might even assert that the expectation that MNEs should exercise social responsibility is itself an identity and lifestyle statement (Muchlinski, 2001).

In modern MNEs, social performance is an amalgam of the inputs of a variety of stakeholder groups, such as employees, shareholders, lenders, customers, suppliers, NGOs and governments. As a consequence of varying levels of stakeholder influence, in some industries, as well as some home or host countries, more is expected from MNEs in terms of their social performance than in others. In modern MNEs, social performance is an amalgam of the inputs of a variety of stakeholder groups, such as employees, shareholders, lenders, customers, suppliers, NGOs and governments. As a consequence of varying levels of stakeholder influence, in some industries, as well as some home or host countries, more is expected from MNEs in terms of their social performance than in others. On account of the broad range of stakeholders, the range of issues falling under the rubric of ‘corporate social responsibility’ is also very broad. At its core are issues such as environmental performance and labour standards, and in recent years, more attention has also been placed on poverty alleviation and human rights issues in developing countries. Issues that have only sporadically entered the mainstream of CSR include labour organisation and collective representation, while those related to tax minimisation and transfer pricing are almost never discussed in connection with the social responsibility of MNEs, although their impact on the host countries can be considerable. Furthermore, critics from developing countries have accused the CSR agenda for being centred on issues of interest to developed countries (the lifestyle dimension), rather than on those of immediate concern to people living in developing countries.

Since profit-seeking firms face an inevitable conflict between distributive and wealth-creating activities, some way to reconcile this conflict needs to be found, if a case is to be made for business engagement in CSR. One way is to argue for the ‘business case’ for social responsibility, where the short-term costs of CSR are contrasted with its expected long-term benefits. In other words, if philanthropy is ‘doing good to do good’, the business case for CSR can be expressed as ‘doing good to do well’. The ‘business case’ for social responsibility will be examined in the following subsection, after which we examine the difficulties associated with defining the boundaries of the (voluntary) CSR activities undertaken by MNEs. We then examine the limited evidence available on the effectiveness and impact of CSR, and conclude by assessing the role of governments in enabling the ‘market for virtue’ to deliver on its promise.

### 18.5.2 The ‘Business Case’ for Social Responsibility

The popularity of shareholder value maximisation as an overriding corporate objective has meant that the business case (rather than the moral case) for social responsibility has gained dominance in recent years, at least in the business and management literature. However, it could be argued that the maximisation of shareholder value, and the focus on the business case, do not provide a very conducive environment for the development of a
broad understanding of social responsibility. Indeed, critics such as Ghoshal (Ghoshal and Moran, 1996; Ghoshal, 2005) have argued that there is a pervasive negative ideology underlying much of contemporary management theorising, which includes viewing inter-firm relationships in terms of controlling opportunism, rather than an opportunity to build trust, and viewing firms solely as instruments for shareholder value maximisation.

While the explicit attention to shareholder value in recent years has made management more transparent and efficient in pursuing its economic goals as agents of the shareholders, stringent application of this doctrine is almost certain to distort the incentives facing the decision makers. More notably, if the dominant belief among executives and market analysts is that shareholders demand returns on a quarterly basis, they are likely to receive them, even if those returns are fraudulent, as several recent cases of accounting scandals involving Enron, WorldCom or Ahold attest. In an economic climate dominated by a short-term focus, encouraging MNEs to embrace their social responsibilities is challenging, since the ‘business case’ for many CSR initiatives cannot be adequately demonstrated.

By the same token, there clearly are instances where the ‘business case’ for social responsibility is not without foundation. Perhaps most notably, firms have come to realise that many environmental investments that are made in a timely and comprehensive manner, and that focus on pollution prevention rather than end-of-pipe solutions, improve resource efficiency and result in lower costs of compliance in the long run (Porter and van der Linde, 1995; Berry and Rondinelli, 1998; Reinhardt, 1999). Improving labour standards by policies that ban the use of child labour, or by instituting programmes to monitor the working standards in supplier firms, may improve employee morale, help recruitment, and enhance the reputation of the firm (Kolk and Van Tulder, 2004). Further benefits may arise from reducing the risks to the value of the firm’s intangible assets, and its potential for legal liability in the long run.

Different types of CSR activities also have very different cost implications for different industries. The most-polluting industrial sectors also tend to be the most capital intensive, and in such sectors, the dynamics of capital investment is likely to condition the response of firms. In sectors where environmental issues have been very expensive to address, such as pulp and paper, industry-level cooperation to explore the viability of different alternative technologies has proven effective in reducing the uncertainty related to new investment (Lundan, 2004a).

In labour-intensive industries, issues related to labour standards understandably carry much more weight. Here much depends on the nature of the relationship between the firm and its suppliers, and particularly the differences between partially or wholly owned subsidiaries, and those between contractual partners. In industries where it is possible to respond to social demands by making incremental adjustments to the production process, either by shifting production locations, or by implementing new organisational standards, the range of possible strategies pursued by firms is greater. Consequently, an industry-level consensus on a desirable approach is more difficult to reach. This can lead to a stalemate, where relatively little progress is made in the absence of demonstrated consumer willingness to pay more for ethically produced products. However, in sectors where profit margins are high due to branding, and where labour costs account for a small proportion of the price of the product, MNEs such as Nike have been able to institute improvements in labour standards without such activities affecting their profitability (Kolk and Van Tulder, 2002).
At the same time, while many social responsibility issues appear to be industry specific, clearly not all firms within a sector respond to the same pressures in a uniform manner. It has been shown, for example, that organisational characteristics, such as the existence of complementary resources and quantitative performance management systems, are associated with better environmental practices (Christmann, 2000; Florida et al., 2001). In terms of our framework introduced in Chapter 5, differences in the CSR performance of firms will reflect differences in cognition and motivation (Oi), as well as available resources and capabilities (Oa and Ot). There is a role for passive philanthropy for some firms, and for a more active engagement for other firms, even stretching to so-called strategic CSR, which aims to link the CSR activities of the MNE with its core competences.\textsuperscript{863}

Although the benefits from CSR are real, their magnitude is difficult to measure, and even more difficult to separate from other factors that contribute to financial performance. Even so, a recently conducted meta-analysis across 52 studies found some cause for optimism, as it revealed a fairly consistent positive association between CSR and financial performance, which included both accounting and market performance (Orlitzky et al., 2003). It appears that while CSR may not pay for itself, it has not been prohibitively expensive either. None the less, it must be said that much of the research is plagued by methodological problems in finding appropriate measures for both social and financial performance, and in controlling for the very real possibility of reverse causality.\textsuperscript{864} Furthermore, the focus on financial performance has helped to reinforce the importance of a ‘business case’ for social responsibility, rather than directing attention to investigating the multiple ways in which large firms interact with their environment, whether for good or bad (Margolis and Walsh, 2003).\textsuperscript{865}

Even if ‘good’ corporate behaviour resulted in some financial benefits, it seems unlikely that these would be large enough to have an identifiable impact on the overall performance of the firm. From an institutional perspective, one would expect that financially successful firms would have both the resources and means (Oa and Ot) as well as the motivation (Oi) to adopt better social policies. A strict interpretation of a ‘business case’ for CSR would suggest that social investments are consistent with shareholder value maximisation only when they can be shown to ‘pay off’ in financial terms. However, a more relaxed interpretation would suggest that the level of responsibility can be set high or low, depending on the extent of stakeholder influence, but that, for a given level of social performance, well-managed firms are likely to reach a lower long-term cost of compliance.

Indeed, while the ‘business case’ is driven by the need to deliver financial rather than social results to shareholders, the evidence suggests that, among the stakeholder groups, some shareholders are also interested in advancing a social and environmental agenda. For example, shareholder groups have been active in calling for better disclosure concerning the exposure of firms to the threats posed by climate change. In practice, social or ethical investment is typically driven by large institutional shareholders such as pension funds. There are two main ways in which ethical investment takes place. One way is through channelling investment to mutual funds that employ positive or negative screens to select an ethical portfolio. The other is by engaging in shareholder activism by buying shares in companies whose behaviour the investors seek to change.\textsuperscript{866}

What greatly complicates the further development of the market for ethical investment is a lack of reliable information. As we have already mentioned, non-financial factors are very difficult to measure, and social responsibility reporting today provides a selective and
incommensurate range of measures to describe what is going on inside the firm. While some countries provide regulatory guidelines on social reporting, in most cases, firms are free to choose what to report and how. The adoption of ISO 14000 standards in MNE supply chains, the publication of codes of conduct, the publication of social performance reports, and a variety of labelling initiatives have been some of the ways in which MNEs have sought to self-regulate their activities (King and Lenox, 2000; Christmann and Taylor, 2001; van Tulder and Kolk, 2001; Lundan, 2004b).

In the end, the development of socially responsible investing requires both that companies report on their non-financial activities in the same way that they report on their financial activities, including threats and opportunities, and that investors take this information into account when they make their decisions, against the short-term pressures normally prevailing in the market (Vogel, 2005).

18.5.3 Whose Standards Should Apply?

The difficulty with proactive social involvement lies in knowing what is too much and what is not enough, since few if any established benchmarks are available (Pearce and Doh, 2005). Depending on the sector and range of countries in which they operate, MNEs are likely to experience a combination of pressures from top-down institutions, such as multilateral agreements, guidelines and national regulatory authorities, and from bottom-up sources, such as customers and NGOs. Some voluntary CSR activity may be prompted by a desire to stay ahead of regulation, or even by a perceived need to forestall future regulation. Other CSR activity may be motivated by a determination to lead the market, or it may simply be in response to specific demands by a powerful stakeholder group.

In general, companies monitor their competitors in the industry, and aim to set their social responsiveness at a level that satisfies external demands, particularly from regulators and NGOs, but does not deviate too far from the established norms in their industry. For some well-known MNEs, such as Shell, Wal-Mart or Nike, their current high profile in some CSR-related activities is traceable to previous instances of bad publicity. On the other hand, some firms may also go beyond what is considered to be the norm, because they are pushed by a committed and persuasive CEO.

Among the firm’s external stakeholders, NGOs in the home country of the MNE, as well as in important host countries, have become an increasingly important force promoting CSR. They do this by directly targeting specific firms and industries, by promoting codes of conduct, and by influencing the content of international multilateral agreements and codes of conduct (Doh and Guay, 2004). Many modern NGOs, like modern MNEs, are global in reach, and different kinds of partnerships with NGOs can form an integral part of the value-creating process of MNEs (Rondinelli and London, 2003; Teegen et al., 2004).

In addition to NGOs, the relationship of MNEs with regulatory institutions has also undergone substantial changes over the past 30 years. Today, national regulatory authorities are less inclined to adopt an adversarial stance, and more likely to engage in negotiation with firms and industry associations (Harrison, 1999; Willman et al., 2003). Among other reasons, this is because, in many industries, MNEs possess significant knowledge related to both technologies and markets that is an essential input to the regulatory process. Indeed, the quality of the regulatory institutions directly affects the MNEs’ cost
of compliance, and a credible governance environment, in the home and host countries, is a precondition for investment that employs advanced technologies and managerial processes, including those intended to improve the social performance of MNEs.

In addition to the influence of civil society and national regulators in the home and host countries, there are multilateral agreements that provide general guidelines for the social responsibilities of MNEs. Chief among these are the OECD Guidelines for Multinational Enterprises (adopted in 1976, and revised in 2000), which oblige the governments of the signatory countries to promote the observance of the guidelines by their MNEs. Specific guidelines against corrupt practices are provided by the OECD Anti-Bribery Convention (adopted in 1997), with governments being responsible for introducing and enforcing legislation at the national level. The UN Global Compact (introduced in 1999) is a voluntary initiative that incorporates essential aspects of the Universal Declaration of Human Rights of the UN, the ILO Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the UN Convention against Corruption. (See Boxes 18.1 and 18.2.) The Global Compact has some 2,500 corporate members, who are expected to set in motion changes in business practices pursuant to the principles, and to report on these in their annual reports or other corporate reporting.

It is in connection with these kinds of obligations that efforts have been made to hold MNEs accountable for human rights violations committed in the course of conducting business, particularly in the natural resource extractive industries. Recent cases involving alleged complicity in human rights violations have involved Shell in Nigeria for condoning government attacks on protesters, Unocal in Burma for the use of forced labour, and BP in Colombia for contracting with military forces known to have a bad human rights record. Although there is a relatively strong shared understanding that the core UN treaties are sufficient to establish an obligation to uphold certain principles of social responsibility, enforcement of these obligations remains problematic. Chapter 19 will discuss one means by which prosecutions against human rights violations have been brought, which is through the extra-territorial application of the US Alien Tort Claims Act.

In the extractive industries such as oil and mining, it is particularly important to consider the links between human rights and corruption, and corruption and transparency (Truelove, 2003). Corruption in general is inimical to good governance, which, in turn, is essential for the protection of human rights. Consequently, efforts to increase transparency, and thereby to reduce corruption, are another way of advancing the cause of human rights. To this end, Publish What You Pay, which is a coalition of NGOs, has promoted the idea that MNEs engaged in natural resource extraction should disclose all the revenue they pay to host governments. Another initiative, targeting the government side, is the Extractive Industries Transparency Initiative (EITI), promoted by the UK government, which encourages disclosure by host governments of their natural resource revenues. Additionally, anti-corruption provisions have also been included in some of the newer trade and investment agreements, such as the free trade agreement between the US and Chile (ibid., 2003). At the same time, the entry of MNEs from China and India into the extractive sectors in Africa and Latin America has raised concerns about the extent to which such firms are willing to join in some of the efforts outlined above (UNCTAD, 2007).
18.5.4 Evidence on the Contribution of MNEs to Social Issues

Taking a very broad view of social responsibility, the empirical evidence reviewed in Part III paints a reasonably consistent picture at least in some respects. MNEs are likely to benefit the host country by providing employment, paying higher wages, providing
training and transferring technology. Depending on the host country’s absorptive and institutional capacity, and the extent and type of incentives to attract investment, entry by an MNE may also induce additional employment creation in related sectors, create technological spillovers, and contribute to the tax revenue of the host country. Furthermore, we reviewed evidence showing that better governance and higher standards, including environmental and labour regulations, are more likely to induce foreign investment rather than to repel it.

Indeed, in the light of the existing evidence, it would appear that attacking MNEs as the source of environmental and social problems in many cases amounts to targeting the ‘wrong enemy’. The growth in global consumption places a burden on environmental resources everywhere, while poverty and bad governance deny many people the opportunity to

---

**BOX 18.2 THE PRINCIPLES OF THE UN GLOBAL COMPACT**

**Human Rights**

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
Principle 2: make sure that they are not complicit in human rights abuses.

**Labour Standards**

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
Principle 4: the elimination of all forms of forced and compulsory labour;
Principle 5: the effective abolition of child labour; and

**Environment**

Principle 7: Businesses should support a precautionary approach to environmental challenges;
Principle 8: undertake initiatives to promote greater environmental responsibility; and
Principle 9: encourage the development and diffusion of environmentally friendly technologies.

**Anti-corruption**

Principle 10: Businesses should work against all forms of corruption, including extortion and bribery.

*Source: [www.unglobalcompact.org](http://www.unglobalcompact.org).*
participate fully in social and political activity, and to lead a productive life. While none of these factors may be directly affected by the presence or absence of MNEs, by virtue of the technologies and organisational capabilities available to them, and aided by the better means of communication and transportation, MNEs are frequently instrumental in making consumption more widely accessible.

The past couple of decades have seen considerable improvement in both environmental and labour standards. In the most-polluting industries, new technologies have been adopted that make production much less polluting. With few exceptions, the feared relocation of industrial production to pollution havens has not taken place, and in the most-polluting industries, such as pulp and paper, mining and oil, MNE have introduced considerable improvements to their production processes.875

The development of new renewable sources of energy that have low capital requirements, such as solar and wind, and the use of global markets to trade greenhouse gas emissions, are resulting not only in reduced emissions, but are also facilitating the transfer of clean technologies to developing countries.876 Certification schemes, such as the FSC standard of the Forest Stewardship Council, are gaining broader acceptance in the marketplace, and have reduced the demand for products made from unsustainably harvested wood.877

As regards labour standards, Moran (2003) presents evidence that the export success of many developing countries has resulted in parallel improvements in worker treatment in factories supplying clothing, athletic equipment, footwear and rugs. Even on the controversial issue of the possibilities for union organising, some progress has been made over the past decade. Furthermore, according to a recent report by the ILO (2006), the number of child labourers fell by 11% in 2000–04, while that of children in hazardous work decreased by 26%. The quality of life has also improved for the families of the coffee and cocoa growers participating in fair trade schemes.878

While we would then conclude that MNEs, in general, have not been the cause of the social ills that many host countries are experiencing, and that, in many cases, they have improved local conditions, it is still a leap to go from this to suggesting, as a group of scholars has done recently, that MNEs should directly help to alleviate poverty by capturing new markets at the Bottom of the Pyramid.879 Specifically, in a series of papers, Prahalad and Hart (Hart and Christensen, 2002; Prahalad and Lieberthal, 2003; London and Hart, 2004) have argued that by innovating new products, services and methods of distribution for the large and underserved market of the poor, and by engaging in non-traditional partnerships with NGOs, MNEs operating in saturated markets can reinvigorate themselves. By bringing efficient distribution and global supply chains to the reach of the 4 billion people living on less than US$2,000 (PPP) a year, it has been further asserted that MNEs can capture new markets while stretching the buying power of the poor by introducing more product variety, lower prices and better quality (Prahalad and Hammond, 2002).

Indeed, some MNEs, most notably Hindustan Lever, the Indian affiliate of Unilever, have made considerable advances in addressing the very different consumer needs in LDCs by devising new ways of packaging that are cheaper, and new ways of distribution that are not as investment intensive. However, these firms have been in the minority, because the adjustment costs required to reach the markets at the Bottom of the Pyramid make it difficult for MNEs that exploit global scale and scope economies to do so.
economically. While the emerging economies of Brazil, Russia, India and China are likely to offer substantial new markets for MNEs selling consumer goods, most of this activity is likely to be concentrated in the more-affluent urban markets, and not reach the rural poor.

Other examples of initiatives operating at the Bottom of the Pyramid include micro-financing programmes. The best-known among these is the Grameen Bank of Bangladesh, which makes small loans to mostly female entrepreneurs in rural areas. Recently, Grameen has expanded its activities to endeavours such as Grameen Telecom, which provides ways of financing the purchase of mobile phones by very low-income consumers (Hart and Christensen, 2002). Instead of relying on collateral, micro-financing schemes generally rely on detailed information about the social context of the applicant when granting the loan. In a sense, they are successors to the soft loan societies that funded immigrant entrepreneurs in cities such as New York and London in the late 19th and early 20th centuries. Like the soft loan societies, modern micro-financing operations often enjoy low rates of default, although depending on the circumstances, they may charge relatively high rates of interest.880

While there is little doubt that serving low-income markets can be done profitably by some firms, the extent to which this can improve the quality of life for the poor in a sustained manner is still an open question.881 For example, the entry of MNEs into wholesaling and distribution in the least developed markets implies significant costs of adjustment, by shifting resources from an inefficient retail sector to other areas of the economy. The extent to which this transition can be achieved without extensive social disruption critically depends on the degree of social cohesion, and the ability of the recipient governments to provide education and other social provisions to ease the transition. Since the poorest countries are typically those in which social cohesion is low, and in which government institutions are likely to be the least effective, the transformational role of MNEs can be significant, but their long-term contribution to development is far from certain.

The final example we might mention concerns the reduction in the price of HIV/AIDS medications in the poorest countries. While in many ways, this issue of pharmaceutical pricing is more of a triumph of the NGOs and of the growing scientific prowess and political influence of countries such as Brazil and India, rather than of the pharmaceutical firms themselves, MNEs have played a crucial role in devising new ways to expand the availability of medications that extend beyond the ability to pay.882

18.5.5 Limits to the Market for Virtue

With all of the examples of progress made in recent years, it is easy to overstate the case for CSR. As we have discussed, there is no question that in some cases, benefits arise from CSR activity that partly offset their cost. However, for most firms, addressing social responsibility issues has not conferred a significant competitive edge due to the unwillingness of consumers to pay for more ethically produced products. Indeed, thus far, much of the CSR behaviour of MNEs has been characterised more by an avoidance of the stick than by reaching for the carrot (Lundan, 2004b). The main problem with CSR is the scalability of the concept, given the limited size of what Vogel (2005) calls the ‘market for virtue’. That some firms in some markets have made significant improvements in labour
and environmental standards in a way that is commercially viable does not mean that the same firms can do so in different markets, let alone that other firms would be able to do the same.

In the environmental arena, significant improvements can be made by improving the energy efficiency of production, and by reducing the amount of waste and undesirable byproducts that are generated. In this sense, environmental practices lend themselves quite readily to the kind of win–win scenario in which one can make a ‘business case’ for social responsibility. However, the improvements in labour standards have so far mostly benefited the primary tier of suppliers. Further down the supply chain, when compliance becomes more difficult and costly, the ‘business case’ for CSR gets less compelling. Indeed, as Vogel suggests, the reason why CSR appears to pay is not because the benefits derived from it have been great, but because, so far, the costs associated with it have been relatively minor, and at least some benefit is derived from reduced risk to corporate reputation. However, the only way that the costs would not accumulate as firms pursue further CSR commitments is if the willingness to pay on behalf of consumers is significantly increased, so that firms are not just trying to avoid the stick, but are actually reaching for the carrot.

Apart from the size of the market for virtue, another point made by Vogel is that while voluntary codes and ‘soft’ regulations have had an influence on corporate behaviour, this is not to say that the same improvements might not have resulted from legally binding commitments as well. Indeed, in the case of environmental improvements, in spite of some high-profile activities by NGOs, regulation has been a major driver for change in corporate performance. For example, firms in the Finnish paper industry were influenced by domestic regulation, as well as the changing preferences of consumers towards green products in their primary export market in Germany, when investments in chlorine-free bleaching were being contemplated (Lundan, 2004a). Public sector regulation and enforcement play a critical role in helping firms to identify and define the appropriate boundaries to their CSR activities. The formal and informal institutions of home and host countries underpin the CSR efforts of MNEs, and consequently, using private firms to advance public policy requires strong public institutions.

In addition to providing a ‘level playing field’ for firms, and reducing the uncertainty concerning acceptable performance, regulation may also be useful in allowing consumers to achieve a more socially optimal pattern of consumption. This is the case if the conflict that exists between consumers saying that they expect social responsibility from firms, but are seldom willing to pay for it, is partly due to the collective action problem they face. Rewarding good corporate behaviour with higher prices or increased sales not only requires a great deal of information; it also demands coordinated action and methods to curb free riding. An important role is played here by NGOs in terms of framing the debate and proposing alternatives, but arguably an even greater role is played by elected representatives, who need to balance many conflicting stakeholder demands when setting the priorities for public policy. Due to the complexity of the issues, and the amount of information required, it is possible that, rather than exercising their power as active consumers, people will find it easier to delegate issues of social responsibility to the government, and the associated institutions of enforcement, whether in the form of regulation, or additional taxes on social ‘bads’.

In order to achieve the desired balance between ‘soft’ and ‘hard’ regulation, Vogel (2005) argues that MNEs should not just aim to go beyond compliance, but to engage in
efforts to raise overall standards, and to influence public policy. However, this does not
mean co-optation of firms by regulators or vice versa.\textsuperscript{885} Regulation today is a negotiated
two-way process, in which timetables, as well as technical specifications, are discussed
among all the affected parties. Engagement in standard setting on complex issues, where
MNEs are at the forefront of technological development, is as much a part of the MNE’s
contribution to CSR, as are the activities that are typically featured in CSR reporting.

Of course, leading firms have a competitive motivation to promote their own standards
as regulatory standards, as this would provide them with a competitive advantage over
their rivals. The critical role of the regulator is to ensure that the burden on the lagging
firms is not excessive, but none the less results in an upgrading of standards (Lundan,
2001). Indeed, as Vogel (2005) suggests, the same argument could be extended to manda-
tory non-financial disclosure requirements. Although the most-advanced firms would
have an incentive to argue for their proprietary standards to be adopted, the role of the
government would be to balance the interests of competition and regulation.

Due to the technological, organisational and financial resources that MNEs possess,
they are indispensable in the process of improving social performance in the countries in
which they operate. At the same time, the voluntary CSR activities of firms are rarely
sufficient to ensure acceptable global capitalism. As Vogel puts it in his conclusion: ‘Civil
and government regulation both have a legitimate role to play in improving public welfare.
The former reflects the potential of the market for virtue; the latter recognizes its limits’.
(p. 173)\textsuperscript{886}

18.6 CONCLUSIONS

The argument we have advanced throughout this volume is that MNEs are responsive to
the institutional environment in their home and host countries, and that they also play a
role in defining the ‘rules of the game’. Since societal goals are becoming more multifac-
eted, and as issues related to human welfare spread beyond the material and extend to
those of fairness, sovereignty, security and the environment, so the incentive structures
and enforcement mechanisms initiated by, or imposed on, MNEs become a more important
ingredient of their contribution to the upgrading of the human environment in which
they operate.

We believe that the principal responsibility of corporations is to engage in value-adding
activities and the transactions associated with them in a way that best satisfies the objec-
tives of the society of which they are part. As we have already indicated, these objectives
may extend well beyond the creation of material wealth, and include a range of desirable
social goals such as environmental protection. On the other hand, if there is great demand
for cheap consumption goods, and little real demand for social performance, MNE activ-
ity is likely to reflect this balance as well.

Furthermore, even in cases where MNEs may play a socially beneficial role, they
can only provide a partial remedy, and they cannot provide solutions to major social
problems, whether related to the environment, labour standards or human rights.
Environmental problems that have been decades in the making require political change
and sustained public investment to put right. MNEs can introduce state-of-the-art tech-
nologies in specific sectors, but such investments address only a part of the overall
problem. Similarly, MNEs can improve labour standards in the export-orientated sectors of an economy, but in agriculture and in the domestically orientated sectors, the only way forward is for governments to provide better education and social opportunity for all citizens. In recent years, one might go as far as to say that too many efforts have focused on voluntary initiatives and the ability of the market to deliver solutions, while political efforts have failed. The evidence to date indicates that the market for virtue is limited in size, and that it is critically dependent on the existence of public institutions to sustain itself.

What should we expect from MNEs in terms of social responsibility? The issues of environmental standards and labour standards represent contrasting poles. Industrial pollution is largely an issue of technology transfer, where the technical standards are established by the specialised engineering firms that supply the technology. In general, efficient technology tends to be cleaner, and, provided that sufficient indigenous absorptive capacity is in place, there is every reason to expect an improvement in environmental standards as a result of MNE investment. Indeed, in Chapter 10 we presented evidence that suggests that the ‘pollution haven’ argument simply got it wrong. If MNEs are attracted to developing countries at all, they have strong incentives to employ the same technology they employ elsewhere in order to effectively protect and exploit their O advantages.

Nonetheless, even with improved technology, increasing industrial production and economic growth will inevitably result in higher absolute levels of pollution. Furthermore, environmental quality is at least as much an issue about how to deal with waste, water and air pollution from local sources, and pollution arising from transportation, as it is to do with industrial pollution caused by MNEs. In developing countries, issues related to subsistence farming, illegal logging, and the soot from wood-burning stoves and land clearing contribute to environmental and health problems. These problems are the consequence of poverty and in some cases, of bad governance, and will not be alleviated by the presence of MNEs.

The contribution of MNEs in the case of labour standards is perhaps even more uncertain, possibly reflecting the relative newness of the issue as one of MNE social responsibility. The use of child labour, excessive working hours, and a lack of sufficient attention to health and safety conditions, are all brought about by poverty and a lack of the kinds of substantive freedoms described by Sen (1999). While many MNEs in the sporting goods, textile and furniture sectors have instituted benchmarks of best practice, most of the suppliers fall outside of the ownership influence of the MNE, and even the leading MNEs acknowledge their inability to effectively monitor their entire supply chains. A few of the pioneering MNEs, such as the Dutch clothing firm C&A, have established policies on the monitoring of suppliers, while also providing assistance to them in meeting the required standards. Such initiatives often involve public–private partnerships with local governments to improve standards, but this presupposes that local governments already have policies in place, and are able to tackle the problems and their underlying causes.

Finally, it bears repeating that in contrast to the philanthropic entrepreneurs of the 19th century, the managers of most large MNEs today act as agents of the shareholders. Even if one assumes that investments in CSR are not generally contrary to the interests of the majority of shareholders, the freedom of managers to pursue such initiatives is
understandably curtailed in this context. By contrast, entrepreneurs who spend their own wealth on philanthropic projects are unconstrained in their ability to pursue a chosen course of action. Indeed, the past decade has seen a considerable increase in the number of entrepreneurs with substantial wealth who are still relatively young, and want to be actively involved in solving problems of global magnitude. This is the case with Bill Gates, who has stepped down from the day-to-day management of Microsoft to chair the Bill and Melinda Gates Foundation, which has an endowment of $33 billion. It is also the case with the eponymous foundation set up by Jeff Skoll of Ebay, and Google.org, a foundation set up by Sergey Brin and Larry Page.

Aside from any specific programmes on CSR, there is much cause for optimism as regards the contribution of MNEs to sustainable development by the transfer of technology and managerial best practices. Nonetheless, the essential fact remains that, with the exception of the natural resource sectors, FDI is primarily attracted to regions with good governance, and it is likely to improve conditions only when the conditions in the host country are conducive to that end. So far, the borders of responsibility have extended only partially to include activities outside of the ownership influence of the MNE. There is little indication that MNEs could bridge the gaps in the social infrastructure in countries without good governance, and without governments addressing the issue of fundamental freedoms that enable successful development to take place.
PART IV

Implications for policy

The focus of this part switches from MNEs to governments as the unit of analysis. Chapter 19 considers the changing attitudes of home and host governments towards MNE activities, and the actions taken by them to influence the level and composition of these activities and the pattern of their behaviour. It also discusses the extent to which particular home and host governments have adapted their institutions, and their macro-economic and organisational policies in the light of the globalisation of business activity, and the economic strategies pursued by other governments.

The thrust of the chapter is that not only has the interface between MNEs and governments been one of the prime determinants of the way in which countries have linked themselves to, and benefited from, the increasing globalisation of the world economy over the past half-century, but also that the nature of that relationship has undergone a profound change. This change has been predominantly brought about by four interrelated forces: first, the emergence of new industrial nations – notably South Korea, Taiwan, China, and more recently India – as powerful actors on the world economic scene; second, the increasing pace of technological and organisational advance and the advent of e-commerce; third, the growing liberalisation of the world macroeconomic environment, and the movement towards closer economic interdependence between nations; and fourth, the emergence of a globally organised civil society.

While, in the 1960s and 1970s, the main thrust of governments was to maximise the direct economic rent from inward investment, and to ensure that MNEs provided the right kinds of resources and capabilities to promote their economic development and restructuring, since the 1980s, governments have increasingly come to view MNEs as a means by which they can upgrade the competitiveness of their domestic resources and capabilities, and evolve a pattern of development which is consistent with their long-term dynamic comparative advantage. To do this, the chapter argues that the economic function of government has shifted from one of intervention in particular markets to counteract the structurally distorting behaviour of firms or special-interest groups, to one of ensuring that the market system operates at the lowest possible transaction costs to its participants in a socially acceptable way. To the extent that MNEs are a key influence both in the ways in which resources are located across national boundaries and in those in which these activities are organised, they directly affect, and are affected by, domestic government policies.
But, as Chapter 20 shows, not always can the unilateral policies of governments achieve their objectives because of the ability of MNEs to avoid, or exploit, country-specific differences in the former’s actions. In some cases, these may be the result of market forces, or they might be guided by different social objectives (for example, with respect to the environment). In others, there may be deliberate strategies by governments to transfer the economic rent of MNE activity from one country to another – and to do so by policies which, at the end of the day, may prove as structurally distorting as actions taken by firms or special-interest groups. Examples include the provision of some kinds of investment incentives and export subsidies, as well as the imposition of tariffs and import quotas. To circumvent an unacceptable distribution of rents between countries, or between particular countries and MNEs, some kind of supra-national action may be called for. The various forms of such action and their likely effectiveness in influencing the pattern of MNE activity and behaviour are identified and discussed in Chapter 20. *Inter alia* the chapter suggests that attitudes formed and action taken at a regional level (by the EU, NAFTA, and so on) and at an international level (by such organisations as the WTO) have become relatively more important influences on the disposition of MNE activity over the past decade.
19. Governments and MNE activity: the unilateral response

19.1 INTRODUCTION

Part III examined some of the ways in which the value-added activities of MNEs might impact on the home and host economies in which they operated. It also dealt with some issues of policies related to specific impact areas. The next two chapters will describe and analyse the more general attitudes and reactions of national governments, regional authorities and international organisations to the perceived consequences of MNE activity. These chapters also discuss some of the measures taken by them to modify either the extent and form of this activity, or their own institutions, strategies and policies in the light of it.

At the outset, however, it is worth repeating the point made earlier, that the economic effects of MNE activity – in particular, home or host countries – must be evaluated, first, in terms of the opportunity cost of the resources and capabilities used, and second, by reference to the variables under the control of the policy makers who determine that activity. In other words, the structure and performance of foreign-owned firms in a particular host country in time \( t \) is partly a function of the institutions and the macro- and micro-management policies pursued by the government in the country in time \( t - 1 \). If the economic signalling of governments is inefficient or distorted, then the responses of MNEs will be also. In one sense at least, a government’s actions towards MNEs are the outcome of its own past economic and political strategies. This lesson has only recently been learned by some governments, who are now reappraising their incentive structures and macro-organisational policies in the light of the globalisation of markets and production.

Although the interaction between governments and MNEs is a dynamic and iterative process, it is possible to identify the main attitudes formed, and actions taken by governments, both towards, and as a consequence of, MNE activity. It is also possible to explain why such attitudes and actions differ between countries and even in the same country towards different types of foreign investors, or towards the same foreign investors over time. Furthermore, it is possible to pinpoint the opportunities and constraints facing national governments and regional authorities in their attempts to relate the level and pattern of inward and outward direct investment, and the operating behaviour of MNE affiliates, to their domestic economic and social objectives.

In doing so, we shall not attempt even to summarise the very considerable literature which has built up over the past three decades or more on the laws, regulations and policies implemented by home and host governments towards FDI and MNEs. For the interested reader, one of the best sources of data is that compiled and set out in UNCTAD’s annual World Investment Report.\(^{890}\) Rather, we shall attempt to offer some generalisations
and illustrations about the nature of the interaction between governments and MNEs, and how this has changed over the past 40 years. In doing so, we shall continue to use the theoretical underpinning of earlier chapters. Indeed, we shall argue that the OLI paradigm offers a useful framework for understanding both the nature and outcome of government–MNE interaction.

19.2 SOME THEORETICAL ISSUES

19.2.1 A Further Application of the OLI Paradigm

Why should national governments wish to modify their formal or informal institutions, or policies, either to affect the behaviour of MNEs or as a result of their increasing presence in the global economy? In terms of the eclectic paradigm, the answer rests, first, in the distinctive O-specific advantages of MNEs and the way in which they augment or combine these assets with the indigenous resources, competences and intermediate products of the countries in which they are producing; and second, in the knowledge that, by their actions, governments may be able not only to influence the O advantages of their own MNEs (or potential MNEs), but also the attractiveness of their own L-specific assets to inward investors. Governments, by their abilities to create new, or modify existing incentive structures, and influence market conditions and/or the efficiency of hierarchies, may also affect the capacity and willingness of both their own and foreign firms to internalise cross-border markets and to conclude collaborative alliances with foreign firms.

It is possible to formulate a number of propositions which relate the extent and form of government action to the configuration of OLI advantages facing MNEs and to its own objectives. Consider, as examples, just five propositions. Proposition 1 is that ceteris paribus the fewer the distinctive O advantages of MNEs (qua MNEs) the less likely it is that any actions by governments will be specifically directed towards such firms. Proposition 2 is that ceteris paribus the greater the inter-country competition for investment, both by foreign- and domestic-based MNEs, and the more ‘footloose’ such investment is, the more governments of any one country will need to ensure that their L-bound assets are at least as attractive as those of its competitors. Proposition 3 is that the greater the attractions of a host country’s resources, capabilities or markets to MNEs and the more the competition between MNEs for these resources, capabilities or markets, the more likely it is that the government of that country will be able to implement actions to extract the maximum benefits from such MNEs. Proposition 4 is that the more the MNE values its O-specific advantages and the more they are systemic by nature, the less likely they are to be willing to sacrifice hierarchical control over them or to conclude cooperative ventures with foreign firms. Proposition 5 is that where MNEs are seeking to augment their O advantages and/or to become global players, the more they will choose to conclude alliances with foreign firms best able to supply the assets, competences or markets they need.

Each of these propositions suggests that government action to affect the level and pattern of value-added activities by MNEs will, first and foremost, be a function of the interaction between the configuration of the L-specific assets, including institutional
assets, under their jurisdiction, and the O-specific advantages of MNEs. Second, it will depend upon the government's evaluation of the likely impact of this interaction on their economic and other goals, as well as on the strategies they adopt to achieve these goals. Third, the ability of governments to modify their actions successfully depends, first, on the extent to which these actions are perceived by MNEs to advance or hinder their global or regional corporate objectives, and second, on the bargaining power of governments vis-à-vis that of the MNEs.

In examining the actions taken by governments over the past four decades as they have affected or have been affected by outward and inward direct investment, we will be especially interested in the motives for these actions, and the extent to which they are symbiotic or anti-symbiotic to those which MNEs perceive to be in their own best interests. Indeed, we shall suggest that, for much of the post-war period, the relationship between MNEs and most governments has been more confrontational than cooperative. Usually this combative approach has reflected the different goals sought by MNEs and governments. However, even where MNEs are perceived to benefit the countries in which they operate, governments have sought to ensure that their own share of the economic rent created by their value added is maximised.

As we have seen in previous chapters, the consequences of the globalisation of markets and production for individual countries have been mixed. Usually a trade-off is involved as some economic and social objectives are advanced and others inhibited. Frequently, governments have sought (not with great success, one might add) to achieve only the 'best of all possible worlds' from all kinds of MNE activity. This has led them to take a bevy of actions, most of which have failed to meet their objectives.

Unlike MNEs, which have broadly similar economic objectives, at least as far as their activities in toto are concerned, governments have a variety of economic and other goals. Some of these goals, and the priorities assigned to them, are likely to be consistent with those of MNEs, for example, the opening up of new markets and the upgrading of local resources and capabilities. Others, such as the advancement of environmental and safety standards, regional development, the pursuit of economic autonomy and the protection of cultural values, might (but not necessarily will) require policies which could reduce the revenues or impose additional costs on MNEs or their affiliates. To the extent that the non-economic objectives of governments have become more important over recent years, the potential for conflict has risen. Obviously, the less palatable the actions of governments are perceived to be, the more the relationships between MNEs and governments are likely to be adversarial. In such cases, the final outcome will rest on the negotiating and bargaining strengths of the two parties. By contrast, the higher the priority afforded by governments to achieving goals consistent with those of MNEs, the more likely it is that the relationships will be cooperative.

We shall argue in this chapter that over the past 40 years – and particularly since the early 1980s – there has been a noticeable shift in the priority of the goals of nation states and in their appreciation of the role which MNEs can (and cannot) play in advancing these goals. The relative bargaining strength of MNEs and nation states has also undergone some change. Chapter 2 showed that, since the 1960s, MNE activity in the product and service sectors has shifted from first-time investment in acquiring natural resources or the servicing of local markets to sequential and asset-augmenting investment in pursuance of a regional or global strategy. Such a change in emphasis, as well as in the
form that MNE activity is likely to take, has considerable implications for the interface between the actions of MNEs and host government policies.

At the same time, established MNEs have learned a great deal by their FDI experiences, including how best to accommodate the objectives of governments with the most benefit—or least disbenefit—to themselves. This learning process on the part of both governments and MNEs, together with exogenous changes in the global political and economic environment, has helped reshape the attitudes of national and regional authorities to both inward and outward direct investment. In general, it has led to a more relaxed stance, as governments have come to appreciate the benefits of economic interdependence, and to see MNEs as a means by which these benefits may be accessed or increased. For example, according to the data collected by UNCTAD (2005c), of the changes made in 1991–2004 to the regulatory regimes governing FDI, the vast majority (2,006 out of 2,156) had made the investment regime more favourable. Moreover, as the industrial structure of the wealthier industrial nations has tended to converge, governments have become more competitive in their macro-organisational and globalisation strategies. Here, too, governments are increasingly perceiving that, under the right conditions, MNEs may help them to enhance the quality of their institutions, and the competitiveness of the resources and capabilities under their jurisdiction (Ozawa, 2005).

Governments have also become increasingly conscious that the kinds of international economic links forged by MNEs may not always be to the long-term benefit of at least some of their constituents. Chapters 11 and 12 have explored, at some length, the concerns expressed on the role played by FDI on the allocation of cross-border innovatory capabilities. Because such capabilities are being increasingly perceived as the ‘seed corn’ for economic growth and competitiveness, governments are evaluating both outbound and inbound MNE activity in terms of its contribution to the upgrading of these capabilities.

One thing is certain. The interaction between governments and MNEs needs to be studied in the context of a constantly changing and volatile world economic and political landscape. There is no (and never has been) one set of optimum policies that governments can adopt towards, or as a result of, MNE activity, which holds good for all nations for all time. Countries differ in their need and ability to attract inward investment or to encourage outward investment. For their part, according to the nature of their value-added activities and the locational options open to them, MNEs will value a production facility in different countries differently. And, over time, as has been so well demonstrated in the case of countries such as Japan, South Korea, Nigeria, Chile, France and Mexico—not to mention the whole of Central and Eastern Europe—the institutional and economic configuration facing MNEs may quite dramatically change—and do so quite quickly!

19.2.2 A Schematic Framework

To conclude this section, we set out an analytical framework for examining and evaluating the main relationships between MNEs and governments. This schema, presented in Figure 19.1, draws on some ideas first set out by Behrman and Grosse (1990) and Lecraw and Morrison (1991), but extends their analysis by incorporating the home country. The framework is essentially based on the interaction between the O advantages of firms.
and the L advantages of countries and how these, in turn, affect the organisation of cross-border, value-added activities (that is, the I advantages of MNEs). The schema contains eight components, or steps, which may precede some course of action, or set of actions, taken by governments. Later in this chapter, we shall examine some of these components in more depth.

The schema is essentially static in its approach. It assumes that, at a given moment of time, and within a particular global economic environment:

1. MNEs possess a set of O-specific advantages and constraints and, according to their goals, and their opportunity sets and organisational structures, will pursue certain strategies to advance those goals.
2. Similarly, nation states possess a set of L-specific advantages and constraints which, according to their goals and opportunity sets, will lead them to take certain actions.
3. Such actions – as directed towards MNEs or to one or more of their affiliates – may range from the setting up of institutions designed to reduce information asymmetries and/or moral persuasion, through a gamut of more formal entry requirements and performance regulations to the outright prohibition of FDI in certain sectors, and/or allowing foreign investors only a minority equity stake in indigenous firms.

Source: Adapted from Lecraw and Morrison (1991).

Figure 19.1 The MNE–home/host country relationship
The juxtaposition between the O advantages and strategies of MNEs and the L advantages and strategies of nation states is potentially of economic value to both parties. Following our discussion in Chapter 5, we consider that the actions of both governments as well as MNEs are fashioned by the interplay between the formal and informal institutions that support their activities. In the case of governments, the formal institutions include the different administrative systems employed, such as the institutions to enforce property rights, competition and the support of entrepreneurship and innovation. The incentive systems include the monetary and non-monetary rewards and penalties to support desired behaviour, including fiscal incentives, public recognition and fines. The shared norms and values include a common understanding of the purpose and role of the government, the extent of individual rights and responsibilities, as well as the role of the family in economic and social life. Less directly, they also include many other aspects of national culture, including the values attached to equality, solidarity and honesty.

In the case of the MNE, the formal institutions include, for example, specific structural forms (for example, a matrix organisation), the adoption of international accounting standards, and forms of corporate governance (for example, a one- or two-tier board). As in the case of governments, incentive systems include the monetary and non-monetary rewards and penalties that support desired behaviour, including bonuses, promotion and disciplinary proceedings. The values and norms reflect not only the belief systems and customs of the home country of the MNE, but also those of its key decision makers, any shared values and norms that exist within the organisation, as well as those of the host countries in which the MNE operates.

The next question is how the net income resulting from MNE activity is distributed between the investing companies and the countries within which they operate. This issue is usually of less concern to capital-exporting countries as the surplus earned by their own MNEs (net of the taxes collected by the host country) accrues to it. But it may critically affect the judgement of the host country of the economic viability of an inbound investment. Here, the balance of the negotiating strengths and weaknesses of the two parties enters the picture. The outcome will affect the final structure and content of MNE activity and the actions taken by governments.

### 19.2.3 A Bargaining Model

Before proceeding to a more detailed examination of the interactions between governments and MNEs, a word about the theory of bargaining may not be out of place (see Figure 19.2). Such bargaining options only arise where, as a result (or an expected result) of MNE activity, an economic rent over and above the anticipated opportunity cost of the O-specific advantages of MNE activity, and the anticipated opportunity cost of the L advantages of the host countries, is earned, or thought likely to be earned. It is important to realise that unless both sets of opportunity costs are covered, no MNE activity will take place. The distribution of the surplus value or rent will then be determined by the bargaining positions and negotiating strengths of the two parties.

The bargaining outcome depends upon the value of these opportunity costs, together with the MNE’s perceived assessment of the L advantages offered by the country, and that by the country of the O advantages offered by the MNE. Clearly, the MNE is in a strong position where its opportunity cost is low and when the government of the host country
puts a high value on the MNE’s contribution to its economic and social goals. By contrast, the host country’s position is likely to be strongest where it has much to offer the MNE, and it is able to obtain the resources, capabilities and markets offered by the MNE from other sources (or produce or tap into them itself). As might be expected, not only do the bargaining abilities of countries vary according to the configuration of their diamonds of competitive advantage (Porter, 1990) but, so too, will those of MNEs depend on the character and uniqueness of their O-specific advantages, and/or those which they are seeking from a foreign location.

Yet, even with these bargaining ‘chips’, the outcome rests upon the negotiating abilities of firms and countries. These, in turn, will depend on each party’s knowledge about the other’s options, of their perceptions of what each has to offer the other and on their respective negotiating experience and skills. Difficulties of evaluation on the part of the host country, for example, will be particularly acute where its knowledge about the impact of MNE activity is limited, or where the outcome of such activity is likely to be multifaceted and to yield mixed benefits. The outcome of the negotiations may depend critically on the way they are handled, and on the competence of the government department or investment agency responsible for the final decision. We shall take up this point later.

Finally, investment proposals may be assessed either by reference to general guidelines, which, while having the advantages of efficiency, clarity and objectivity, take no account

Source: Adapted from Lecraw and Morrison (1991).

Figure 19.2 MNEs and host countries – a bargaining framework
of the distinctive features of individual projects, or on a case-by-case basis, which, while acknowledging the uniqueness of each project, can be very time consuming, and may send confused signals to MNEs as to how host governments are likely to evaluate their investment proposals. All other things being equal, the increasing demands for transparency and consistency in government policies towards foreign investors would suggest a preference for general policies, unless the government in question is exceptionally skilled at targeting investors. For example, while focusing on the informational failures in the market, and targeting specific investors did work in attracting investment in the case of Costa Rica, it is unlikely to work in Jamaica, due to the inability of the government to pursue consistent policies with respect to foreign investment (Mytelka and Barclay, 2004; Wint, 2005). None the less, a recent survey of 109 IPAs indicated that greater targeting was expected to be by far the preferred policy measure to attract FDI in 2005–08 (UNCTAD, 2005c:35).

Two other points should be noted about the bargaining process. The first is that most of the literature on the subject tends to focus on the interaction between MNEs and host countries at the time of the proposed entry by the foreign investor, even though the provisions sought by the host country may include post-entry performance requirements, or even a provision for divestment or ‘fade out’ after a stipulated time period. However, de facto both the MNE and host government may wish to renegotiate the terms of the MNE’s presence at a later date. This is because the relative negotiating strengths of the MNE and host country may change once inward investment occurs.

At one time, it was believed that as soon as an MNE entered a country, its bargaining position began to obsolesce as a result inter alia of its investment in immobile plant and equipment (Vernon, 1971) and the erosion of some of its O advantages through involuntary leakages or competition. In such cases, countries (and, for that matter, local business partners of joint ventures) might wish to renegotiate the terms originally agreed to tilt more of the value added to themselves. On the other hand, if the MNE yields more economic benefits than was originally envisaged, the host country may be tempted to give additional incentives for it to engage in more, or more high-valued, production.

At the same time, if the inbound investors generate new and more valuable O advantages, or if they change the character or emphasis of their existing investments (for example, by engaging in more R&D or rationalised investment), it may wish to renegotiate the terms of the original agreement, particularly in respect of any performance constraints that were initially imposed upon it.896

The second point about the bargaining process is that the host government may be able to influence its own ability to negotiate effectively by modifying its institutions and its economic strategy to make the country more attractive to foreign investors. Examples include the greater attention now being given to the role of IPAs, the relaxation of performance requirements, abolishing controls on dividend remissions or capital repatriations, and the removal of domestic structural market distortions. Such cases reflect a situation in which both parties may gain from the ‘right’ kind of government action which, as a later section in the chapter will show, have become more frequent in the past couple of decades.

It is, then, difficult to generalise on the nature and direction of the obsolescing bargain as the O and I advantages of MNEs and the L advantages of countries are constantly shifting, as, indeed, are the respective opportunity costs of the bargaining parties.
This, of course, presupposes a dynamic view of the bargaining relationship and the motivating and precipitating factors that might affect the upgrading of both firm- and country-specific resources and capabilities over time. In a study of nationalisations of MNE investment in India, Vachani (1995) distinguished between static bargaining success (the outcome of one negotiation) and dynamic bargaining success (the outcome of several negotiations over time). He found that technology intensity and the size of MNE investment were positively related to dynamic bargaining success, or in the words of Vernon, they kept the obsolescing bargain from becoming obsolete.

In a more recent contribution, Grosse (2005a) offers three short industry studies of how the bargaining relationship between MNEs and governments has changed over time, and concludes that the main driver of institutional change is the macroeconomic imperatives facing host countries rather than the actions of MNEs. While the divergence between the interests of the host country and the MNE has not disappeared, what is notable is that the way disputes are handled has changed away from institutions designed to foster unilateral action and expropriation, to those helping to establish a rules-based architecture of dispute settlement (Wint, 2005).

Considerably less attention has been given to home country–MNE bargaining relationships. This is presumably because it is assumed that the interests of two parties are likely to be compatible, or that the home government can take whatever action it wishes without sacrificing the gains to be had from the domestic activities of its own firms. In fact, neither view is necessarily correct. In the first case, several studies have revealed that the marginal social rate of return of FDI may be (but not necessarily is) less than the private rate of return and that, in such circumstances, from a social viewpoint, domestic firms may overinvest overseas.

In the second case, which runs counter to the first, home governments may underestimate the gains to the competitiveness of their home economies as a direct result of the outbound MNE activity. These gains, which have been dealt with at some length in other parts of this book, arise because of the complementarity of outward and domestic investment. They include tapping into and feedback of knowledge about the presence and behaviour of competitors, suppliers and customers, and any additional economies of scale and scope which foreign production might make possible (UNCTAD, 2006). In the past, at any rate, home governments have done relatively little to curb outward direct investment, except by foreign exchange regulations or discriminatory taxation. More recently, however, while largely encouraging outward MNE activity, the Chinese government has exercised its right to refuse permission for its firms to engage in outward FDI, where it perceives that the country would not benefit by so doing (ibid.). Moreover, home governments may, and do, exert some influence upon the timing and scale of outbound MNE activity, and curb its profitability through a variety of extra-territorial controls.

Putting some of these thoughts together, Eden et al. (2005b) argue the case for a broader-based model dealing with MNE–state relations than that originally proposed by Raymond Vernon. They assert that the multifaceted and complex nature of bargaining, and recent insights from IB and strategic management demand that more attention be paid to the varying motivations for MNE activity, the multiple goals of nation states, and the economic, political and institutional constraints placed on each party.
19.3 INTERACTION BETWEEN HOST GOVERNMENTS AND MNEs

19.3.1 The Changing Scenario over the Past 40 Years

We have suggested that the actions taken to influence foreign MNE activity in host countries depend essentially upon the nature of the existing contribution of the investing companies to the economic and social objectives of the countries concerned, as compared with the benefits of using the resources and capabilities involved differently. In practice, such actions (at one time or another) have ranged along a continuum from complete \textit{laissez-faire} to the complete outlawing of inward direct investment, although nowadays no government in the world takes either of these extreme positions. Moreover, since the goals of national governments are multifaceted and their needs for inward investment differ (compare those of Botswana with those of Germany, or those of China with those of Belgium), it follows that their propensity to influence inbound MNE activity is likely to vary according to both the type of FDI and its perceived operational impact.

Thus a country whose prosperity rests on its possession and exploitation of a single natural resource may be very sensitive to foreign ownership of that resource. Also, as Chapter 18 has shown, even the most liberal countries restrict the degree of foreign participation in strategically and culturally sensitive industries. Similarly, countries with severe balance of payments or external debt problems may be more cautious in permitting inward investment in those activities which will exacerbate these difficulties than in those which are not so constrained. The different needs of host countries for technology, capital, entrepreneurship, management and organisation skills, institutional upgrading and competitive stimuli might result in liberal performance demands of MNEs in one functional area and extremely restrictive requirements in another.

We have further suggested that actions taken by host governments as a result of inward investment may be of two main kinds: those specifically directed to MNEs or their affiliates, and those which may affect all kinds of firms. Each may be designed to influence the contribution of inbound investment to the short- and long-run objectives of the host country. Short-run objectives essentially relate to the immediate (net) value added created by foreign affiliates, and the share of that value added retained in the host country. Long-run objectives concern the impact of MNE activity on the ability of the host economy to upgrade its L-bound resources and competences, and for its firms to improve their penetration of regional or global markets.

The recent history of the economic and social interaction between host countries and MNEs is essentially that between the changing L advantages offered by the former and the O advantages of the latter. Elsewhere in this book we have argued that, more than the distribution of factor endowments, the formal and informal institutions in a country are critical in determining the costs of transacting, and therefore the type and magnitude of economic activity undertaken by firms. A change in the political philosophy and social goals of a government may lead to a dramatic recast of its economic systems as, for example, occurred in Central and Eastern Europe after the fall of the Berlin Wall. Over a longer period, government involvement in educational and R&D programmes, and the quality of national innovatory systems, may critically affect the future economic environment, as for example demonstrated by Singapore and Ireland.
Using this kind of approach, we now consider some changes in the interaction between MNEs and host countries over the past 40 years or so. In doing so, we may identify three fairly distinct phases. While the precise timing of each has differed between companies and countries, by and large the first lasted from the early 1950s to the mid-1960s, the second from the mid-1960s to the late 1970s and the third from the late 1970s to the present. For reasons which will become apparent, we shall call them respectively the ‘honeymoon’, the ‘confrontation’ and the ‘reconciliation’ phases. Finally, although the reconciliation phase still continues, the concluding subsection discusses some issues pertinent to the investment climate today.

The honeymoon phase
Any partnership, particularly a fully fledged marriage, starts off with each partner having great expectations of what the other can offer, although this is sometimes more a matter of faith than anything else! Certainly, even if love is not blind, it does tend to wear rose-coloured spectacles which magnify the good and overlook the less desirable features of one’s partner. So it was with the early post-war interface between MNEs and the governments of the countries in which they operated. From the viewpoint of both newly emerging developing nations and war-ravaged Western Europe, the capital, technology, organisational capabilities, managerial skills and entrepreneurship of foreign-owned (particularly US) firms were sorely needed. However, because of inadequate or distorted markets for these assets, they could often only be obtained via inward direct investment. During these years, US economic and technological hegemony was at its peak, and American corporations dominated international production, just as UK firms had controlled much of world trade a century and a half before. At the same time, US manufacturers were seeking new outlets for their products and new sources of energy and raw materials to supplement their indigenous supplies.

On the face of it, it seemed a perfect partnership between US foreign investors and host countries, although in some cases it was Hobson’s choice for the latter as, at the time, only MNEs possessed many of the assets and/or markets they needed. It was this very control of assets and markets which gave rise to the first signs of discontent with the partnership. Nevertheless, in the 1950s and early 1960s, at least, all (or most) was sweetness and light. With the international economic climate fashioned at Bretton Woods and Havana in the mid-1940s ensuring exchange rate stability and a well-ordered training regime, the IB scenario was as promising as it had been during the previous 30 years.

One other thing is worth mentioning. Most MNEs in those days were comparatively small, and involved in fewer countries than they are today. Most manufacturing affiliates, too, were set up as asset-exploiting import-substituting ventures, and were truncated replicas of their parent companies, acting largely independently of each other. Only in the resource-based sectors had foreign corporations evolved anything like a global product or marketing mandate, or were engaging in much intra-firm trade. The main economic impact of FDI in those years was, then, in the resources, capabilities and markets they provided to the recipient countries, rather than the way in which these were organised.

The confrontation stage
As a marriage passes out of its honeymoon stage and becomes more firmly established, the partners are better able to assess how far each is, in fact, able to satisfy the other’s
desires and aspirations. Sometimes this learning process affects the attitudes and behaviour of one or both of the partners; sometimes the character of the relationship changes; and sometimes the balance of influence on decision taking shifts. One thing is certain: after a time each partner becomes aware of the weaknesses as well as the strengths of the other, and the costs as well as the benefits of the relationship.

The most far-reaching changes in the international economic climate of the 1960s and early 1970s stemmed directly from the growing political independence of many developing countries, a better identification of their economic goals and a growing belief of governments (which was not always justified) that they had the resources, institutional mechanisms and organisation skills to achieve these goals.

This new self-awareness or self-faith, coupled with a Keynesian approach to economic management and the setting up of new administrative networks, was occurring at a time when MNEs were gaining a substantial foothold in many host countries. As more emphasis began to be given to such developmental goals as satisfying basic needs, advancing self-reliance, improving the balance of payments and raising the level of technological capacity, so inward investment became evaluated in these terms. Not surprisingly, it was found wanting in one direction or another. Gradually, it dawned on governments that the kind of contribution which MNEs might make to economic development was not always that which they had expected or needed most. To be sure, foreign firms provided technology and management capabilities, but were these always the appropriate kind or at the right price? Admittedly, their affiliates might help to save imports, but did they always buy as much from local producers as was socially desirable? Agreed that they created employment, but were not their production methods more capital intensive than those of indigenous firms, and did they always recruit or train local management as well as they might? And, while they sometimes led to more exports of primary products, what if this was at the cost of sustainable indigenous development?

In addition, MNEs were frequently perceived as transmitting a way of life which was not always welcomed, while, through advertising and other promotional means, they might adversely influence social and cultural values. By their presence and behaviour, they could drive out, or preclude the entry of, indigenous competitors. In continuing to locate high value-added activities from their home countries and/or by internalising knowledge and information transfers, they might lessen the chances of a host country achieving even a modest technological capability of its own. Finally, because of their market power, they were perceived not only to earn high economic rents, but also, through a variety of devices, to minimise the host country’s share of these rents.

These were years, too, when the management style and organisational strategy of some of the larger MNEs were changing. As the geographical spread of their activities increased, so did the tendency of corporations to adopt a more centralised and multidivisional control structure. At the same time, decisions about capital investment, product range, the sourcing of inputs and the kinds of markets served were more likely to be taken from a regional or global perspective. The trend, too, towards the international standardisation of some products and the specialisation of processes and markets, placed an increasing premium on quality control, continuity of output, protection of proprietary rights and the exploitation of economies of scale and scope, all of which prompted a more integrated governance structure of MNE activity.
In the late 1960s, fixed exchange rates held good, world economic expansion continued apace, and inflation was generally under control. Nonetheless, the global institutional system was under great strain, particularly when the US balance of payments position turned sour and the US dollar lost some of its appeal as a reserve currency. Two events in the early 1970s – the devaluation of the dollar and the huge price rise of oil by OPEC – heralded a watershed in post-war international economic relations. These events, together with the growing frustration of many developing countries with the inability and/or unwillingness of the existing economic order to reduce the income gap between themselves and the developed nations, sparked off a period of intensive North/South confrontation. Although much of the debate was rhetorical, it did create an uncongenial climate for international business.

In the first half of the 1970s, MNEs came under increasing scrutiny and attack. They were criticised not only on the grounds of their unacceptable behaviour and uneven contribution to economic development, but also because they were perceived to be a product of an international economic system that was no longer acceptable. If the system could not be changed, then at least – so the critics argued – some redress might be taken against one of its leading manifestations.

The early 1970s were the ‘high noon’ of confrontation between the governments of several host countries and MNEs. The measures taken by the former to affect the behaviour of the latter are well known and already part of history. They ranged from the outright expropriation of foreign assets of MNEs, through restricting the level and direction of new investment, to laying down comprehensive performance criteria for foreign affiliates, and to aiding indigenous firms to compete more effectively in world markets. In these years, however, there was little recognition by host governments of the need to modify their economic strategies and policies in the light of the new challenges and opportunities posed by inward FDI.

The response of the MNEs – which has not been so well documented – was predictable. Where their subsidiaries were already fully integrated into the local economy (as in the case of many older import-substituting ventures) and were still earning an economic rent, they absorbed the costs of intervention – but thought twice before investing any new capital. In other cases, their options ranged from restricting the transfer of technology or technological capacity to circumventing controls on income flows through TPM; and from switching – or threatening to switch – their production to another country, to trying to persuade their home governments to use their economic or political leverage to obtain a better deal from host governments.

In the main, this kind of reaction enraged host countries even more, especially where, in order to compete for the same MNE activity, they were forced to pay even higher economic rents. So countries sought to increase their bargaining power either by harmonised regional action or by obtaining the advice and guidance of such international organisations as the UNCTC, UNCTAD, UNIDO and the World Bank on how best to use inward investment to aid their development or restructuring process.

The reconciliation phase
As often happens, just as a particular problem is beginning to be solved, it becomes less acute or ceases to exist. The late 1970s and early 1980s saw governments learning from the experiences of the previous decade and refining, modifying and extending their policies
to better harness the contribution of inward direct investment. At an international level, attention centred on drawing up codes of conduct or guidelines of behaviour for MNEs and improving the flow of information about their activities. If the 1960s and the early 1970s were years of disillusionment about the net benefits of FDI, the subsequent two decades brought no less dissatisfaction with the organisational strategies, institutional mechanisms and economic policies of national governments.

The result of this learning process has been a more enlightened appraisal of the value of alternative modalities of obtaining the necessary resources and capabilities for economic growth, and the introduction of more appropriate institutions and constructive macroeconomic and organisation policies in the light of the activities of MNEs. At the same time, MNEs have become more appreciative of the fact that their global strategies might not always work to the fullest social and cultural benefit of each and every country in which they operate. A more sensitive and better trained breed of managers and civil servants has emerged, while the emphasis of bargaining has moved to promoting a more mutually rewarding and long-term relationship between the parties concerned, and away from extracting the most short-term economic rent out of an FDI.

These shifts in attitudes have been sparked off and shaped by changes in the L advantages of countries and the OLI configurations of firms. We would simply identify four such changes. First, and most important, there has been a widening of the sources of many of the assets and competences which, in the 1960s, were largely monopolised by US and some European MNEs. The markets for many kinds of technology, management skills and capital have become less imperfect; hence the incentive to internalise them has lessened. Second, the past three decades have witnessed considerably more competition by countries for the kinds of benefits which MNEs have to offer. In particular, the need for countries to upgrade their innovating capabilities has led them to encourage MNEs to transfer some of their high-value activities to their midst.

Third, as we have already noted in this volume, an increasing number of smaller developed and developing countries are engaging in FDI. As a result, trade in intangible assets is increasingly resembling that of the goods embodying these assets, with intra-industry international production following along the lines of intra-industry trade. Fourth, notwithstanding the substantial growth of cross-border strategic alliances and other kinds of non-equity ventures, we see that most MNEs are adopting more regionally or globally integrated strategies towards their cross-border operations. Integration has occurred despite several currency crises in the 1990s, and mounting concerns over the robustness of the international financial system.904

There is, of course, a political dimension to the events of the past couple of decades. With a few exceptions, throughout the 1980s and 1990s, national administrations became noticeably more right wing and favoured market-orientated institutions and policies.905 At the same time, social priorities have changed. For example, security issues and environmental protection are now high on the political agenda of many countries. For the most part, countries which have grown the fastest in the past two decades are those which are the most favourably disposed towards inward direct investment, and most value the benefits of economic interdependence. Indeed, as more countries generate their own MNEs, they are beginning to view inward and outward investment as part of a more holistic economic strategy.906
In conclusion, the 1980s ushered in a more mature and symbiotic relationship between MNEs and governments. Each now knows the conditions under which the one may, or may not, be expected to contribute to the other’s well-being. Each better appreciates the role which mutual commitment, trust and forbearance should play in the success of any partnership. Each recognises the importance of institutional upgrading as part of the development process. Nevertheless, because economic and social goals, and the ability to achieve these goals, differ between the two parties, it is inevitable that some differences in perception and some clashes of interest will remain. Moreover, there is nothing permanent about a particular diamond of competitive advantage of a country. History is replete with examples of the rise and fall – and, sometimes, rise again – of the economic prowess of nation states. However, the pace of structural change is probably greater than it has ever been. Similarly, MNEs vary in size and strategy, and the OLI values affecting their behaviour are frequently transient.

The investment climate in the 21st century

The start of the new millennium has not altered the basic tenor of reconciliation; indeed if anything, the past decade has seen even more emphasis being placed on the role of MNEs in wealth creation. In many developing countries, FDI is valued as a desirable means to enhance or even to jumpstart economic restructuring and growth. In developed countries, the concentration of FDI in clusters of high value-added economic activity has led to renewed efforts to use FDI as a tool of regional development. In some industries and countries, races to attract FDI have taken place, where regions have bid against each other using a combination of overt taxes and subsidies, and (alleged) covert promises of favourable treatment (Charlton, 2003; Ghauri and Oxelheim, 2003).

The growth of asset-augmenting FDI in developed countries, which takes place mostly through M&As, has evoked new concerns on the part of host governments. Although such investment can help secure local employment, as well as facilitate technology transfer, the change of ownership to foreign hands also creates long-term uncertainty, whether real or perceived. Furthermore, the fact that investment covers only one part of the activities undertaken by modern MNEs implies that host governments will also increasingly need to consider how domestic resources and capabilities need to be upgraded to enable local firms to become better integrated into MNE networks. Such integration may still involve investment by the MNE, but it may also involve long-term contractual relationships. Increasingly, such opportunities arise not only in manufacturing, but in connection with the offshoring of various business services. Indeed, IPAs are increasingly targeting service functions, although they are finding that targeting activities that can be offshored across different sectors is more difficult than targeting specific (manufacturing) firms (UNCTAD, 2004).

The dilemma of host countries in the 21st century is that the countries and regions that have the most need for the bundle of resources and capabilities brought about by FDI, are the ones least likely to appear attractive to the investing firms. In the countries with the most pressing need for the upgrading of income-generating assets and institutions, FDI is a precondition for growth and development. At the same time, as we discussed in Chapter 10, research indicates that economic growth and institutional development influence each other, and both are common preconditions for attracting flows of FDI (Li and Liu, 2005). Indeed, it is becoming increasingly clear that the ‘soft’ issues of...
development, which include institutional transformation both at the formal and informal levels, underpin any process of development and growth (North, 1990, 1999, 2005; Dunning, 2006c).

Good governance in the form of a well-functioning judiciary and rule of law, protection of property rights and promotion of competition appear to be essential in creating a climate conducive to inward FDI. Empirical evidence from economic research relating the quality of formal institutions to levels of FDI indicates that countries with well-functioning institutions tend to score highly on every measure of institutional quality, and such countries are more successful in attracting foreign investment (see Chapter 10 for further discussion). On the other hand, more evidence is also emerging that high levels of corruption tend to coincide with low institutional quality, acting as a deterrent to foreign investment (see, for example, Wei, 2000; Habib and Zurawicki, 2002).

These developments pose two distinct challenges for local, regional and national governments that would like to attract and retain inward foreign investment, and so-called ‘integrated network subsidiaries’ in particular (see Chapter 8). In the first instance, there is the problem of marginalisation, or of being left out of the mainstream of globalisation, and outside of the consideration of investing firms. The second problem is the quality of inward investment, as poorly integrated subsidiaries are likely candidates for divestment, and may serve to perpetuate low-cost, enclave production. Furthermore, as we discussed in Chapter 16, the local and regional spillovers expected from inward MNE activity are only likely to arise in cases where the host country has developed its human resources, physical infrastructure and institutional context to a level that enables the transfer of technology and management practices from inbound foreign investors to local firms.

The problem of marginalisation can appear in the context of an entire continent, most notably in Africa, which only very recently has begun to attract sizeable investment flows – including some from China (UNCTAD, 2006), but it can also affect the economically disadvantaged regions within the Triad. In recognition of the dangers of being left out of the global economy, IPAs have been set up in countless regions around the world in an effort to attract advanced technology and high-skill employment to a particular area (Narula and Dunning, 2000; UNCTAD, 2003b). The tools to attract the right quality of investment include financial incentives, which are discussed in the following subsection, as well as targeted attraction and after-care policies (Wheeler and Mody, 1992; Young et al., 1994; Mudambi, 1995). Host governments can also play an important role in facilitating the entry of the desired foreign investor into a local network of related activities, since the more fully the multinational participates in the local network, the higher become the opportunity costs of relocation.

The experiences of countries related to the developmental effects of MNE activity over the past two decades have been far from uniform. Some countries have recorded very positive effects, while for others the end result has been negative. Success stories of FDI-induced development include the cases of Mauritius and Madagascar, where particularly Mauritius has successfully moved from least- to higher-skilled affiliate operations, and encouraged indigenous investment. Indeed, based on their success, Moran (2003) suggests that in the next stage, countries such as El Salvador and Uganda could replicate the progress of Mauritius and Madagascar, which in turn could emulate in a stepwise (or
Finally, as the stock of FDI matures globally, one would anticipate that rates of reinvestment will contribute a growing share of the flows of FDI, and consequently, they should become increasingly relevant to the policies aimed at investment attraction and retention. Investing public resources into retaining firms that have a record of reinvestment may have a better risk-return profile in the long run than trying to attract new investment with incentives (Lundan, 2003a). Of course, reinvested earnings are not the only means by which an affiliate can grow and become integrated into its host location, but internally generated funds represent a low-risk means of financing future growth, and affiliates with longer duration have been found to be more likely to engage in sequential investment in the same location (see, for example, Mudambi, 1998).

To summarise, we believe that after a honeymoon period regarding the benefits of globalisation, a new realism has set in, prompted by the following factors. First, there is dissatisfaction with the fact that the process of globalisation is not always inclusive, although frequently this reflects the poor policies and institutions, and/or stages of development and economic structures of countries, for example, in Africa, rather than the actions of MNEs. Second, the issues of localisation, which are often of a cultural and social kind, and reflect differences in values and belief systems, are now recognised as having to be set alongside the benefits of further integration. Third, the emergence of new players, especially China and India, with their own distinctive country-specific characteristics that are reflected in their institutions and policies towards outward and inward FDI, are intensifying the competition for investment. Fourth, the increasing need to consider the attractiveness of host countries not just to FDI but to MNE systems, which requires domestic upgrading, but may or may not involve actual investment. Fifth, the lowering of some transaction costs, and the increasing outsourcing of activities, particularly as regards service MNEs, is creating new threats and opportunities for home and host countries. Sixth, the increasing recognition by national governments that if they are to benefit from globalisation, they need to abide by the rules of the game, and yet carve out their own distinctive comparative advantages and to adjust their institutions and policies (including those related to FDI) to achieve this goal.

19.3.2 Policies Specifically Directed to Affect Inward Direct Investment

Policies towards inward direct investment broadly fall into four groups. The first group relates to the conditions of entry or setting up of a foreign affiliate. The second concerns the operating requirements demanded or expected of foreign-owned affiliates. These may well be a precondition for the investment being allowed in the first place. However, we shall consider them separately as they concern the day-to-day operations of affiliates. The third group of policies is directed at the conditions for the exit of foreign investors. Finally, the fourth group encompasses the other three, but, unlike them, addresses itself to the most cost-effective way of attracting inbound direct investment.

**Conditions of entry**

The conditions of entry or setting up of foreign investors are usually based on five main criteria. The first concerns the allowed degree of foreign ownership of indigenous
resources. Is 100% – or majority – foreign ownership permitted, or are foreign firms only allowed a minority participation in indigenous enterprises? The second criterion relates to the kinds of value-added activities in which MNEs may participate. In the past, some national authorities have been very strict, not only about the sectors open to foreign investors, but also about the proportion of a sector’s output they are permitted to supply. Even the most liberal countries are reluctant to allow much foreign participation in strategic or culturally sensitive sectors. At the other end of the spectrum, foreign investors may also be unwelcome in sectors producing goods or services perceived (by governments) as undesirable or inessential.

The third criterion relates to the financing of the inbound investment. Countries that are short of foreign currency are likely to insist that all the initial capital investment should be financed by the foreign investor from the international capital market. The fourth criterion concerns the location of the investment within the recipient countries. Countries which pursue vigorous regional policies may require, or put strong pressure on, foreign-owned firms to locate their activities in areas of lagging growth or above average unemployment.

The fifth criterion relates to the pre-entry conditions for FDI, and comes within the broad heading of investment incentives. The different types of investment incentives are summarised in Box 19.1. These include a broad range of fiscal incentives, such as tax

---

**BOX 19.1  TYPES OF INVESTMENT INCENTIVES**

**Fiscal Incentives**

- Reduction of the standard corporate income tax rate.
- Tax holidays.
- Allowing losses incurred during the holiday period to be written off against future profits.
- Accelerated depreciation allowances on capital taxes.
- Investment and reinvestment allowances.
- Reductions in social security contributions.
- Deductions from taxable earnings based on the number of employees or on other labour-related expenditures.
- Corporate income tax deductions based on, for example, expenditures relating to marketing and promotional activities.

*Value-added-based incentives, including:*

- Corporate income tax reductions or credits based on the net local content of outputs.
- Granting of income tax credits based on net value earned.

*Import-based incentives, including:*

- Exemption from import duties on capital goods, equipment or raw materials, parts and inputs related to the production process.
- Tax credits for duties paid on imported materials or supplies.
<table>
<thead>
<tr>
<th>Export-based incentives, including:</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Exemptions from export duties.</td>
</tr>
<tr>
<td>● Preferential tax treatment of income from exports.</td>
</tr>
<tr>
<td>● Income tax reduction for special foreign exchange-earning activities or for manufactured exports.</td>
</tr>
<tr>
<td>● Tax credits on domestic sales in return for export performance.</td>
</tr>
<tr>
<td>● Duty drawbacks.</td>
</tr>
<tr>
<td>● Income tax credits on net local content of exports.</td>
</tr>
<tr>
<td>● Deduction of overseas expenditures and capital allowance for export industries.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial Incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Direct subsidies to cover (part of) capital, production or marketing costs in relation to an investment project.</td>
</tr>
<tr>
<td>● Subsidised loans.</td>
</tr>
<tr>
<td>● Loan guarantees.</td>
</tr>
<tr>
<td>● Guaranteed export credits.</td>
</tr>
<tr>
<td>● Publicly funded venture capital participating in investments involving high commercial risks.</td>
</tr>
<tr>
<td>● Government insurance at preferential rates, usually available to cover certain types of risks such as exchange rate volatility, currency devaluation, or non-commercial risks such as expropriation and political turmoil (often provided through an international agency).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Subsidised dedicated infrastructure.</td>
</tr>
<tr>
<td>● Subsidised services, including assistance in identifying sources of finance, implementing and managing projects, carrying out pre-investment studies, information on markets, availability of raw materials and supply of infrastructure, advice on production processes and marketing techniques, assistance with training and retraining, technical facilities for developing know-how or improving quality control.</td>
</tr>
<tr>
<td>● Preferential government contracts.</td>
</tr>
<tr>
<td>● Closing the market to further entry or the granting of monopoly rights.</td>
</tr>
<tr>
<td>● Protection from import competition.</td>
</tr>
<tr>
<td>● Special treatment with respect to foreign exchange, including special exchange rates, special foreign debt-to-equity conversion rates, elimination of exchange risks on foreign loans, concessions of foreign exchange credits for export earnings, and special concessions on the repatriation of earnings and capital.</td>
</tr>
</tbody>
</table>

Source: Adapted from UNCTAD (1996:180).
holidays or reduced rates of taxation, other financial incentives, such as subsidised loans or loan guarantees, and other incentives, which includes subsidised infrastructure and public services.\textsuperscript{910} While the extent to which these incentives are fully captured by MNEs (for example, tax holidays or rebates) may depend upon the performance of their affiliates, others are directed to aiding the start-up of new ventures. These include investment and regional development grants, subsidised loans and/or factory rents, and accelerated depreciation allowances. Such incentives can sometimes be very substantial (Guisinger, 1985).\textsuperscript{911}

Fiscal incentives, as a subset of the monetary incentives offered to foreign investors, have attracted considerable attention in recent years due to the increasing frequency of ‘locational tournaments’ to attract foreign investment (Mytelka, 2000a; Charlton, 2003). At the same time, IPAs, supported by the World Association of Investment Promotion Agencies (WAIPA), as well as other institutions,\textsuperscript{912} have become more professional and business orientated, shifting their focus from general promotion activities to harnessing specific business opportunities. A shift in the geographical emphasis of IPAs from the mature markets of the Triad, to the emerging host (and home) countries is also to be expected in the coming decade (Passow and Runnbeck, 2005).

### Operating requirements

Performance-related measures may embrace the whole gamut of operating practices (see Box 19.2). They include behavioural guidelines or requirements in respect of the local purchases of capital goods, raw materials, intermediate goods and services; recruitment, employment and training practices, particularly at a managerial and professional level; the proportion of output exported; the type of value added (for example, R&D) undertaken by the affiliates; information provided on intra-firm pricing practices; conditions attached by MNEs on the use of technology transferred; and even (in the case of developing countries, in particular) types of production methods utilised. In some cases, these requirements may be traded for more-favoured treatment of MNEs by governments, such as the granting of additional import licences and protection from foreign competition.

Not all governments encourage or insist upon such patterns of behaviour (which in many, though not in all, cases may lead to market distortions). Governments that do are inclined to focus on just a few. For example, European administrations have tried to obtain some assurance from Japanese manufacturing investors about the local content component of their output reaching a certain level.\textsuperscript{913} Performance requirements tend to be most demanded by host governments when there is inadequate competition from local firms, or where it is clearly in the best interests of the MNE (but not necessarily that of individual foreign affiliates) to act in a way that is unacceptable to the host government.\textsuperscript{914} They may also be used as a means of assisting industrial restructuring,\textsuperscript{915} which may be an entirely laudable objective.

Less justifiable, however, is the practice of some governments to use performance requirements as a substitute for the adoption of more appropriate macro-organisational policies, which, though possibly more difficult to implement, might better serve their long-term objectives. Examples include using performance requirements to help reduce (or not increase) a balance of payments deficit (see Chapter 14); to stimulate employment at the cost of less-efficient production methods (see Chapter 13); to insist upon R&D and training programmes by MNE affiliates that use resources which might be used better elsewhere in the economy (see Chapter 11); or to disallow the control of export markets by the invest-
BOX 19.2 CATEGORIES OF PERFORMANCE REQUIREMENTS

Prohibited by the TRIMs Agreement

- Local content requirements.
- Trade-balancing requirements.
- Foreign exchange restrictions related to the foreign exchange inflows attributable to an enterprise.
- Export controls.

Prohibited, Conditioned or Discouraged by IIAs

- Requirements to establish a joint venture with domestic participation.
- Requirements for a minimum level of domestic equity participation.
- Requirements to locate headquarters for a specific region.
- Employment requirements.
- Export requirements.
- Restrictions on sales of goods or services in the territory where they are produced or provided.
- Requirements to supply goods produced or services provided to a specific region exclusively from a given territory.
- Requirements to act as the sole supplier of goods produced or services provided.
- Requirements to transfer technology, production processes or other proprietary knowledge.
- Research and development requirements.

Not restricted

- All other performance requirements.

Source: Adapted from UNCTAD (2003a:3).

Governments and MNE activity: the unilateral response

whether MNE, where this might help advance its global efficiency. Indeed, Moran (2003) sees the imposition of local content requirements, and JV/technology transfer requirements as one of the primary reasons for the poor results that some countries have experienced with FDI.

Whatever their motivation, governments are constrained in their use of performance requirements following the TRIMs agreement, which disallowed the use of local content requirements, trade balancing requirements, foreign exchange restrictions and export controls. Other performance requirements may be limited by IIAs at bilateral or regional levels (see Chapter 20). However, influential developing countries such as Brazil and India have argued for amending the TRIMs agreement to allow for more policy flexibility in order to improve the developmental impact of FDI (UNCTAD, 2003a).
Exit conditions
Few governments now impose divestment requirements at the time of a new firm’s entry. However, they were quite common in the 1960s and 1970s, particularly among developing countries which viewed the role of inward investment as that of a tutor to indigenous firms and considered that as soon as the tutoring had been successfully accomplished, the tutor should gracefully withdraw. Such conditions are likely to prove most successful in cases of market-seeking MNEs whose competitive advantages rest on the kinds of intangible assets (O advantages) that can be most easily transferred and assimilated by the recipient economy. They also appertain to some resource-seeking FDI where the host country, by dint of its favoured possession of such resources, is in a strong bargaining position. They (and, for that matter, entry and performance requirements) can less easily be imposed on foreign affiliates that are part of a global or regional network of activities over which the parent company wishes to maintain close control.

Achieving cost-effective FDI
The fourth group of policy measures encompasses the other three, but, unlike them, addresses itself to designing and implementing the most cost-effective institutions and policies for attracting inbound direct investment. In practice, incentives, regulations and performance requirements go hand in hand. It is quite consistent for governments to limit the participation of foreign-owned firms in one sector while giving tax incentives to encourage investment by them in another; or for them to insist upon a certain local content requirement while offering export subsidies. Fiscal incentives may take various forms, but the most common are tax holidays, investment grants, accelerated depreciation allowances, employment premiums, subsidised loans or rents and regional grants. Some of the institutional incentives impinge directly on the revenue costs of firms and sometimes on the profits earned.

Research reveals that while, in some instances, MNE-specific incentives have played an important role in influencing the location of FDI, they have not, in general, been a major determinant of such investment.\textsuperscript{916} However, much depends on the raison d’être for the MNE activity and the kind of incentives offered. Incentives are likely to have their greatest impact where a foreign firm is undecided about its choice of a number of economically viable locations, and where they are not counteracted by performance requirements. They have generally been less successful in attracting the kind of investment drawn by the unique assets and competences of the host country.

In addition to the attempts that have been made to identify the conditions under which fiscal and other incentives\textsuperscript{917} are likely to increase the flow of inward direct investment, attention is also increasingly being paid to appraising the benefits resulting from the incentives or, indeed, to the opportunity cost of such incentives. After all, it is one thing for countries to attract MNE-related activities to their borders and quite another to ensure that the benefits derived from such activities compensate for any ‘buying’ costs incurred.

Indeed, Young and Tavares (2004) argue that competition for FDI presents potential host governments with a prisoner’s dilemma. If countries are able to make credible commitments not to distort competition based on fundamentals, that is, factor costs, effective institutions and an adequate social and economic infrastructure, they would probably not need to offer additional and/or specific incentives to attract FDI. Potential
host countries could still work to overcome any information asymmetries between the
host country and the investor, but the end result would be a distribution of investment
based on competitive conditions. In the absence of the ability to make such an agreement,
governments may be tempted to offer monetary inducements to get MNEs to locate in the
area. This then puts pressure on other locations to reciprocate by offering their own incen-
tives, and the end result is a situation where everyone offers inducements, albeit to a
different degree.

According to a survey conducted by UNCTAD (2003b), this is indeed the case in the
global economy today, as nearly all countries work to encourage inward investment,
although the exact form and extent of such encouragement varies across countries. Many
of the inducements offered, such as cash grants or fiscal incentives, place a direct burden
on public finances. Other inducements, such as infrastructure investments or favourable
contracts for energy, for example, are some of the indirect means of channelling public
support to attract MNEs. From a public policy standpoint, the question is whether such
inducements pay off in the end, or in other words, whether the price paid to attract an
MNE is repaid by increased employment and other benefits of increased economic activ-
ity in a given location.

It is interesting to note that while investment attraction as public policy has become
more widespread, and IPAs enjoy a higher profile and more resources than before, the
general feeling among scholars on the effectiveness of such policies is decidedly negative.
In the aggregate, many scholars believe that the distribution of value-added activity in the
presence of monetary incentives is not likely to be very different from the distribution that
would arise if no incentives were paid. A common justification for investment incentives
is that due to the performance gap between MNEs and local firms, it is worth more to
attract FDI than it is to stimulate the development of local firms. This assumption has
come under scrutiny in recent years by several scholars such as Bellak (2004b), who argue
that the existence of a performance gap between foreign investors and domestic firms
needs to be investigated and established empirically, before any such incentives are con-
templated.

Some of the reasons why investment incentives continue to be popular policy instru-
ments have already been covered in our discussion in Chapter 17 on tax policy. One reason
is that there are clear examples where fiscal and other incentives have worked to attract
considerable amounts of investment, such as in Ireland, Switzerland and Singapore.
However, these examples illustrate situations in which the monetary incentives play only
one part in coordinated policies to attract FDI (for example, Ireland and Singapore), or
where efforts have been made to improve locational competitiveness and competitive
conditions for all firms, whether domestic or foreign (for example, Switzerland). Another
reason for the popularity of incentive policies, as Rondinelli and Burpitt (2000) point
out, is that from the point of view of public officials, a policy of upgrading educational
facilities or physical infrastructure will not produce immediate results, and may seem
unduly passive, particularly if other states or regions are offering financial inducements.

A firm that is attracted to a particular location because of the fundamentals, that is, a
combination of factor costs, institutional quality and infrastructure, has a better chance of
becoming integrated into the local economy. This, in turn, serves to increase the costs
of divestment over time. By contrast, a firm attracted by investment incentives may be less
committed to the region, and might make fewer subsequent investments in the area, while
remaining responsive to inducements offered in other locations. Furthermore, firms drawn by fiscal incentives are not likely to crowd-in more firms that make their investment decisions based on the fundamentals. Consequently, there is reason to believe that an adverse selection problem may also arise as a consequence of the use of monetary incentives.918

As regards evidence on the effectiveness of incentive schemes, estimates made by Mallya et al. (2004) indicate that the Czech national incentive scheme, which included various types of fiscal measures, as well as employment and training grants, is unlikely to have increased FDI by more than 10%. However, the authors also find that the screening rules that were applied to foreign investors may have been successful in attracting larger investors, thus resulting in more employment creation. However, as the volume of investment increases, the scalability of successful intervention is called into question, since selective subsidisation invites rent seeking by firms, which needs to be countered by further government intervention.

In general, monetary incentives to foreign investment are more likely to be warranted if the resource and capabilities used by MNEs (such as labour) are in elastic supply, if MNEs do not crowd-out local firms in the market, and if local firms benefit from productivity spillovers (Hanson, 2001). As we have seen in the previous chapters, it is quite likely that only one or none of these conditions holds in practice. This is of course not to say that countries could not or should not do anything to ensure that their economies offer a suitable platform for foreign production. Institutional design and macro-organisational policies which include coordinated investments in infrastructure and education, and the provision of information to enable MNEs to make well-informed choices, has yielded positive results in cases such as Intel’s investment in Costa Rica. Furthermore, the most likely conditions where spillovers may occur is when local firms have the ability and motivation to invest in the absorption of foreign technologies and skills. Subsidising foreign investment without encouraging the absorptive capacity of local firms to engage with the MNEs is unlikely to produce the desired results, making a coordinated macro-organisational policy preferable to the use of incentives (Blomström and Kokko, 2003).

19.3.3 General Policies of Host Governments as a Consequence of the Growth of Inward Direct Investment

The growing significance of the activities of the affiliates of MNEs in most developing and developed economies, as documented in Chapter 2, has meant that governments have been increasingly compelled to re-evaluate their macroeconomic and organisational strategies in the light of this phenomenon. At the same time, the growing interdependence of nations fostered by the global economy has led to a closer harmonisation and interlocking of macroeconomic policies pursued by the leading industrial nations, particularly the so-called ‘Group of 8’.919 At a macro-organisational level there is far less cross-border collaboration. Indeed, such institutional policy convergence as is occurring is, we believe, largely the outcome of competitive forces, rather than any deliberate act of cooperation between national authorities.

Of the changes that have occurred as a result of these events, together with a cluster of new technological breakthroughs in the 1980s and 1990s, none has been as far
reaching as the widespread renewal of faith in the market as a resource allocator and stimulator, and the disillusionment of the role of the state as an owner and organiser of economic activity. Undoubtedly, these changes in attitude are a reflection of the favourable growth rates achieved by the more market-orientated economies. However, it is also a testimony to the failure of political regimes which had promoted alternative institutional systems, or to those which had so abused the market system as to make it unworkable.

Yet, accompanying the renaissance of the market as a macro-institutional system, has come a growing realisation that it cannot, by itself, always create or sustain the conditions necessary to guarantee its own success. Nor can individual markets cope with some of the economic or social spillover or external effects of the transactions they organise. Most particularly, and through no fault of its own, the market cannot always provide the requisite supply and demand conditions to ensure socially optimal investment in education or commercial innovatory activities – the main engines of a country’s future wealth.

The combination of renewed confidence in the market to perform a wide range of functions and a growing appreciation of its endemic limitations as a generator and allocator of physical assets and human competences in an uncertain, interdependent and environmentally conscious global economy, is causing national governments to reappraise their macro-organisational strategies. In a Ricardian or Heckscher–Ohlin world, nations perfectly complement each other in their value-added activities. Each country produces the goods and services that require resources and capabilities in which it has a comparative advantage, and trades these for others which require inputs in which it has a comparative disadvantage. Although the principle of comparative advantage remains valid today, it is nonetheless the case that most of the leading industrialised countries (especially those located in the Triad of North America, the EU and Japan) produce and trade similar goods and services.

It is also true that the competitive advantages of these countries are becoming increasingly based on the level and structure of the assets and capabilities they create for themselves rather than on their natural factor endowments. While markets play an important role in the production of such assets and capabilities, they are generally highly imperfect. This, however, is not primarily a result of the presence of structural distortions imposed by the participants in the market, but rather reflects the inability of the market per se to cope adequately with such variables as uncertainty, economies of scale and scope, externalities and the production and distribution of public goods. In other words, markets may not be able to ‘shape’ the production and transactions of such ‘products’ as technological knowledge, organisational techniques, security, health, safety and environmental standards, as successfully as they previously shaped those based on purely natural resources. In such cases, national administrations, acting as custodians of the citizens under their governance, may be required to step in either to compensate for market impurities or to help create a ‘social’ market system and the accompanying institutions, by which production and transactions are organised in a way that benefits the community as a whole.

Although the above paragraphs may seem a digression from our main theme, they are not. The opening up of national economies to the winds of global change and competition, and the role which MNEs play, both as actors in cross-border markets and as
brokers in the allocation of economic activity between nation states, has meant that host governments are now evaluating inward investment less for the new resources and capabilities it provides, and more for the way in which it can integrate their economies into the global marketplace, and help upgrade the quality of their indigenous human and physical capital. At the same time, to promote the right kind of MNE activity, governments have had to reappraise the conduct and efficiency of the markets under their jurisdiction, and, where necessary, help create and sustain the institutions and policies under which they might work to the social good. Although negotiation and bargaining over the share of the benefits from inward investment may remain as fierce as ever, the primary focus is being increasingly directed towards obtaining the right kind of MNE activity in the first place, and then to ensuring that the activity fulfils its proper role in advancing domestic competitiveness and the social good.

We might identify four basic types of policies that countries have adopted, and are likely to adopt, towards foreign investment. The first is a policy of non-intervention, involving encouragement of both inward and outward investment, with few performance requirements or institutional controls imposed on investors. Most OECD countries have adopted this strategy, along with advanced developing countries such as Singapore, and to a more limited extent, countries such as Malaysia, Thailand and Mexico. The second is a policy of structural adjustment and upgrading, where inward and outward FDI are either encouraged or inhibited as an integral part of the micro-organisational strategy of the government. Examples include Japan, South Korea and Taiwan. The third is a selective investment policy, where investment is limited to specific sectors, and performance standards are imposed to enhance the economic and social consequences of the investment. Such policies were adopted by a number of Latin American and sub-Saharan African countries which pursued import-substituting policies in the 1960s and 1970s, with the notable exception of Mexico. The fourth is a controlled investment policy, which involves stringent controls of inward and outward investment. In the past, such policies have been adopted by India and China, as well as by some Latin American and African countries, although since the early 1990s, such policies have increasingly given way to others welcoming foreign investment.

However, even among countries pursuing non-interventionist policies, there are differences in the extent to which policies towards FDI are part of a coordinated strategy involving the upgrading of resources and capabilities. Ireland and Singapore stand out as examples of countries that have systematically improved the attractiveness of their economies by investing in education and training, supporting R&D, and investing in infrastructure. Other countries, including many OECD countries, as well as developing countries such as Malaysia, Thailand, China and Mexico, have relied more on FDI to assist in the upgrading of indigenous resources and capabilities in specific sectors. Furthermore, while there may be no explicit distinction made between inward investment via M&As and greenfield investment, host countries have generally had a preference for greenfield investment (Safarian, 1993). Indirectly, there may be substantial obstacles to M&As, such as when a proposed merger involving large firms invites a review by the competition authorities (see Section 19.6.3). Additionally, national institutional characteristics, such as the prevalence of preferential ownership shares, or the cross-ownership of banks and industrial enterprises, may make M&As difficult or impossible to undertake, as has been the case in Japan and Germany.
Chapter 2 has shown that, until the mid-1960s, the US and the UK accounted for half of the world’s outward direct investment stock. At the time, the relative economic significance of this investment was even greater in the case of several European countries, notably the UK, the Netherlands and Switzerland. Not until the late 1960s did (West) Germany again begin to be an important outward investor, while Japan’s contribution to the world’s investment stock only became of real significance in the 1980s.

We have argued elsewhere that the main reasons for the geographical concentration of outward investment in the 1960s were, first, that the O advantages necessary for such investment were strongly concentrated in the hands of US and UK firms, and second that because of the nature of these advantages and their differences in their cross-border production and transaction costs, they were generally best accessed and/or exploited from a foreign location.

It is, nevertheless, true that most existing and potential foreign investors outside the US were facing balance of payments difficulties in the 1960s and early 1970s, while a war-ravaged Europe was still short of resources, especially capital, management skills and technology to revitalise her industries. Because of this, home governments were reluctant to encourage outward investment, except where it was perceived to support domestic economic activities or was intended to acquire consumer goods and services which could not be produced domestically. Chapters 6 and 14 have shown that very little recognition was given to the possible complementarity between the benefits of domestic and foreign investment, although in their research into the effects of outward MNE activity from the UK, both Reddaway et al. (1968) and Dunning (1971b, 2002c) did discover some substantial technical feedback effects in a number of cases.

In spite of their lack of enthusiasm for outward investment, most governments maintained an open or a neutral stance towards it. By 1971, at least 15 countries offered some kind of investment insurance or guarantee scheme. In the same year, virtually all countries permitted foreign tax payments to be credited against domestic tax liabilities and/or deferred taxation on foreign income until it was repatriated. Yet, in the 1960s, all major investing countries were concerned about the possible negative effects of capital exports on their national economies. As Chapter 14 has shown, several of these (the UK, the US, Japan, France and Sweden) used controls to try to remedy adverse balance of payments situations. By contrast, Germany and Japan tried to increase their FDI outflows to reduce their balance of payments surpluses (Bergsten et al., 1978).

Only Sweden and Japan had any kind of comprehensive policy towards outbound investment. In 1974, the Swedish government passed a law which authorised the government to block an outflow of capital whenever it was perceived to conflict with the objectives of national economic policy. A key component of the law was that any application to export capital needed to be justified on balance of payments grounds. In addition, it had to include the views of labour unions. In practice, this law was generally ineffective as most Swedish MNEs were able to finance their foreign operations without transferring additional capital out of Sweden.

The Japanese case was (and still is) very different. From the mid-1960s, Japan has adopted a systemic approach to both inward and outward direct investment. At that time,
it set up a single agency to ensure that outbound MNE activity was consistent with national economic objectives. Initially, the emphasis was directed towards protecting the employment of Japanese workers, increasing the exports of manufactured goods, and safeguarding supplies of energy and raw materials for the domestic industries. Subsequently, Japan encouraged the export of labour-intensive and low-productivity industries, such as textiles and clothing, especially to neighbouring developing countries in Asia. It did so both to reduce its foreign exchange reserves – thereby heading off a revaluation of the yen – and to release domestic resources which could be more productively redeployed in higher-technology sectors.

Still later in the 1970s and early 1980s, Japanese MNEs began to set up offshore affiliates in several manufacturing sectors, for example, textiles, clothing and semiconductors, to undertake the labour-intensive parts of producing medium- to high-technology products. Also at this time, Japanese investors began to make inroads into the high-income markets of the US and Europe – most noticeably in the motor vehicles and consumer electronics sectors – initially in response to the rising value of the yen and protectionist measures, but later as part of their globalisation strategies.

Unlike other developed countries, Japan has evolved a holistic and integrated strategy towards outward direct investment. Even today such a strategy is inseparable from its more general industrial, trade and technology policies, as well as from its policies towards inward direct investment. Although it is accepted that, in the case of some firms, and for at least some period of time, Japanese investment may be substitutable for domestic investment, the policy is based on the essential complementarity between the two. For, first and foremost, Japanese outward direct investment is designed to promote the long-term competitiveness of the Japanese economy. In so far as it can capture global markets more effectively than by other means, it helps to provide the revenue to finance additional domestic innovatory activity, and to release indigenous resources for more productive uses. Investment in resource-based sectors – especially in developing countries – helps to guarantee the supplies (at the right quality and price) of raw materials and semi-processed goods for Japanese factories. Investment in labour-intensive manufacturing processes and/or products helps the investing company to maintain competitive prices in world markets. At the same time, Japan can claim that she is performing a useful ‘tutorial’ function to developing countries, by assisting them to more fully utilise and upgrade their own resources.

As far as the governments of other developed nations are concerned, although the criteria for evaluating the costs and benefits of the foreign activities of their MNEs have changed over the years, there is some evidence that they have begun to integrate their actions into their broader macro-organisational strategies. The major reason for this is that the globalisation of production and markets, particularly within the Triad, is forcing industrialised countries to reinterpret their strategies towards sustaining and advancing the competitiveness and comparative advantage of their indigenous resources and capabilities. When the contribution of direct capital exports is viewed in this light, it is entirely possible that, far from adopting an adversarial policy, governments may seek to encourage certain types of outward investment, or at least reduce any structural impediments on the ability of firms to pursue their international production strategies.

A review of recent macro-organisational policies pursued by Western governments reveals only a slight change in emphasis which can, in any case, be attributed to the
internationalisation of business. Until the 1990s, the writings and speeches of politicians rarely specifically acknowledged the benefits of the global activities of their firms. Since, in the public mind, these activities were, and are still, associated with the export of jobs or technology, this is perhaps understandable. Nevertheless, we believe it is misguided as, increasingly, outward and domestic investment are not in competition with each other. Both are (or can be) means by which access can be gained to the most up-to-date technologies and ‘best-practice’ managerial, organisational and marketing methods. The one exception seems to be in the area of anti-trust policy where governments, particularly the US authorities, have taken a more relaxed attitude in the belief that both domestic and cross-border mergers and alliances may sometimes help firms capture the economies of scale or scope demanded by global competition.

As it becomes better understood that the macro-organisational strategies pursued by governments are an important factor affecting the competitiveness of the resources and capabilities over which they have jurisdiction, and that outward direct investment has a particular and special contribution to make in this process, it may be that governments will come to adopt a more positive attitude towards their own MNEs. Certainly, several developing countries, notably China, Singapore, Malaysia and South Korea, are actively encouraging their own firms to become global players by engaging in strategic asset-seeking FDI (UNCTAD, 2006). At the same time, such investments have, in turn, evoked concerns related to national security in the host countries, not just in the US – most notably in the case of China National Offshore Oil Corporation’s bid for Unocal, and the (indirect) takeover of some US ports by Dubai Ports World – but also in the case of a proposed takeover of a Canadian metals firm by a Chinese buyer, and a bid for the UK gas supplier Centrica by Gazprom of Russia (ibid.). Of course, the role of home governments need not be limited to policies to encourage outward investment. In his analysis of the past four decades of US policy, Wells (2005) argues that the decade of the 1990s may have been exceptional with respect to the degree to which US administrations were prepared to intervene on behalf of individual MNEs in dispute cases, such as the one that arose over energy investments in Indonesia in the wake of the Asian currency crisis of 1997. Although such cases may not involve any extra-territorial application of US law as such, they do involve the questionable use of the power and influence of the government to assist MNEs in reaching their commercial objectives. Wells traces the basis for US government intervention to the Hickenlooper Amendment of 1961, which enabled the US President to end aid to a country that acquired American property without appropriate compensation; and also the Gonzales Amendment of 1972, which provided the government with the ability to use its influence at international financial institutions to vote against loans or other use of funds for governments accused of taking US property without compensation.

Although there have been a few notorious cases, where US MNEs have sought to influence or even overthrow elected governments, such as those involving the United Fruit Company in Guatemala and ITT in Chile, and have done so with the support of the US government, Wells argues that in previous decades, the US government has been reluctant to use the tools available to it in investment dispute cases. This is because, in the decades of the Cold War, the economic interests and the wider political interests of particular administrations were often in conflict, and while officials of the Treasury and Commerce departments considered disputes over outward foreign investment to be
important, the State Department typically viewed them only as relatively minor aspects of US foreign policy interests. Whether the shift in the geopolitical priorities of the US after 9/11 again serves to subjugate the commercial interests to the political interests remains to be seen.

But at the very least, governments should not allow their own firms to be penalised by the more-favoured strategies of their foreign counterparts. It is to be accepted that some of the policies are structurally distorting and are better removed altogether, either by negotiation at the conference table or by pursuing strategic trade and related policies. In the case of government policies which, by reducing market failure, help their countries to invest overseas, then the best reaction by other governments is to try to reduce the transaction costs facing their own firms.

The fact that more countries have now reached a stage in their IDP where the inflows and outflows of FDI are more symmetrical also gives rise to new policy issues. Chief among these is the need for governments to consider the economic impact of the inward investment by foreign MNEs, and of the outward investment of their own MNEs, as an integrated part of their competitiveness-enhancing strategy. Furthermore, it is not just investment that home countries need to be concerned with, but the entire range of foreign activities coordinated by MNEs, including contractual and alliance-based relationships.

19.5 THE CHANGING POLITICAL ECONOMY OF FOREIGN INVESTMENT

The role of the MNE as a political actor has undergone a fundamental transformation over the last century. According to Kobrin (2006), there are three essential elements to this transformation. First, that mutually exclusive territorial jurisdiction no longer characterises the global economy. Second, that the boundary between the public and private spheres has become increasingly blurred, with states competing as economic actors, and MNEs supplying a range of public goods. Third, that political authority has been fragmented, as MNEs and NGOs have moved from being the objects of international politics to becoming its subjects. The following discussion will tackle these issues in turn.

19.5.1 Sovereignty at Bay in the Digital Economy

Vernon's *Sovereignty at Bay* (1971) was a seminal contribution that put forward the notion that as MNEs were becoming more powerful, states were losing their influence. However, Kobrin (2001a) has argued that at the time, the sovereignty discussion in fact overextended its case, as MNEs still acted within a state system much more than is the case today, when globalisation has actually compromised territorial sovereignty. In other words, the premise that economic and political governance is based on geographic or territorial jurisdiction is no longer valid due to the advances in transport, ICTs, as well as the policies of economic liberalisation that have been pursued for most of the post-Second World War era. While MNEs have not directly caused territorial jurisdiction to become less important, they have been instrumental in the process by which the global economy has established itself.
Indeed, Kobrin argues that, in spite of the title of the book, Vernon never really claimed that the nation state would fade away. In the period that Vernon was writing about, sovereignty was to do with autonomy and control, which of themselves did not necessarily challenge territorial sovereignty. In fact, if anything, MNE activity reinforced rather than challenged external sovereignty, marked by exclusive territory, defined borders and geographically based political and economic governance. The primary problems related to MNEs were conflicts caused by the underlap or overlap of jurisdictions and extraterritoriality, rather than anything to do with territorial sovereignty. Thus during the era of *Sovereignty at Bay*, while MNEs were involved in jurisdictional conflicts, territorial jurisdiction per se was not an issue. However, the advent of the internet, and e-commerce, and the unprecedented levels of interconnectedness that characterise our contemporary global economy, evoke the question of whether the basic idea of territorial jurisdiction is still relevant?

In a globalised world ‘the spatial reach and density of global and transnational interconnectedness weave complex webs and networks of relations between communities, states, international institutions, nongovernmental organisations and multinational corporations which make up the global order’ (Held et al., 1999:27). Nation states are, by no means, unimportant, but they do not have quite the privileged position they enjoyed before the current era of globalisation. Consequently, as Strange (1996) has argued, scholars of political economy need to move away from a state-centric perspective, and, instead, examine how the sovereignty of national governments is challenged not just by MNEs, but by a variety of non-state actors, including multilateral organisations and NGOs. Strange also cautioned that the declining power of the state may be picked up by some other authority, or indeed by no-one – either of which could lead to increased political uncertainty and volatility in the global economy.

The increasing knowledge intensity of production and the role of continuous innovation affecting the competitiveness of firms pose further challenges to the relationship between states and MNEs (Mytelka, 2000b). If anything, the terrain of political battlefields is likely to get even more varied and complex in the future. Various state and non-state actors, both domestic and foreign, are playing an increasingly important role in defining and influencing the creation of the rules-based infrastructure for the commoditisation of information, which is essential to the growth of the digital economy (Newman and Zysman, 2006).

Like all markets, digital markets require definitions of property, exchange and competitive market structure, as well as the enforcement of social norms. As Newman and Zysman demonstrate, governments have been in the forefront of creating the institutions that underpin the digital market. Regulations concerning issues such as privacy in the collection of personal information, and the application of copyright laws to digital media, or the definition of the rights pertaining to ownership of tangible and intangible goods, and the rules regarding their use and reuse, are continuously evolving. Indeed, the ability of businesses to collect data, such as financial or health-related information, and to control the dissemination of information, has created a new imperative for governments to devise and implement institutions which safeguard the rights of the individual. As Newman and Zysman argue, we are witnessing something of a role reversal, in which governments, which in earlier decades were frequently accused of violating people’s right to privacy and free speech, are now called on to act as a watchdog to oversee private efforts.
to appropriate information. Such changes mean that in the global economy, the values and belief systems that underpin markets, and the institutions derived from them, need to be re-established and reinterpreted again and again, both in different markets, and in the same markets over time (North, 2005).933

19.5.2 States, Firms and Civil Society

In their influential book *Rival States, Rival Firms*, Stopford and Strange (1991) argued that rivalry between nation states for control over the means of wealth creation had overtaken traditional concerns such as territorial issues in diplomatic relations. They characterised this new kind of diplomacy as a triangular relationship, where one side represented firm-to-firm relationships, another represented relations between MNEs and host countries, and a third represented relations between states, particularly with respect to competition over MNE investment.934

In a recent review of this contribution, Stopford (2005) suggests that some changes in the structure of the triangle have been necessitated as a result of a move away from a world based on territorial divisions to an integrated global economy. He argues that there are now three critical balances of power: the first is the balance between states and their relationship to the dominant economic power, which today is still the US; the second is the balance between states and markets; and the third is the balance between individuals and states.

A realistic conception of the state has to include an understanding of both the state as a collection of individual cities and regions that have their own relationship to the global economy, as well as the growing influence of civil society. A realistic conception of the MNE, on the other hand, requires an understanding not only of the importance of the resource, capabilities, institutions and markets within the governance of the MNE, but also of the alliance-based and outsourcing relationships that constitute the MNE network of value-added activities.

Stopford also draws attention to the growing importance of the institutional and, indeed, the moral foundations of the global economy. Like Dunning (2003c), he believes that in addition to fostering economic growth, the political, economic and cultural interdependencies in an integrated global economy can become sources of conflict and instability. Throughout this volume, we have emphasised the importance of both formal and informal institutions (norms and values) in fashioning the scope, form and effects of IB activity. We have also asserted that while, at their best, the market-orientated institutions that underlie and serve the global economy are well placed to support the supply of private goods and services, they are less suited to delivering public goods and services, or ensuring that the wealth-creating organisations undertake their functions in a responsible and socially acceptable way.

Furthermore, the institutions of governance in place in the global economy have shown themselves vulnerable in their assigned tasks, such as preventing financial crises or being able to contain the contagion effects from such crises. Consequently, and perhaps controversially, we argue that capitalism on a global scale requires a more explicit dialogue and an examination of the ethical underpinnings of the market.935 Territorially confined markets had a morality derived from the same notions that defined the nation state, such as found in the moral philosophy of David Hume and Adam Smith. While the belief systems grounded in any particular culture may not be suitable as a moral basis for the
global economy, it is even more perilous to allow for a vacuum to be created when issues of governance shift from the national to the global level.

One visible manifestation of the resurgence of the importance of the norms and values governing business transactions has been through the demands made by civil society on MNEs in respect of their impact on social goals, including issues of justice and fairness. The field of NGOs is incredibly diverse: they range from small single-issue organisations, through to large international organisations such as Oxfam or Greenpeace, to those aimed specifically at facilitating the operations of coalitions of NGOs on a global scale. The last organisations are professional advisory bodies, and have been said to represent a new industry, which is that of the ‘protest business’ (Ostry, 2001). With their help, a variety of NGOs are making themselves visible in the multilateral arena, as well as exerting influence over the behaviour and actions of corporations. Among other things, this has been reflected in the growing reporting on environmental and social issues, and in the voluntary codes adopted by industries that have come under the spotlight.936

One principal reason for the existence of NGOs is that they address the democratic deficit in the global economy. For example, developing countries have been effectively (if not nominally) excluded from many of the decision-making fora. However, the democratic deficit argument works both ways. NGOs represent voices that would otherwise be unheard, while at the same time their affairs may be conducted in ways that make them often unaccountable, unelected and lacking in transparency.937

19.6 THE CASE OF EXTRA-TERRITORIALITY: HOW MIGHT HOME/HOST DIFFERENCES BE RECONCILED?

19.6.1 Introduction

We now turn to consider a group of problems which stem from the presence of an MNE or its affiliates in particular host countries, and which cannot easily be resolved by negotiation between the MNE and the host country government. Inter alia these arise because the MNE is behaving in a way that is expected of it by its home government. If this is not perceived to be in the interests of the host government, only the acceptance by one government of the other’s rights, or a bilateral agreement between the two governments, can resolve the issue.

Chapter 6 has described how much of the direct investment by European (especially British, French, Dutch and Belgian) MNEs in the 19th century was in their overseas colonies, and was intended primarily to service the economic needs of the mother countries. UK-owned companies in India and much of Africa, French and Belgian companies in Africa, Dutch companies in South-East Asia and Japanese companies in China served as arms of the economic policies of their mother countries. De facto (and, on occasions, de jure), they provided a transmission belt for the export of the formal and informal institutions, economic systems and political ideologies of the home countries to the countries in which they established outposts.

In his various writings, Vernon (1971, 1985, 1998) has referred to the twin personality of the foreign affiliate of a MNE. On the one hand, he points out, it is subject to the laws of the country within which it operates; on the other, it has to abide by the decisions of
its parent company, which is required to comply with the laws of the country in which it resides. Over the years, this dichotomy has led to considerable conflict between investing and recipient countries. This reached an extreme form in 1906 when American marines were despatched to Honduras to guard US sugar plantations threatened with burning by the local population. A year later, when Honduras and Nicaragua were at war, the US Navy sent a warship to protect American properties along the coast of Honduras. And in 1910, US forces landed at Bluefield in Nicaragua to protect the interests of US nationals and MNEs located on or around the Escondido River. These and other instances of this particular form of political extra-territoriality are cited by Wilkins (1970).

A century later, with extra-territoriality once again an emerging issue, we explore the examples of three kinds of extra-territoriality provisions. The first relates to the restriction of exports from the foreign affiliates of MNEs, the second to the cross-border extension of domestic anti-trust legislation, and the third to the defence of human rights.

19.6.2 Export Embargoes

A well-publicised attempt by a home government seeking to restrict the exports of a foreign affiliate of one of its MNEs was that made by the Reagan administration in 1982. It concerned the export of compressors by the French affiliate of the US Dresser Corporation to the Soviet Union, where they were to be used in the construction of natural gas pipelines in Siberia. The US government perceived such exports to be against its strategic interests and ordered the Dresser Corporation to cease trading with the Soviet Union. This action offended the French government, which promptly ordered the US affiliate to ignore the instructions of its parent company. After taking legal advice, the affiliate decided to comply with French law and accepted the consequences of violating US policy. Earlier in 1974, the sale of locomotives by a Canadian affiliate of another US MNE – Studebaker-Worthington – to Cuba took place despite US Treasury objections.

According to Keohane and Van Doorn Ooms (1975), the fact that the number of major intergovernmental conflicts arising from the extra-territorial application of US law by US MNEs has been so small is itself a vindication of US policy. The main vehicle of the extra-territorial provisions is the Trading with the Enemy Act, first enacted during the First World War. The Act was subsequently amended in 1933 to enable the President to exercise its powers during peacetime national emergencies. By the use of this Act, the US has, in the past, been able to dissuade its foreign subsidiaries from trading with Germany during the First World War, Japan prior to US entry into the Second World War, and the communist countries of China, North Korea, Cuba, North Vietnam, and eventually South Vietnam and Cambodia after the fall of Saigon in 1975 (Marcuss, 1999).

Certainly, it would seem that until the mid-1970s, the great majority of US companies complied with the sanctions voluntarily. The protests lodged by host governments were generally weak and did not confront the sovereignty issue directly. One notable exception was an eyeball-to-eyeball altercation between the US and France in 1967. This concerned an agreement made by Fruehauf-France, a US affiliate which was two-thirds owned by the American Freuhauf Company, to sell trailers to another French company – Berliet – for incorporation into trucks which Berliet intended to sell to Communist China. The US Treasury Department directed the American parent to instruct its affiliate to suspend the execution of the contract. This was done, but Berliet insisted on its contractual rights and
threatened suit. The French directors of the affiliate then acted independently. They sued the American directors and Fruehauf (US), alleging that substantial losses would be incurred if the US directive was implemented. The French court then appointed an administrator for Berliet so that it could meet its Chinese commitments. The French government also sent a warning to the US government that if it attempted to apply the Trading with the Enemy Act Regulations, it would cause a permanent threat to hand over the subsidiaries of American companies, in conflict with the sovereignty of the state in which the subsidiaries are located (Kobrin, 1989). Faced with this situation, the US Treasury backed down and accepted defeat.

By the 1970s, the economic hegemony of the US had waned considerably, and host governments were less inclined to acquiesce to the demands of American law and policy. In 1974, for example, when the US Treasury and State Department objected to the sales of auto products to Cuba by the Argentinian plants of the three major US auto producers, the host government not only refused to discuss the matter but also threatened to impound the vehicles destined for Cuba, and, if necessary, to nationalise the subsidiaries. In the end, not only were the licences granted, but also Secretary Henry Kissinger acknowledged the inevitable conflict posed by US law. A year later, after yet another case involving the export of office furniture by the Canadian affiliate of Litton Industries to Cuba, restrictions on the exports of subsidiaries located in countries which favoured trade with Cuba were lifted.

In addition to the Trading with the Enemy Act, the US has also used the Export Control Act dating back to 1949, and its successor, the International Emergency Economic Powers Act (IEEPA), dating back to 1977, to regulate the export of goods and technology to countries that pose a threat to national security. This has led to sanctions being imposed against Angola, Burma (Myanmar), Egypt, Haiti, Iran, Iraq, Kuwait, Libya, Nicaragua, Panama, Rhodesia (Zimbabwe), South Africa, Sudan and Yugoslavia. IEEPA has also been used to impose sanctions against individuals engaged in international terrorism and drug trafficking. However, the complexity of the issues involved, and the relatively broad terms in which the sanctions are expressed, have also invited a substantial amount of litigation both to challenge their legality and to clarify their meaning (Marcuss, 1999).

Kobrin (1989) has persuasively argued that although there may be many cases where the behaviour of the subsidiaries of an MNE may conflict with the interests of the home countries, the power of the latter to do anything about it largely depends on the strength of their economic, political and strategic (and sometimes military) capabilities, relative not only to those of the host country, but also to the rest of the world. It also rests on the extent to which investing firms take an ethnocentric attitude to their foreign operations (see Chapter 8). Kobrin suggests that the decline in the economic and political hegemony of the US and the more geocentric approach to overseas production by the major US investors over the past two decades have encouraged host countries to resist any interference in their domestic affairs by the US government. Gilpin (1975, 1987) endorses this view, and argues that the falling US share of the world’s stock of FDI (see Chapter 2) is itself a contributory factor to the inability or reluctance of the US authorities to enforce extra-territorial policies or regulations. Over a longer time horizon, there is much to suggest that the erosion of Pax Britannica in the 19th and early 20th centuries coincided with a reduced involvement of the UK government in the foreign affairs of its own MNEs.
Even so, the limits to unilateral action are relative. Following the events of Tiananmen Square in 1989, both the US and the EU placed an embargo on military exports to China. Pushed by France and Germany, the EU announced that it would be lifting its embargo in 2004, only to step back against strong opposition from the US, including threatened restrictions on US technology exports to the EU, and a failure on the part of China to demonstrate notable improvements in its human rights regime.940

19.6.3 Application of Anti-trust Policy

We turn next to consider the attitude of foreign governments (particularly the US government) towards the extra-territorial application of domestic anti-trust legislation. In the 1950s, such legislation was held responsible for destroying some existing US investments in the UK and inhibiting new investment (American Chamber of Commerce in London, 1955).

Gladwin and Walter (1980) identified three kinds of extra-territorial application of US anti-trust law.941 The first is where there is a perceived intra-firm conspiracy to restrict competition between an American parent company and its foreign affiliate or, indeed, between its foreign affiliates. A case in point is the prosecution and subsequent conviction of the US Timken Roller Bearing in 1951 for its agreement not to compete with its English and French affiliates, and for its actions to prevent these subsidiaries from competing in the Western Hemisphere. Second, a US court may order a US corporation to divest its interests in a foreign company should it believe that this reduces competition in the US market. For example, in 1950, US courts ordered Alcoa to dispose of its interests in the Canadian affiliate Alcan, DuPont and, a year later, forced the divestment of DuPont in Canadian Industries as an Anglo-American venture. In both cases, this action was strongly resisted by the Canadian government.

Third, American companies may be forbidden to acquire companies in particular host countries. This application of anti-trust legislation has probably had the most far-reaching consequences of all the extra-territorial measures imposed by the US. Its provisions have been used to block a potential, as well as an actual, erosion of competition. The classic case here was the ruling by US courts against the proposed acquisition by the Gillette Corporation of Braun AG in Germany in 1968, on the grounds that it would considerably reduce the contestability of the market for electric razors in the US.

The practice of extra-territorial anti-trust legislation is not limited to the US and does not only apply to the foreign subsidiaries of MNEs. Contracts concluded in cross-border collaborative agreements are subject to the same authority. However, beginning with the Reagan administration, over the past few decades, there have been few cases of infringement of anti-trust legislation involving the three kinds of action brought to the US courts. This is notwithstanding the fact that the number of cross-border acquisitions, mergers and strategic alliances have mushroomed. In the US, too, several M&As have been allowed, which a decade earlier would certainly not have been permitted by the US courts.

All this suggests a changing attitude of governments to anti-trust legislation. This monograph has frequently stressed that to be competitive in a global marketplace, firms in R&D and information-intensive sectors either have to be very large to benefit from the economies of scale or scope, or need to conclude alliances with other companies (including their competitors) to lessen their resource commitments and gain access to new supply
capabilities and/or markets. In many cases, however, this leads to more (domestic) industrial concentration. The fact that this is not opposed by national authorities is explained partly by the generally increased exposure of domestic firms to foreign competition (particularly within free trade areas) and partly by the belief (which is not always correct) that size and global competitiveness go hand in hand, and that smaller firms need to merge or collaborate with each other to compete with their larger rivals. US attitudes have also been influenced by the more liberal treatment of the European Commission to industrial concentration and cartelisation.

The other reason for the fewer prosecutions of firms for violation of extra-territorial anti-trust provisions by the US government has been the reduction in the power of the American authorities to enforce this legislation. There is a direct parallel with the emasculation of the Trading with the Enemy Act and similar legislation. Moreover, over the years, especially in the past decade, the US has had few important ‘enemies’ outside of the ongoing War on Terror. Indeed, it is now encouraging trade with, and investment in, some of the very countries on which earlier it had placed export embargoes.

However, at the international level, competition law consists of partially overlapping domestic regimes. As a consequence, multijurisdictional merger review, where multiple authorities are empowered to scrutinise the same merger, and might reach a different conclusion, has become an emerging issue of concern (Guzman, 2004). This happened, for example, in the case of the proposed GE-Honeywell merger in 2001, which was approved by US competition authorities, but blocked by the EU, which applied a different kind of review process (Gugler, 2006). However, an opposite example can be found in the mergers that took place in the pharmaceutical industry in the late 1990s. In the five merger cases analysed by Marcotullio (2001), the relationship between the US and European authorities evolved case by case towards more cooperation. This in turn resulted in more convergent evaluations, reflecting a similar view of the product market, the relevance of R&D, and the shape of competition in the future market.

According to Klodt (2001), the two principal concepts underlying international anti-trust cooperation are the effects doctrine and the comity principles. The justification for extra-territorial jurisdiction in anti-trust cases is derived from the effects doctrine, which states that national authorities are entitled to pursue any case that affects competition in their jurisdiction, irrespective of the country of origin of the firms. The basis for cooperation is established by the principles of positive and negative comity, where negative comity involves consideration of the effects of any action on the other party, while positive comity entitles one authority to refer a case to another authority. Both negative and positive comity are included in the US–EU agreement, although negative comity has been applied with far greater frequency.

In the wake of the growth in M&As in the 1990s (see Chapter 2), the question arises of whether sufficient oversight of global oligopolies can be achieved by the extra-territorial application of national competition policies, or whether international competition (anti-trust) rules are required? In a review of US–EU merger cases from 1945 to 1998, Klodt found that in 13 of the 20 cases he reviewed, there were conflicts arising from differences in national legislation or national policy goals, which hindered the possibility of cooperation. As a consequence, he concludes that by themselves, the effects doctrine and the comity principles are not likely to be sufficient to secure cooperation in a global economy, where national or regional interests still remain paramount.
19.6.4 Responsibility for Human Rights Violations

The final example of the extra-territorial application of national laws we wish to examine concerns the use of the US Alien Tort Claims Act (ATCA) of 1789 to bring prosecutions against MNEs for violations of human, labour and environmental rights. The Act states that 'district courts shall have original jurisdiction of any civil action by an alien for a tort only, committed in violation of the law of nations or a treaty of the United States'. Although it lay dormant for a long time, a number of cases have been brought under ATCA over the past decade, many involving activities that took place outside of the US, and were undertaken by non-US MNEs.

One such case involves the Canadian MNE Talisman Energy, which was accused of human rights violations in Sudan. In his introduction to the Talisman case, Kobrin (2005) explains that with the exercise of public authority comes public responsibility, and if MNEs have become acknowledged actors in the international political arena, they might also be held responsible for public functions, such as upholding human rights. Furthermore, he states that the sharp distinction between the public and private spheres is a Westphalian creation that developed with territorial sovereignty and property rights protection. Before the rise of the nation state, political authority was more diffuse and non-territorial, and today, with an integrated global economy, political authority has again become more fragmented.

The critical issue in the case rested on the concept of complicity: what exactly does it entail? Is simply entering a country with a bad record on human rights enough, or is active participation in violations required? Is there a role for constructive engagement? While the UN Norms on the Responsibilities of Transnational Corporations asserts that the primary responsibility for human rights rests with the states, it goes on to declare:

Within their respective spheres of activity and influence, transnational corporations and other business enterprises have the obligation to promote, secure the fulfillment of, respect, ensure respect of and protect human rights recognised in international as well as national law, including the rights and interests of indigenous peoples and other vulnerable groups.

This is a duty that clearly goes beyond compliance with national laws and regulations. As such, it represents a change from the long-standing barrier against MNE involvement in domestic politics, and creates an expectation that MNEs should actively work to secure human rights, labour rights and environmental protection.

How might one then assess the degree of complicity? Existing intergovernmental codes of conduct give rise to a classification of complicity into direct, beneficial and silent complicity (Kline, 2005). Direct complicity involves acts that support or contribute to violations of human rights. Beneficial complicity includes benefiting from political repression in a way that may enhance immediate commercial interests. Silent complicity embraces those situations in which the connection to the violations is primarily coincidental, but where the MNEs are aware, or can be assumed to be aware, of the violations.

Judged by these standards, the conduct of Talisman certainly involved silent complicity, and in all likelihood, beneficial complicity as well. Nonetheless, in this instance, the Canadian government thought it inappropriate to involve themselves in the operations of a Canadian firm abroad in order to intervene in the domestic matters of another
state. Similarly, Talisman was either unable or unwilling to engage in more forceful efforts to protect human rights, and eventually withdrew from Sudan to quell the protests by NGOs.

While the issues raised by this and similar cases are compelling, the use of ATCA, although one the few available means, is probably not the best means to try to set the limits of acceptable conduct in the global economy. We would agree with Kobrin that as soon as a firm’s responsibility extends beyond its responsibility to shareholders, defining the boundaries of that responsibility cannot be left to the firms themselves, but belongs to society at large. The guidelines published by the UN and the OECD go some way towards articulating the extent of the responsibility. None the less, the enforcement of these responsibilities remains problematic due to the mismatch between the economic interdependence that characterises the integrated MNE, and the legal tradition that reinforces the independence and limited liability pertaining to the constituent parts of the corporation (Stephens, 2002).

### 19.6.5 Other Areas of Conflict

Other issues involving MNEs may also cause some friction between home and host nations. Many of them do not involve the issue of extra-territoriality as such, but arise because of the different laws, regulations and policies of countries, which MNEs can sometimes counteract or exploit, and by so doing, affect the cross-border distribution of costs and benefits. Perhaps the most obvious examples are taxation and transfer pricing, discussed in Chapter 17. Earlier in this chapter we discussed the fact that host countries sometimes compete with one another in the investment incentives and tax breaks they offer to gain more inward direct investment. The nature of the competition for the benefits of MNE activity is rather different and less transparent – but each country would certainly like to gain as high a share of the taxable income as it can.

Suppose, for example, that corporation taxes in Country B are lower than in Country A. Chapter 17 has shown that *ceteris paribus* this would give an MNE from Country A which produces in Country B an incentive to switch taxable income from Country A to Country B by, for example, manipulating the prices on goods and services internally traded between these countries. Since it will lose tax revenue, Country A will regard TPM as against its interests. Country B, on the other hand, will stand to gain additional tax revenue. The outcome could be a conflict about the distribution of income between the two tax authorities, with the MNE being caught as ‘pig in the middle’. This example, which is just one of many which could be given, serves to make a general point: in many instances, the apparent conflict of interests between MNEs and nation states conceal more fundamental conflicts of interest which exist between nation states. In the case just illustrated, although TPM may benefit the MNE, its real consequence is that it causes income to be redistributed between the citizens of Country A and those of Country B.

Similarly, conflicts between home and host countries might arise over the remission of dividends and the repatriation of capital between the foreign subsidiaries and their parent companies. Clearly, such conflicts will arise whenever the assets of a foreign affiliate are expropriated by a host government without adequate compensation. To the US government, the action by Iran after the overthrow of the Shah of Persia in 1979 was no less an affront than was the interference of an American MNE – ITT – in the political affairs of
Chile in 1973. However, the ongoing issue of the right of a host country to unilaterally freeze the dividend remissions due to foreign investors because of its own internal economic difficulties, suggests a more subtle, yet more difficult, area of contention. It may not matter a great deal whether the home country does not have its own balance of payments difficulties. But what if both the home and host countries are in similar financial straits? Then a straightforward conflict of interests arises, and one country might perceive that the other is extending its jurisdictional rights beyond its boundaries.

In a variety of other fields, the MNE may be a transferring agent, or even an arbitrager, of country-specific institutional differences. Take, for example, the contemporary issues related to labour and environmental standards, or those relating to securities legislation, information disclosure and accounting procedures, and the norms of business conduct (for example, attitudes to bribery and corruption) that the MNE qua MNE may quite unwittingly introduce governments (particularly those of countries with very different cultures, ideologies and economic systems) to new areas of conflict. Most of these issues, however, have nothing to do with extra-territoriality per se.

Indeed, as quickly as one area of intergovernmental conflict disappears, another seems to arise. The response by MNEs to regional integration has widespread ramifications for the political sovereignty of nation states and the efficacy of unilateral policies. The growth of intra-industry trade and investment, and the growing similarity of the economic structures of many advanced countries, is creating a new set of inter-country tensions. Moreover, as the trade and production of countries become increasingly linked by the operations of MNEs and cross-border alliances, these conflicts are likely to become more transparent.

At the same time, some old sources of conflict are returning. The rise in oil and mineral prices over the past five years, coupled with a resurgence of nationalism in some Latin American countries, has led some governments to press for a renegotiation of contracts earlier concluded with MNEs. For example, Venezuela has unilaterally converted contracts from operating service agreements to joint ventures, with a majority held by the government, as well as increasing royalties and raising taxes on the oil companies (UNCTAD, 2007). In Bolivia, the oil and gas resources were nationalised, including those companies privatised in the 1990s (UNCTAD, 2006, 2007). In the case of hard minerals, the rise in prices prompted governments in Peru and Chile to introduce new taxes or royalties levied on sales or profits, and similar legislation has been proposed in South Africa and Zambia (UNCTAD, 2007).

True to its schizophrenic nature, MNE activity can – at one and the same time – bring countries closer together and drive them further apart. Once again, much depends on the OLI configuration with which an MNE is faced and its strategic response to that configuration.

19.7  CONCLUSIONS

As yet, few governments explicitly attempt to integrate their actions designed to affect the costs and benefits of MNE activity into their general economic policies. Nor, indeed, do they consider inward and outward direct investment alongside investment by unilateral domestic firms as complementary ways of advancing economic restructuring and growth.
This chapter has first outlined the main reactions of host governments to inward investment. It identified the reasons for cross-country differences in such policies and how they have evolved over the past 30 years. It suggested that, very gradually, as the contribution of the different kinds of inbound MNE activity has become better understood, and a more important feature on the landscape of most economies, they have had to give equal attention to the appropriateness of general institutions and macro-management policies, as well as those specifically addressed to MNEs. This has not only been made necessary by changes in the world economic scenario and the position of host governments in that scenario, but also, in some cases, by the increasing flexibility of MNEs in the siting of their value-added activities.

The chapter has also argued that it is the balance between the competitive or O-specific advantages of MNEs (as perceived by the host countries) and the L advantages of countries (as perceived by the MNEs), together with the opportunity costs and negotiating strengths of the two parties, that determine the institutional and policy responses of host governments. This balance has changed over the past decade or so. Independently of world economic events, we have argued that it is necessary to take an evolutionary or dynamic approach to understand MNE–host government relationships. In particular, it is important to know how different kinds of outward and inward investment may affect the interaction between the O-specific advantages of the investing firms and the L advantages of the home and host countries. It is also critical to understand the ways in which national governments, either by design or accident, may affect inbound or outbound MNE activity, and the way in which it is organised.

The role of national governments in increasing or reducing market failure and reconfiguring their institutions, together with their influence on the geographical concentration of related industries, is also decisive as it affects both the L advantages of its L-bound resources and capabilities and the O-specific advantages of foreign MNEs. Finally, this chapter, like those before it, has also suggested that these various interactions need to be considered in the light of different developmental and/or economic restructuring strategies of governments, and in the context of some kind of asset-accumulation model.

Policies towards outbound and inbound direct investment have generally been formulated on the presumption that each is substitutable for domestic capital formation – either by MNEs or uninational firms. The growing convergence between the economic structures of the industrialised countries, the rising importance of the role of created assets and supporting institutions in fashioning the competitiveness of firms and industries, and the increasing ease with which these assets can traverse national borders, has changed not only the nature and pattern of the global division of labour, but also the contribution of MNEs to that division of labour. Inward investment can play its part by providing new resources, capabilities and markets, and by stimulating the better use of indigenous resources and capabilities. Outward investment plays its part by tapping into another nation's competitive and comparative advantages and by capturing new markets, both of which may help to sustain and upgrade the domestic innovatory opportunities of the investing firms.

It is the synergy between international direct investment flows and the competitiveness of countries in the global economy that is beginning to force a reappraisal of the domestic macro-organisational policies of governments. Indeed, we believe that, ultimately, the
main impact of MNE activity on governments – and particularly those in the Triad – will be to force them to adopt a systemic and strategically led set of policies. The generic strategy must surely be to sustain, and, if possible, advance the competitiveness of its firms and the comparative advantage of its L-bound resources in the global market place. But, in itself, this strategy can only be successful if all the components that, between them, determine economic prosperity are integrated and geared to a common objective. This means that fiscal, environmental, education, industrial trade and technology policies must all be institutionally and strategically driven. And in each of these, directly or indirectly, governments must take account of the policies of their competitors, and how their efforts in affecting trade, migration and the activities of MNEs, impinge upon the success of their own policies.

This is undoubtedly a tall order, but it is one that reflects the complexity of the issues involving MNEs and governments. On the one hand, the globalisation of markets is reducing the role of government. On the other, many of the goods and services that are traded across boundaries can only be supplied by extra-market institutions, or where supplied by markets, these are very imperfect, suggesting a role for more government intervention. As we have seen, the recent rise in oil prices and that of some hard minerals is affecting the size and distribution of economic rents between governments and MNEs in a number of resource-rich countries. Whether this windfall is spent on sustainable social programmes, or appropriated as private wealth, is for the governments to determine. At the same time, many developing countries are facing an acute shortage of another critical resource, namely fresh water, which can only be addressed by concerted government efforts and, in all likelihood, FDI.

Furthermore, a range of non-economic and socio-economic issues enter into national and individual utility functions. Issues such as the environment, security, climate change and consideration for the next generation of consumers and workers, all have to be taken on board in a world in which cultures, values and belief systems remain very distinct. What is the role of government in affecting, and being affected by, MNEs in reconciling these inter-country differences, while benefiting from freer trade and investment? We have argued that there is a role for national governments, as their policies and institutions can, and do, affect MNE activity. At the same time, many of the challenges of the 21st century require a supranational approach to find solutions, which is the subject of Chapter 20.
20. Governments and MNE activity: the multilateral response

20.1 INTRODUCTION

The previous chapter considered some of the ways in which national governments might seek to influence, or respond to, MNE-related activity. However, in the early 2000s, there is increasing reason to suppose that, by itself, unilateral action may not always be fully effective, or produce an optimal outcome for particular home or host countries. Each of these is linked to the perceived incapacity of individual administrations to combat different kinds of structural or endemic market failure, or unwelcome social or environmental effects, arising from, or associated with, the activities of MNEs. To overcome this incapacity, some kind of collaborative action by countries may be necessary. The rationale and form of such action is the subject matter of this chapter.

There are three main reasons why national governments might require supranational assistance in their dealings with MNEs. The first arises from the former’s perceived weak bargaining and negotiating positions vis-à-vis the latter, as demonstrated by their inability to extract the desired share of any value added MNEs create, or to effectively influence their patterns of behaviour. One way to redress the bargaining balance is for a group of countries to pursue collective and/or harmonised policies towards MNEs. Another may be to try to get agreement on some kind of institutional framework by which the goals, strategies and behaviour of MNEs and their affiliates might be better monitored and/or influenced.

The second reason for multilateral action is where, because of cross-border market failure, the L-specific advantages of potential host countries are insufficient to attract the investments they need, or where the institutions and policies of the home country impede outward investment. Here intergovernmental efforts to reduce the disincentives to MNE activity may be justified.

Third, the policies of national governments may be ineffective because they are counteracted by those of other countries. This is the case where the strategies of host (or home) governments towards FDI may conflict with the perceived best interests of the home (or host) country. For example, it is possible that a limitation on the remission of dividends imposed by a host country may conflict with the balance of payments interests of the investing country. The government of the country adversely affected can sometimes neutralise the other country’s actions. However, only bilateral or multilateral cooperation can resolve the conflict. ‘Beggar my neighbour’ investment policies by governments towards MNEs may also be suboptimal in global welfare terms.

The following sections deal with these three issues – each of which, in turn, needs to be reappraised in the light of the globalisation of economic activity. Policies on MNEs
and FDI touch on two central issues in political economy, namely what is the desired trade-off between economic and non-economic goals, and what is the desired balance between government intervention and free markets (Cohen, 2007). Countries that act as home and hosts to MNEs can, and do, adopt a variety of positions along these two dimensions, reflecting both their underlying cultural and ideological norms and values, and the prominence or the affiliates of MNEs in their economies. As a consequence, the policies adopted by countries vis-à-vis MNEs, and the institutions used to implement them, also reflect this variety. Indeed, the past decade has seen notable movement towards regionally based solutions rather than multilateral responses to the issues posed by MNEs, which can be seen as another indication of the complexities inherent in the integrated global economy.

20.2 MULTINATIONAL ACTIONS TO ASSIST THE BARGAINING POWER OF HOST COUNTRIES

There are two reasons why countries might find themselves in a disadvantaged position in negotiating with MNEs. The first is that, as other chapters in this book have shown, host countries often compete with one another for the value-added activities both of foreign firms and of their own MNEs. Moreover, they often do so in highly imperfect market conditions. Indeed, they may sometimes exacerbate these conditions by their macroeconomic and/or micro-management policies. Only a collaborative effort to reduce cross-border market distortions, or setting rules or guidelines of behaviour to avoid wasteful inter-country rivalry, can overcome these deficiencies. Thus, for example, the European Commission has imposed restrictions on the amount and kind of incentives which may be offered by member states to foreign investors (Ghauri and Oxelheim, 2003).

Second, for reasons discussed in the previous chapter, some host countries may be at a disadvantage in bargaining with MNEs even where there is no competition for their resources and capabilities from other countries. In extreme instances, MNEs may be able not only to extract the entire economic rent arising from their activities, but also to use their leverage to engage in organisational or operational practices which, under other conditions, would be unacceptable. This lack of government bargaining power may be a result of ignorance, lack of experience, underdeveloped institutions or inappropriate policies. Alternatively, it may reflect the monopolistic control exerted by MNEs over the resources and capabilities they provide, or the markets which they serve. In such cases, supranational action may take four main forms. We shall briefly discuss each in turn.

20.2.1 Collective Action by Countries

The first step that countries may take is to group together to strengthen their bargaining position against MNEs, and to formulate unified policies towards their activities. This, indeed, has been one of the purposes of several of the regional integration schemes involving developing countries, as described later in this chapter. These schemes not only lessen the possibility of MNEs playing off the government of one country against that of
another, but also, if an MNE tries to use its monopoly position in one country, it may find that this adversely affects its performance in another.

How far these common actions are successful depends on the extent to which a unified policy is likely to produce more beneficial results to the participants than ‘going it alone’. This, in turn, rests on the form of the agreement between the member countries, and its distributional consequences vis-à-vis the terms and conditions which countries might have negotiated individually with the MNEs. Moreover, it may be easier to obtain a collective agreement on some matters than others, and impossible to harmonise all at the same time.

For example, within the EU, the European Commission continues to issue directives to remove the impediments to the completion of the internal market, most recently in the area of services. However, fiscal policy remains the domain of individual member states. While these states do not openly compete against one another to attract inward foreign investment, regional aid and other inducements can and have been used to influence the locational decisions of firms. Indeed, it may well be that, as and when one avenue of competition closes, another opens. The real question is whether the inter-country rivalry that exists is an expression of market-facilitating forces or that of the distortion of such forces.

History has shown that the experience of regional integration schemes in tilting the benefits of MNE investment towards particular countries is a mixed one. Often it would appear that the larger and more powerful members of an association have gained at the expense of the smaller members. As an example, in 1970 this led to a breakaway of the Andean group of countries from the Latin American Free Trade Area in which Brazil, Mexico and Argentina were perceived to be the main beneficiaries of MNE activity. On the other hand, within NAFTA substantial gains have accrued to Mexico, and within the EU, smaller economies such as Ireland, Finland and Austria have sometimes fared better than some of their larger counterparts.

20.2.2 Assisting National Governments to Re-evaluate Their Domestic Policies

The second way to assist nations in their institutional response and policies towards MNEs is by the education and training of government policy makers, not only in economic management and administration, but also, more specifically, in the appropriate macroeconomic and organisational policies to adopt towards, and in the light of, MNE activity. This latter task was one of those assigned to the UNCTC in 1973. At the time, the centre and the Commission to which it was responsible was providing information about, and undertaking research on, MNEs (or transnational corporations, as the UNCTC preferred to call them), and of evaluating both the consequences of MNE activity and how host governments might maximise the net benefits arising from it. In 1991, the UNCTC was transferred from New York and absorbed by UNCTAD. Today (in 2007), one of its divisions, namely, the Division on Investment, Technology and Enterprise Development (DITE) continues much of the earlier work of information gathering and analysis, and of assisting developing countries to devise policies and to upgrade their institutions so that they might gain the maximum benefits from both inward and outward MNE activity. In addition, it publishes the annual World Investment Report, which contains a review of the latest trends in MNE activity, and explores a particular theme of interest about their operations.
For the last three decades, advice and guidance on MNE-related issues has been provided by a variety of UN agencies – notably the UNCTC, UNCTAD, UNIDO, ILO, the World Bank and the IMF – in two main ways. The first has been in the form of cross-country workshops on specific MNE-related issues (transfer pricing, the transfer of technology, negotiating hotel contracts, restrictive business practices, the economics of EPZs, investment incentives, JV management, environmental standards and so on) in which experts and participants share knowledge and experience about the consequences of inward (or outward) direct investment and the policies adopted towards it. The second is by individual consultants, or teams of consultants, visiting a particular country to help the appropriate authorities identify and deal with specific matters of concern to the government of that country. Examples include the preparation of foreign investment laws and regulations, the construction of a code of practice for technology transfer, the restructuring of taxation policy in the light of MNE activity, and administrative procedures in negotiating with inward investors.

Multilateral action of this kind (provided that the information is correct and the advice is sound!) can be and has been of considerable help to host countries, in obtaining foreign resources and capabilities on satisfactory terms, in using these resources and capabilities wisely and, where appropriate, in refashioning their macroeconomic and organisational policies. Parenthetically, it is worth observing that over the last three or more decades, the emphasis of the advisory work of the various UN agencies has shifted from being mainly concerned with ways and means of improving the bargaining position of host governments vis-à-vis MNEs, to helping them devise suitable economic strategies to maximise the benefits of both inbound and outbound FDI.954

20.2.3 Codes and Guidelines

The third way in which multilateral action can aid (or even replace) unilateral action is by the introduction of internationally acceptable codes of conduct or guidelines of behaviour. These institutional instruments might be addressed either to MNEs or to the home and/or host governments. In both cases, they are likely to be drawn up by the governments of individual countries, or a regional (for example, NAFTA, the EU) or international (the OECD, the UN) agency or commission. Guidelines directed specifically to MNEs have also been compiled by chambers of commerce, trade associations and individual MNEs. Neither codes nor guidelines normally have the force of law, but an acceptance of them does imply the willingness of both corporations and governments to abide by their provisions, except in the cases where they are perceived to operate against their own economic or political interests.

Codes may be general or specific. They embrace, for example, such issues as ownership, transfer of technology, the disclosure of information, employment and training, labour standards, taxation, competition and the environment. The underlying principle of the guidelines is to inform MNEs about matters which are likely to be sensitive to host countries and to encourage them to behave in a way which is in keeping with the national well-being of the economies in which they operate.

Although adherence to the OECD guidelines for MNEs, which were introduced in 1976 and revised in 2000, is not binding on the part of MNEs, the constituent member states have the right to publicise the names of flagrant or persistent offenders.955 The OECD
guidelines are also addressed to governments in their dealings with MNEs. In particular, they stress the need for governments to treat domestic and foreign firms in an equal and equitable manner, and to abide by their contractual obligations and international commitments. The guidelines also encourage the establishment of international machinery for the settlement of disputes.

The most ambitious code to govern the conduct of MNEs, which was two decades in the making yet never ratified, was the code on transnational corporations prepared by the UNCTC. It was similar to, yet more far reaching than, the OECD guidelines. It was planned that at least its major provisions should become legally binding on the countries which were signatories to the code. Unlike the OECD guidelines, but rather like the Tripartite Agreement of the ILO from 1977, which it was intended to complement, the UNCTC code was drafted with the particular interests of developing countries in mind. Indeed, the reason why the code took so long to work out, and ultimately failed, was because there were so many divergent views about both the costs and benefits of MNE activity, and the precise wording of the provisions of the code.

In many respects, the initial rationale for such a code largely disappeared while it was being negotiated. Between the mid-1970s and the 1990s, not only did several developing countries devise and implement quite sophisticated formal and informal institutional procedures and instruments to ensure that inbound direct investment worked to their best interests; but the perceived costs and benefits of such investment – not to mention national economic policies – had changed to such an extent that many governments now accepted certain patterns and consequences of MNE activity which, at one time, they would not have been prepared to tolerate. In other words, neither the expectations of host countries of FDI nor the internationalising strategies of MNEs in the early 1990s were those of the 1960s and 1970s.

In any event, allowing for the diverse economic and cultural characteristics of countries as well as their different needs and expectations of inward investment, it is questionable whether any general code of conduct for MNEs – much less for particular host countries – could be meaningfully implemented. Voluntary codes of conduct that apply to all firms, such as the UN Global Compact, which draws on the Declaration on Human Rights, the Rio Declaration on Environment and Development and the ILO Declaration on Fundamental Principles and Rights at Work, are, by necessity, very broad, and require interpretation at the industry level to become operational. There is thus considerable uncertainty as to what is expected of firms in specific industries and what, if any, methods of enforcement are appropriate.

Nonetheless, when interpreted as guidelines to normal practice, codes of conduct can provide useful information, particularly to first-time foreign investors and small or medium-sized MNEs about what is expected of them. And even where the behaviour of most large established MNEs and/or their affiliates is entirely consistent with any proposed code, it is possible that they may be tempted to ignore some of its provisions whenever and wherever these are perceived to work against their best interests. At the same time, negotiations over the code in which business representatives, governments and NGOs are involved, can sometimes yield valuable (albeit often expensive!) insights into what each party expects from an FDI. As with any joint venture, success will critically depend on an identity (or near identity) of goals and ideologies as well as on the mutual forbearance and trust of the partners.
20.2.4 A New International Governance Structure?

The fourth avenue of multilateral action is to devise an appropriate machinery of regional or international governance to set the ground rules for the cross-border activities of MNEs and to monitor the responses of national authorities to these rules. This is exactly what bilateral and multilateral trade agreements have done so successfully since the 1960s, although in the contemporary global economy, such agreements need to take account of their consequences for FDI as well. The kinds of market failure related to trade – and especially the suboptimal policies of national governments that the GATT was set up to eliminate or counteract – are very different from those associated with international production. The imposition of TRIMs and TRIPs by many countries is a case in point. To ensure a level playing field in the modern global economy, it follows that either existing international regimes will need to be modified, or new forms of governance structures should be set up. We shall return to this issue later in the chapter.

20.3 COLLECTIVE INVESTMENT SUPPORTING OR MARKET-FACILITATING SCHEMES

The previous section has identified some kinds of supranational action which may be necessary to supplement – and in some cases, supplant – unilateral action towards, or in the light of, MNE activity.

In some instances, however, the problem facing national governments is not one of ensuring that MNE activity is consistent with, or supportive of, their economic and social goals, but of getting the right kind and quality of FDI in the first place. In what circumstances is it appropriate for some supranational support to be provided for this purpose? The answer essentially depends on the reasons for a country’s lack of drawing power, and, more particularly, the extent to which such a lack arises from market imperfections, which may be overcome by some form of collaborative action.

Let us give two examples. Research has shown that in the case of the poorer developing countries, the main obstacles to attracting MNE activity are an uninviting business environment and their inadequate domestic markets and/or supply capabilities (Tungodden et al., 2005). Of these latter, the lack of a suitably trained labour force and an inadequate transport and communications infrastructure are the most pressing constraints. In these instances, intergovernment aid or multilateral loans from international agencies (for example, the World Bank, the European Bank for Reconstruction and Development, the Asian Development Bank) are the most likely (and most useful) form of multilateral support. In the past, MNEs have helped to supply these resources (see Chapter 6). Even today, consortia of foreign equity investors or private banks act as a useful catalyst for development. Additionally, the Foreign Investment Advisory Service (FIAS) of the International Finance Corporation (IFC) and the World Bank focuses on increasing the level and impact of private investments by identifying practices that impede productive FDI, such as deficiencies in the investment climate and related laws, and administrative barriers.

When the deficiencies just described are compounded by inappropriate administrative mechanisms and underdeveloped or outdated institutions, it is even more difficult for
individual countries to rid themselves of a vicious circle of economic inefficiency and political lethargy. A particularly good example of this kind of market failure is that experienced by the transition economies of Central and Eastern Europe since the late 1970s. The movement from a collectivist to a market-orientated economy involved economic and social costs which were far too great for commercial corporations, either singly or collectively, to bear. This is because the root problem was a systemic one. It is then entirely appropriate that the cost of setting up a new institutional framework, or upgrading an existing one, for organising the allocation of resources should be a supranational or multilateral responsibility. Lest one might be tempted to extend this reasoning to other parts of the world, it should be pointed out that the ratio between the social costs and benefits of removing or reducing systemic market failure varies considerably between countries and regions, as does the willingness of countries to embrace the disciplines and social consequences of a market system.

Clearly, the extent and form of bilateral or multilateral action to counteract domestic or international market failure will depend upon the extent and form of that failure, the costs and benefits of overcoming it, and the distribution of those costs and benefits between the countries affected by it. The setting up of a new futures market on the Singapore stock exchange is one thing; the introduction of a completely new social accounting system in Albania or an IPR regime in the erstwhile Soviet Union is altogether another. Moreover, it is sometimes difficult to disentangle political, strategic or social motives from purely economic ones in offering supranational advice and assistance on the organisation of market-orientated policies. Finally, a complete removal of market failure may only be possible if a country is prepared to surrender part of its national sovereignty or way of life, which it might not be prepared to do. Much depends on the trade-offs involved. Even an industrialised country such as the UK found that, when it sought a loan from the IMF in 1976, this was only forthcoming on condition that certain changes were made to the macroeconomic management and culture of the British economy.

But suppose, as a second example, that MNE activity is being restricted by the presence of unacceptable non-commercial economic risks. Where these risks cannot be insured, and even some commercial risks (for example, aircraft insurance) are so large that they usually involve a consortia of insurance companies from several countries, multilateral investment insurance or trade credit guarantee schemes, such as those offered by the Multilateral Investment Guarantee Agency (MIGA) of the World Bank, might be an entirely legitimate instrument for reducing this disincentive to FDI. Similarly, some very large infrastructure capital projects are being wholly or partially funded by multilateral agencies, or a consortia of commercial or merchant banks. For example, the Inter-American Development Bank and the European Community Investment Partners (ECIP) programme offer financial support to reduce obstacles to domestic and foreign investment, foster open investment and regimes, and provide grants and loan financing to developing countries.

To address concerns about the adverse social and environmental impact of some of the large investment projects it was involved in, MIGA introduced its own environmental assessment and disclosure policies in 1999. In 2007, it proposed a comprehensive new policy on social and environmental sustainability, to improve the developmental impact of its projects. These efforts are complemented by the Equator Principles, which are based
on the IFC’s guidelines for project financing in developing countries, are endorsed by the majority of the large financial institutions that provide financing in developing countries. However, in recent years new concerns have been raised concerning the conditions under which institutions such as the China Development Bank, which has access to large financial reserves, are lending money to finance development projects in Africa and elsewhere. So far the Chinese banks have not agreed to apply the lending conditions endorsed by the World Bank, for example, and since many projects have taken place in countries that have been subject to an embargo or boycotted by Western lenders, the developmental impact of such projects is not known.960

20.4 REGIONAL INTEGRATION

20.4.1 Introduction

One of the most significant features about the global economy of the past decades has been the acceleration of a long-term trend towards greater economic interdependence between countries. This acceleration was most dramatically displayed in the 1990s by the political and economic upheavals that took place in Central and Eastern Europe, the completion of the internal market of the EU, and the initiation of NAFTA between the US, Canada and Mexico. Indeed, the current (2007) stalemate in the Doha round of trade negotiations might be seen as an indication that the global economy has entered an era of regionalism that threatens to undermine the multilateral order.

The nature and form of economic interdependence may vary along a spectrum which identifies the degree of spontaneous or engineered closeness among the participating nations. At the very least, interdependence implies an agreement between two or more countries to reduce or remove discriminatory trade restrictions with one another. At the other extreme, it may result in an elimination of political boundaries, a harmonisation of institutions, and a unification of domestic economic policies. As one moves along the spectrum, so the impact of interdependence on the international division of labour between countries and firms becomes more significant. Indeed, the two are closely interlinked, inasmuch as the existence of artificially imposed barriers to the movement of goods, people, assets and technology, prevents firms from properly exploiting the benefits of cross-border product or process specialisation, or fully capturing the economies of scale, scope and risk spreading. At the same time, governments may wish to promote regional integration for their own ends – most noticeably, to advance the upgrading and restructuring of their industries, including, where appropriate, a change in their ownership.

A country may be part of more than one integrated region. As we have already observed, the leading industrial nations try, wherever possible, to harmonise their macro-economic policies in the cause of global economic stability. There are several preferential trade and investment agreements which exist between different groups of countries (for example, members of the Commonwealth) and between some developing and developed countries. There are, in addition, a plethora of cross-country commodity agreements which affect the pattern of trade between the parties to the agreements, and between them and the rest of the world – although these do not always or necessarily make for freer or more efficient international markets.
20.4.2 The Determinants of the International Allocation of Economic Activity

Adam Smith (1776) was one of the first economists to explore the advantages of the specialisation of economic activity. Although his analysis was couched more in terms of the division of tasks among individuals in a particular firm in a single location (for example, in his famous pin-making example), later economists, writing after the first flush of the industrial revolution and the introduction of the factory system, took up the theme and applied it to the distribution of economic activity between firms and sectors, and over space. The well-known Ricardian concept that each country should specialise in the production of goods and services that require resources in which it has a comparative advantage, and export these in exchange for others that require resources in which it has a comparative disadvantage, has long provided the linchpin for the explanation of cross-border trade in goods and services, at least between market economies.

However, it is, perhaps, worth emphasising that such a prescription for trade implies the complete absence of artificially created barriers between the countries concerned or, putting it differently, full economic interdependence between them. Again, this is but an extension of the principle that in order to maximise the efficiency of resource allocation within a particular country, individuals and institutions should be freely permitted to undertake the tasks or functions to which they are best suited.961

A world of Adam Smith, David Ricardo, and later that of the neoclassical economists Eli Heckscher and Bertil Ohlin, thus implies the fullest international division of labour and free movement of goods and services between countries. However, it also assumes a complete immobility of factors of production. As we have argued elsewhere in this volume, MNEs cannot exist in such a world. Hence, all trade is conducted at arm’s-length prices between companies whose value-added activities take place within their national boundaries.

It is also worth observing that such an international division of labour is assumed to be based entirely on the distribution of natural endowments, namely, labour, land and so on, and a stock of capital. Governments are presumed to exert no influence on the way these resources are used or upgraded. Technology (including organisational technology) is assumed to be a free good, and universally available across boundaries. In so far as information and knowledge enter the picture at all, they do so by their differential impact on the quantity and quality of factor endowments, and hence on the structure of the comparative advantages of countries. However, in classical and neoclassical economics, technology is never considered as a scarce product in its own right.

In practice, such complete economic interdependence has never existed, though it came near to it in the second and third quarters of the 19th century. Since then, at one time or another, one government or another has imposed some kind of restriction on the import of intermediate or final products. Usually this has taken the form of tariffs or non-tariff barriers. More often than not, the rationale has been the perceived need of the importing country for some temporary protection to enable it to develop its dynamic competitive advantage. In the 19th century, Germany, France and the US each helped to build their indigenous industries by pursuing import-substitution strategies not very different from those utilised by Japan in the 1950s and 1960s, and by some developing countries today.962

As Chapter 6 has already shown, the US tin plate, cutlery, cotton thread and silk industries were among those which owed their development to the imposition of tariffs on
European imports and, in many instances, European direct investment played a critical role in fashioning the spatial reallocation of trans-Atlantic economic activity. Such import barriers reached their peak in the inter-war years, at which time the world resembled a cluster of segmented and isolated markets, with trade being limited to goods and services that nations were unable to produce economically for themselves. Similarly, but for different reasons, in the early post-Second World War period, trade and investment were restricted by currency imbalances. However, there followed a period of largely free and reasonably stable economic growth.

In the longer term, the structure of both the domestic and international allocation of economic activity is primarily determined by the pace, structure and upgrading of human and physical capital, and of institutional reform. The 20th century saw the emergence and growth of many new nations as producers and trading partners in the world economy. In the inter-war years, for example, India, Egypt, China and Japan challenged the established pre-eminence of such UK industries as cotton textiles and shipbuilding. Today, several East Asian and Latin American countries are outcompeting the countries of the Triad in their supply of a wide range of intermediate products, consumer goods and services, some of which are supplied by foreign affiliates. By 2004, for example, it was estimated that such affiliates accounted for more than 50% of all Chinese manufacturing exports (UNCTAD, 2005c), while the outsourcing of call centres from the US and Europe to low-wage economies, notably India, has been one of the most pronounced forms of MNE activity over the last decade (UNCTAD, 2004).

Economic development is also strongly influenced by political change and by technological innovations. The discovery of new kinds and sources of minerals and raw materials has sometimes dramatically affected the terms of trade of many developing countries. Examples include oil, bauxite, rubber, tin and synthetic fibres in the early 20th century, and the lighter speciality steels, composites and polymers, ceramics, and optic fibres in the later 20th century. Revolutionary new transport and telecommunication techniques are also affecting both the vertical and horizontal international division of labour. At the same time, advances in information and organisational technology have encouraged the concentration of the ownership and control of globally integrated activities. Inter alia this is demonstrated by the growing role of FDI and cross-border alliances in the worldwide production of manufactures and services, and the consequential increased share of trade accounted for by intra-firm transactions.

Finally, the international division of labour is critically dependent upon the extent to which, and the form in which, participating nations wish to involve themselves in such a pattern of resource allocation, which is primarily market determined. Most nations are schizophrenic about such economic interdependence for two main reasons. First, they want the benefits of a more efficient pattern of resource allocation, without the abrogation of economic sovereignty and cultural identity, or the social disruptions that go with it. Second, some nations – particularly smaller and developing nations – believe that a market-driven international division of labour does not always operate to their economic benefit. This they attribute to the failure of the market (as an allocative device) to help them overcome the obstacles to their own participation in that division of labour. This might be a result partly of the entrenched positions of established firms (or countries) in the international marketplace, and partly of their inability to obtain the competences without which the benefits of economic integration cannot be fully obtained.
20.4.3 The Role of MNEs in Influencing the International Allocation of Activity

The main impact of the activities of MNEs on the international division of labour arises from the way in which they internalise cross-border intermediate product markets in the countries in which they operate. The nature and effects of this internalisation, revealed both directly by the actions of MNEs or their affiliates and indirectly through the spillover consequences on their competitors, suppliers and customers, has been described in some detail in the preceding chapters. In so far as changes in the quality, efficiency and sectoral allocation of resources induced by MNEs affect the comparative trading advantages of the countries in which they operate, they are also likely to impinge on the international (as well as the national) allocation of resources.

There are many similarities between the forces making for cross-border corporate and regional integration. In both cases, a prerequisite is a failure of markets to allocate economic activities efficiently among the units (that is, firms or countries) being integrated, which a common governance of the units is envisaged to overcome or lower. However, whereas MNEs seek to internalise cross-border markets to reduce or circumvent inter-firm transaction costs, the motives are arguably more complex in the case of the regional groupings of countries. While these groupings are also prompted by a desire to lessen the inter-country costs of doing business, the incentive to lower the costs of intra-regional government-induced market distortions or to provide a countervailing economic or political force to other countries or regional groupings may be of even greater significance.

At the same time, a distinction needs to be drawn between the activities of MNEs designed to supply existing markets more efficiently, and those intended to restructure the spatial distribution of such activities between countries. An investment by a British firm in Brazil to produce plated glass for the French market, an acquisition by a US firm of a copper mine in Chile or an investment by a Japanese bank in the Netherlands, are examples of the first kind of activity. Such import-substitution and resource-based investments may affect the international division of labour via their effect on the structure and efficiency of domestic production.

However, the reorganisation of European investments of both foreign and European MNEs, or the restructuring of their activities in North America or East Asia to exploit better the differences in factor endowments between that part of the world and their home countries, directly affects the global allocation of economic activity. Such cross-border rationalisation of production is frequently spearheaded by MNEs. In anticipation of the completion of the internal market in 1992, EU-based MNEs were noticeably active in reorganising and refocusing their European operations – sometimes in alliance with other MNEs. As Chapter 14 has shown, this resulted in the growth of intra-MNE trade, especially between affiliates in regionally integrated areas. At the same time, intra-firm trade is becoming an increasingly important part of world trade.

Other, more recent, examples are the relocation of both low-wage services and some R&D activities from the Triad to selected developing countries (UNCTAD, 2004, 2005c).

In discussing the likely impact of regional integration on MNE activity into and out of an integrated area, it is convenient to distinguish between its primary or initial effects and its secondary or consequential effects. The response of MNEs and the net effect of regional
integration on inward and outward direct investment will also depend on the particular macroeconomic consequences being considered.

Take, for example, the removal of tariff and non-tariff barriers, such as has taken place since the formation of the European Economic Community in 1958 and the conclusion of the Canada–US Free Trade Agreement of 1990. The primary consequence of this kind of integration is to change the costs and benefits of supplying an existing market from a location inside and outside the integrated region. Thus, goods exported from France to Italy or from Canada to the US will increase their competitiveness relative to domestic firms producing in Italy and the US. Clearly, the extent to which exports will increase will depend on the relative importance of the transfer costs saved, any effect the extra sales of the exporting companies may have on their production costs, and the elasticity of demand for the final products. As far as firms from countries outside the integrated market are concerned, the locational consequences will depend upon the value of the common external tariff and/or non-tariff barriers relative to those previously imposed by individual countries. Like the companies within the integrated area, they should benefit from the removal of intra-country trade barriers.

We have suggested that these primary, or initial, locational effects (also referred to in the literature as ‘trade diversion’ effects) will influence countries and sectors in different ways. They are also likely to affect different kinds of firms differently. Consider the removal of non-tariff barriers. The elimination of border controls, which represent a fixed cost to firms, is likely to benefit SMEs. The cessation of favoured treatment in their procurement policies by governments towards firms located in their own country will clearly work against the uncompetitive firms in that country. Producers that already have a network of value-added activities or marketing contacts and distribution outlets within the integrated region are particularly well placed to benefit from regional integration. MNEs, particularly those which are already pursuing a polycentric strategy, are among those most likely to gain.

However, it is the secondary effects of integration which, in the long run, are likely to be of greater importance for the international allocation of economic activity. These arise both from the restructuring of such activity between countries, sectors and firms within the integrated area, and from the new opportunities for firms to increase their technical and scale efficiencies by reducing production and transaction costs. In so far as these gains are passed on to the owners of factor services, or to consumers, integration will lead to an increase in real income and a further exploitation of the benefits of product and plant specialisation. It may also be expected to encourage innovation and technological progress. Such effects are ‘dynamic’ in the sense that they are likely to raise the potential growth rates of (at least some of) the integrating economies.

Most empirical studies on the impact of regional integration agreements have focused on the impact of trade flows. However, Balasubramayan et al. (2002) made an attempt to quantify the impact of regional integration on FDI by using a gravity model in which they evaluated the significance of the standard independent variables of GDP, population and distance, augmented by an economic freedom index. They found that regional integration agreements did not determine the magnitude or direction of bilateral FDI flows in a cross-sectional country-level sample, once the economic size of both host and home countries was accounted for. Another gravity model was applied by Egger and Pfaffermayr (2004a) on the effect of EU integration on FDI. In contrast to the previous study, which
was cross-sectional, the authors modelled bilateral FDI stocks in three time phases, namely, 1986–92, 1993–94 and 1995 onwards. They found some anticipatory effects, but few after the integration actually took place. The same authors also discovered that the effect of bilateral investment treaties (BITs, discussed in the following section) on the inbound stocks of FDI in the OECD was positive in 1982–97, once allowance had been made for differences in the countries’ economic size, factor endowments, and the impediments to trade and FDI imposed by them (Egger and Pfaffermayr, 2004b).

20.4.4 Recent Efforts at Regionalisation

As we have already noted, in the early 1990s, two major regional integration schemes came into effect, namely, the completion of the internal market of the EU in 1992, and the NAFTA agreement between the US, Canada and Mexico, which came into effect in 1994. The latter part of the 1990s also saw increasing efforts to broaden the scope of regional integration.

In the Western Hemisphere, recent regional integration efforts have included a proposed agreement for a Free Trade Area of the Americas, and Mercosur (comprising Argentina, Brazil, Paraguay and Uruguay) adding Bolivia and Chile as associate members. Other established regional organisations, namely the Caribbean community (Caricom), the Central American common market and the Andean Community (Bolivia, Colombia, Ecuador, Peru and Venezuela) also continued to strengthen the ties between the members. In addition to being a member of NAFTA, Mexico signed a number of bilateral free trade agreements (FTAs), including treaties with the EU (2001) and Japan (2004). Similarly, Chile entered into several FTAs, including agreements with the EU (2002), the US (2004), China (2006) and Japan (2007).

The US began a series of bilateral FTAs, starting with the US–Israel agreement of 1985 and adding 10 new agreements since the year 2000. In the Asia-Pacific region these included bilateral FTAs with Australia, Singapore and South Korea. In Africa and the Middle East, bilateral FTAs were concluded with Jordan, Morocco and Bahrain, with negotiations conducted with Oman and the United Arab Emirates, as well as with the South African Customs Union. With the prospect for a Free Trade Area of the Americas fading away, in 2005 the US concluded the Central America–Dominican Republic Free Trade Agreement (CAFTA-DR), which included Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and the Dominican Republic, with negotiations continuing with Panama. In South America, bilateral FTAs were concluded with Chile, Peru and Colombia, with negotiations continuing with Ecuador.

In the Eastern Hemisphere, regional integration efforts were facilitated by the ASEAN Free Trade Area (AFTA) and the Asia Pacific Economic Cooperation (APEC) forum. However, regional integration agreements had little impact on the pattern of trade in East Asia until the entry of China into the WTO in 2001, which prompted a round of negotiations for bilateral agreements, linking the larger economies of China, Japan and South Korea to ASEAN, but not to each other (Baldwin, 2006). Of these, the China–ASEAN FTA framework agreement, due to come into force in 2010, was concluded in 2002, the South Korea–ASEAN FTA (excluding Thailand) came into effect in 2006, and Japan pursued bilateral agreements with the ASEAN Big-4 (Malaysia, Thailand, the Philippines and Indonesia). In the wake of the conclusion of the US–South Korea FTA in 2007,
Japan indicated that it might pursue an agreement with the US as well. Singapore, like Mexico and Chile, also signed FTAs with a number of countries, including agreements with the US, Chile, Japan and South Korea.

In Africa, 11 of the 20 members of the Common Market for Eastern and Southern Africa (Comesa) had initiated a free trade area by 2004. The formation of the East African Community (EAC) in 2001 between Uganda, Kenya and Tanzania is also expected to attract more FDI to the region.

The EU expanded from 15 to 25 members in 2004, with Bulgaria and Romania joining in 2007. In 2005, accession negotiations were also started with Croatia and Turkey, while the former Yugoslav Republic of Macedonia was given candidate country status, although no accession timetable exists for it at this point. Beginning in 1995 with Turkey, the EU has also entered into bilateral FTAs with most of the countries around the Mediterranean, as well as pursuing agreements with Mercosur, the Central American and Andean countries, the Gulf Cooperation Council, ASEAN, as well as India, South Korea and Russia.

According to popular textbooks, such as Total Global Strategy by Yip (2003), the central tension faced by MNEs is that between global integration and local responsiveness. The prospect that tastes might be converging across borders, or that some differences could be ignored without sacrificing sales, has created possibilities for pursuing a global strategy that exploits the scale and scope economies arising from integrated global production. However, data presented by Rugman and Verbeke (2004b) indicates that most large MNEs draw the majority of their sales from their home region, and far fewer have significant sales in two parts of the Triad, while only nine of the group of 365 large MNEs had balanced sales in all three parts of the Triad. Using FDI data, Dunning et al. (2007) came broadly to a similar conclusion, but argued that outside Europe, there is a trend towards the globalisation of MNE activity.

Together, these facts would seem to suggest that globalising the value chain may be easier to achieve than gaining market share in countries that are substantially different in terms of institutional distance (Xu and Shenkar, 2002). The investments that are required to adapt products and services to meet the needs of consumers, as well as to satisfy regulatory requirements in distant markets, can be considerable, and institutional distance increases the costs of developing local advantages abroad. If the MNE is, nonetheless, able to cultivate specific local institutional and other competences in a foreign country, it can combine these with its transferable O-specific assets to gain an advantage in a new market. If the MNE is very adept at transferring its advantages abroad, it may be able to effectively increase its foreign sales even without developing significant local advantages, but in most cases, this is likely to be difficult to achieve.

Over the past 30 years, trade and direct investment involving the Triad countries has become more firmly intra-regional and less global (Rugman, 2005). For example, in Europe, only the UK has a significant investment stake in the US, while the majority of UK trade is still with its EU partners. For the rest of Europe, the European market is far more important than the American market. For Japan, in 1998 a third of outward FDI, and 40% of exports was directed to other parts of Asia (Rugman, 2001:120). Since the emergence of China as a major manufacturing producer, intra-Asian FDI by Taiwan, Singapore and South Korea has also increased dramatically (UNCTAD, 2006). Thus the relevant trade-off for MNEs may not be the one between global or local, but between regional or local.
One possible implication of this is that the economic reality of regionalism may also be reflected in a gradual move away from multilateralism. As MNEs become more prominent as political actors, the regional rather than the multilateral fora may be where many of them seek to use and build their influence.969

20.4.5 Regional Agreements and the Multilateral System

A regional agreement is only beneficial if signatories to it can claim benefits that are not open to those outside of the agreement. By definition then, such agreements are discriminatory. However, much of the actual impact of an agreement depends on the size and level of development of the participating countries, and the extent and pattern of their existing trade and investment ties. If a regional agreement facilitates economic activity that otherwise might not have taken place, it is said to be trade and investment creating, instead of merely diverting economic activity from those outside of the agreement to those on the inside.

The level of integration within these agreements varies greatly. The extent to which rules on FDI are incorporated into regional agreements, and their likelihood of liberalising FDI flows varies as well. Indeed, the range of different standards applied, and the sheer numbers of agreements concluded, has raised concerns that the network of regional integration agreements, together with bilateral FTAs and investment treaties, represent stumbling rather than building blocks on the way to the development of an integrated global economy (Bhagwati et al., 1998).

However, others argue that regional agreements exist because they are easier to negotiate than their multilateral counterparts, and view the former as complements to the multilateral initiatives. As Baldwin (1997) has put it, some analysts look at regional (and thus discriminatory) liberalisation and see liberalisation, while others see discrimination. However, instead of relying on the traditional explanation of frustration with the multilateral process as driving regionalisation,970 Baldwin argues that much of this is driven by a domino effect, whereby the introduction of a new discriminatory bloc induces efforts to join among the non-members. Thus, in his view, regional agreements are not substitutes for multilateral liberalisation, but rather work in tandem to foster liberalisation.

As a consequence, instead of seeing three well-formed trade blocs in Europe, North America and East Asia, Baldwin (2006) argues that we are likely to see three blocs that are both fuzzy and leaky. The EU is the most integrated institutionally, while the other two are more like matrices of bilateral deals. NAFTA is the more integrated of the two, while East Asia has almost no political or institutional integration. The three blocs are fuzzy, because they do not have clearly defined borders. Again Europe is the most coherent one, but even there, bilateral agreements complicate the picture. The US, Canada and Mexico have all negotiated their own bilateral treaties, while the Big-3 economies of East Asia (China, Japan and South Korea) are not linked at all. The blocs are leaky, since the web of bilateral treaties also includes cross-bloc FTAs.

However, as both manufacturing and services continue to get more globally integrated, the political forces that favoured the creation of the ‘spaghetti bowl’ of regional and bilateral treaties might give way to demands for more uniformity, as MNEs will reconfigure their choice of location. An example of how this might occur can be found in the IT industry, where the major producing nations reached an agreement, under the auspices of the
WTO in 1996, to fully liberalise world trade for a list of IT goods, such as computers, software and semiconductors. Once the agreement was reached, many smaller producer nations signed up to it to protect their share of the global market, and the agreement is now estimated to cover about 97% of world trade in the IT sector (Bora, 2004, cited in Baldwin, 2006).

Judging whether any regional agreement is deemed a success also depends on the expectations that are formed. For example, if it is judged by the increases in the volume of intra-regional trade and investment, Hufbauer and Schott (2005) argue that NAFTA has certainly been a success. If evaluated by its effects on labour and environmental conditions in the region, the effect has been far less dramatic. However, the authors note that the side agreements on labour and the environment, which were pioneering at the time, were meant to increase the political attractiveness of NAFTA, particularly from the viewpoint of the Democratic party in the US, but there was little in these agreements that was likely to fundamentally alter either labour or environmental standards in the participating countries.

As we have argued in Chapter 18, trade agreements or MNE activity on their own will not improve worker standards or environmental conditions, except when these conditions can be remedied at relatively low cost. The agreements can serve to highlight certain critical issues, such as the environmental problems in the Mexican border towns, but such problems have been decades in the making. In the absence of substantial funding from the Mexican government, NAFTA on its own is unlikely to provide a satisfactory solution. At the same time, it is also unlikely that NAFTA would cause a serious deterioration in the standards that are applied, and if anything, its impact, in the long run, is likely to be a gradual upgrading of environmental standards.

In addition to the side agreements, another notable aspect of the NAFTA agreement is the content of the provisions regarding the protection of investor rights under Chapter 11. While many of these provisions are similar to the TRIMs agreement under the WTO, an important difference is that while private investors are not given access to the dispute settlement system under the WTO, this is possible under NAFTA. Consequently, an issue of concern for some NGOs has been that ‘measures tantamount to nationalisation or expropriation’ under the agreement might lead to a very broad definition of regulatory takings, including possible compensation for foreign investors for damages that arise from regulation instituted to advance environmental or health and safety goals. Consequently, more restrictive language has been adopted in recent FTAs, and, for example, the US–Chilean and US–Singapore FTAs make it more difficult for MNEs to claim that environmental or health measures could be tantamount to expropriation.

20.5 SETTING THE CONDITIONS FOR INTERNATIONAL INVESTMENT: THE ROLE OF MULTILATERAL INSTITUTIONS

20.5.1 Investment-related Measures under the WTO

In spite of the less confrontational stance between host countries and MNEs, between the host countries themselves, and between home and host countries, which has emerged over
the past decades, MNEs are still popularly thought of as arbitragers of discord and fashioners of intergovernment strategic competition for resources, capabilities and markets. For many years, intergovernmental organisations, such as the WTO, have set the conditions under which trade in goods may be conducted freely, and advance the dictates of dynamic comparative advantage. Various rounds of GATT negotiations have focused on the implications of how new technological, institutional and organisational developments might affect such trade and the distribution of its benefits between the participating countries.

The adequacy of the WTO to deal with trade that is not only increasingly undertaken by MNEs, but frequently conducted within their own organisational boundaries, has been questioned by many analysts over the years. Relatively early in the period following the inception of the GATT, investment issues came to be separated from trade issues, and began to be governed by different types of IIAs.973 The period of the 1960s and 1970s saw a growing number of bilateral investment treaties initiated by European countries. The idea behind such institutional instruments was that, since governments in general, and developing country governments in particular, have a difficult time in creating credible commitments to investors, BITs allow for the enforcement of these commitments outside of the borders of the home country in international arbitration.974 US-initiated treaties emerged in the 1980s, and had a somewhat different purpose and form from their European counterparts, inasmuch as the former provided for national treatment in the pre- and post-establishment phases, while the latter were only concerned with the post-establishment phase.

The number of BITs has grown significantly over the past decade. Although the first such treaty dates back to 1959, the majority have been concluded since 1987. By the end of 2005, a total of 2,495 BITs had been concluded (including renegotiation of older treaties). These are complemented by double taxation treaties (DTTs), which numbered a total of 2,758 in the same year (UNCTAD, 2006). Today, most BITs are concluded either between developed and developing countries, or between two developing countries. While the provisions contained in these agreements have been overwhelmingly favourable to foreign investors and economic liberalisation since UNCTAD started monitoring them more than a decade ago, in 2004 and 2005 an unusually high number of changes were made to national policies on FDI (particularly in Latin America and Africa) that were less favourable than before (UNCTAD, 2005c, 2006). However, in 2004, 20 countries, both developed and developing, also lowered their rate of corporate income tax, presumably on account of the growing competition for inward FDI (ibid.).

In addition to BITs and DTTs, there have also been a number of FTAs concluded between developing countries, as well as between developed and developing countries. Examples include Mexico–Uruguay (2003), Chile–Central America (1999), South Korea–Chile (2004), Singapore–South Korea (2005) and Singapore–India (2005) (UNCTAD, 2006). Indeed, according to some commentators, owing to the different provisions that they contain, the growth in different types of IIAs has contributed to the emergence of the so-called ‘patchwork problem’ of investment rules (see also Section 20.4).

An analysis of the dispute cases taken to the World Bank’s International Centre for the Settlement of Investment Disputes (ICSID) shows that there was strong growth in the number of cases brought since the late 1990s. Specifically, of the 219 cases brought by November 2005, more than two-thirds were filed since 2002, and virtually none of these
cases was initiated by governments (UNCTAD, 2005a). In addition, there have been noticeable shifts in the sectoral distribution of such disputes over time (Wint, 2005). In the 1970s and 1980s, for example, the disputes occurred predominantly in the extractive industries, whereas in the 1990s, privatisation investments have led to a marked increase in dispute cases in the infrastructure sectors. Indeed, there has been some concern that disputes involving definitions of regulatory takings, for example, might be used to rewrite aspects of host country law as a result of arbitration proceedings conducted in a closed forum. At the same time, as Wint points out, the increasing number of cases could also be seen as a sign of improved relations between MNEs and host governments, and their commitment to settle disputes according to the terms set down in bilateral or multilateral investment treaties.

The period of trade and investment liberalisation from the early 1980s to the mid-1990s culminated in the conclusion of the Uruguay round of trade talks, and the establishment of the WTO in 1995. The Uruguay round brought to conclusion two agreements that were directly concerned with FDI, namely those on Trade Related Investment Measures (TRIMs), and the General Agreement on Trade in Services (GATS). The TRIMs agreement prohibited the use of performance requirements, such as local content, import–export balancing and foreign exchange balancing requirements on FDI. Because many services are not transportable over space, the only way in which foreign firms can supply them is by ‘on the spot’ production. The GATS agreement is thus directly concerned with MNE activity, since it applies to any form of commercial presence for the supply of a service. Other agreements reached at the same time included the TRIPs agreement on intellectual property rights, as well as those on subsidies and countervailing measures (SCMs), dispute settlement and the trade policy review mechanism.

Following the WTO ministerial conference in 1999, which saw the ‘Battle of Seattle’, when anti-globalisation protesters took to the streets, the multilateral system entered a period of uncertainty, until a new round of negotiations was began in Doha in 2001. However, in spite of (or because of) the range of agreements concluded in the Uruguay round, the current round of negotiations is in danger of becoming the first round to fail since the inception of the multilateral system. The so-called ‘Doha Development Round’ has already missed several deadlines, and was not completed by the deadline of June 2007, when the fast-track authority of the White House to negotiate trade deals expired.

Among the developing countries that stand to gain or lose the most from the Doha round, there is increasing suspicion that trade liberalisation through the WTO, which would remove the special preferences that many developing countries currently enjoy, would not be to their benefit, due to the high costs of economic adjustment. There is also some anxiety that the negotiations might result in reductions in the theoretical ceiling for protection (the bound rates), but not have much of an effect on the actual tariffs applied, which are already low. Furthermore, the raft of bilateral trade treaties concluded, and particularly the recent expansion of bilateral treaties by the US, are seen as signs of a lack of interest in the multilateral agenda.

On the other hand, business groups such as the European Roundtable of Industrialists and the Transatlantic Business Dialogue are anxious for the Doha round to be completed. Indeed, MNE lobbying to influence the timetable and content of multilateral negotiations has produced results in the past, as was evident in the case of the TRIPs agreement.
The predecessor to the TRIPs agreement was the World Intellectual Property Organisation (WIPO), which was set up in 1967 to administer the treaties related to copyright and industrial property rights. WIPO, however, was unable to bring about a harmonisation of standards, and it was thought that bringing this function under the aegis of the WTO would provide not only consistent rules, but also a process for dispute settlement that had been lacking previously. Switching the forum from the WIPO to the WTO also had the additional benefit that IPR issues could be linked to negotiations on other issues, such as agriculture and textiles.

According to Ramamurti (2005), it was American pharmaceutical firms, and the CEO of Pfizer in particular, who were most cognisant of the need to strengthen intellectual property laws worldwide. Working first through established industry associations, and then developing an IP committee with 13 US firms that were heavily involved in IP production, the committee then looked for allies in Europe and Japan. Eventually, the committee was able to bring together a three-way coalition between itself, the Keidanren in Japan and the European Union of Industrial and Employers’ Confederations. While there were significant differences of opinion within the three-way coalition, these did not get in the way of reaching the objective of using the WTO to bring about a harmonised IP structure in the global economy.

The efforts led by the MNEs were also helped by the introduction of the Trade and Competitiveness Act of 1988 in the US, which ushered in a series of Special 301 provisions that could be used to put pressure on trading partners to revise their IP laws or risk retaliatory sanctions. The consequence was that the introduction of the TRIPs agreement in the Uruguay round set out a global approach to IPR. No sector was excluded, the standard period of patenting became 20 years, and compulsory licensing could be undertaken only under predetermined conditions (Maskus, 1998). Today, US MNEs, particularly in the pharmaceutical industry, are advancing so-called ‘TRIPs-plus’ provisions through the bilateral agreements that the US has negotiated with countries such as Singapore, Chile and Australia.

At the same time, it should be pointed out, that opposition to the US-type IP protection has come from multiple sources. On the issue of pharmaceutical patents (the original impetus to the TRIPs agreement), several developing countries have used the existing provisions for compulsory licensing to challenge the rights of patent holders in the face of public health crises, such as that caused by the spread of HIV/AIDS. Early movers in this regard were the governments of South Africa, Brazil and India, which eventually succeeded in gaining substantial price reductions for essential medicines, and recently other countries such as Thailand have followed their lead. Not having any private incumbent interests to protect in the pharmaceutical industry, the developing countries have generally emphasised public interest at the expense of the innovating private firm. Another controversial issue concerns the development of open source software, and the standards that should apply to the use and reuse of a variety of digital media, including audio-video material and books. Here the debate is varied, involving issues of piracy and fair use, and the respective rights of the copyright holder and the consumer, with some European countries taking a more permissive (pro-consumer) stance, for example, by advocating restrictions on the use of digital rights management technologies.

The fundamental issue concerning the operations of MNEs is that their territorial boundaries are wider compared to those of governments, a fact that has long been
acknowledged by international lawyers. In 1967, Ball proposed a treaty that would establish a supranational authority to administer a law governing the operations of international companies, but the idea was regarded as impractical at the time. In the early 2000s, the evolution of European company law, and the introduction of the Societas Europea serves to demonstrate that supranational legislation is possible. A prerequisite for such legislation is a mutuality of interest and benefits of the countries concerned, and a general consensus on the distribution of the costs and benefits of MNE activity. Such conditions – and, on occasion, the lack of them – have fashioned the governance of the US and its institutions for the past two centuries. It is now being accepted, in part at least, by an increasing number of countries comprising the EU. However, and as and when countries converge in their ideologies, cultures, political frameworks and economic systems, the practicality of the Ball proposal becomes rather more appealing (Ball, 1967).

De facto, however, a reconciliation of the interests of countries has been substantially brought about by other means over the past 30 to 40 years. We have already described the evolution of both a variety of codes of conduct as guidelines intended to set norms of behaviour of MNEs in each of its major dimensions, and also the responsibilities of government towards MNEs – particularly as regards national treatment. But, no less significant have been the changing attitudes of national governments towards MNEs, which have caused them to review and reappraise the desirability for some kind of supranational governance of MNE behaviour.

However, in spite of supranational schemes to promote the economic welfare of their participants, perhaps the main factors prompting the convergence or harmonisation of domestic economic policies – including those specifically addressed to MNEs – are the dissemination of knowledge about the ‘best-practice’ institutions and policies between countries, and the internationalisation of competitive pressures. Moreover, although firms remain the principal wealth creators in market economies, the role of governments in establishing the conditions for wealth creation is not only becoming increasingly significant, but is also changing in character.

Such collaborative action is not governments replacing or distorting markets, but governments intervening to ensure that markets can and do operate efficiently. It is not governments seeking to (over)regulate MNEs, but governments seeking to upgrade their institutions and improve the organisational efficiency of their own resources and capabilities, so that the competitive advantages of both foreign and domestic MNEs can be used in a way that will best advance their joint strategic interests.

20.5.2 The Prospects for a Multilateral Agreement on Investment

In a world in which international commerce is being increasingly driven by MNE activity, there is a lot of sense in the idea that there should be some globally acceptable framework for the governance of international production as there is for international trade. Indeed, the concept of a GATT for international investment – to be called GAI or GAIIC (General Agreement on International Investment or International Corporations) – was put forward more than three decades ago by Kindleberger and Goldberg (1970). It was later reinterpreted by Wallace (1976), who proposed the establishment of an International Investment Organisation (IIO). In both cases, it was believed that a supranational regulatory institution, drawing on the principle of international law or internationally
acceptable social controls, would help to resolve some of the cross-border conflicts arising from MNE activity – particularly those to do with taxation and transfer pricing, capital repatriation, anti-trust legislation, balance of payments issues and security regulations.

However, though of intuitive appeal, the history of failed negotiations shows that a general agreement on international production would be very difficult to put into practice. This is primarily because FDI, unlike trade, implies the actual presence in one country of a firm that is owned and controlled by nationals residing in another country. The implementation of rules or guidelines on the terms of trade of intermediate products between an MNE and its foreign affiliate is one thing. The construction of guidelines and regulations concerning the terms of foreign-owned production and the strategies of MNEs is quite another. While it may be comparatively easy to obtain a broad consensus by firms and countries on matters such as anti-dumping, import controls, export subsidies and accounting conventions, achieving commonality on the appropriate governance over MNE-related activities is considerably more difficult. This is partly because there are many areas of both MNE or government behaviour which are not transparent or easily evaluated, and partly because many investment instruments may be facets of a more general set of economic measures.

At the time when the original idea of a GAII or GAIC was conceived by the leading capital-exporting countries, a very different perspective on how an international organisation might influence the activities of MNEs was being voiced by some host – particularly developing – countries in the 1960s and 1970s. As transnational investment has become both more significant and more balanced with the passing of the years, this voice has grown louder, with the US (or at least some sections of the US community) contributing to it. Basically, the proposition is that because of their ability to move assets around the world, MNEs may not only circumvent unpalatable national policies and controls, but may also play one government off against another to advance their own objectives. At the same time, governments in the pursuance of their national economic and social goals may engage in destructive competition with each other for inward investment. Such actions, so the protagonists argue, can only be properly resolved by intergovernment cooperation or by supranational regulation. However, one problem facing any such supervisory body would be to distinguish between those actions by MNEs which benefit global economic welfare by overcoming market inefficiencies, and those which add to the power of large and wealthy companies or countries to behave in a structurally distorting or socially unacceptable way.

On the heels of the entry into force of the Uruguay round of agreements, the OECD began a major effort in 1995 when it initiated negotiations on a Multilateral Agreement on Investment (MAI). These were eventually abandoned in 1998. Some of the reasons given for the failure of the MAI included the choice of forum of the OECD, which excluded the developing countries – although they were expected to follow the agreement once it had been reached – and the perception that the negotiations were secretive and exclusionary. There was also a lack of interest on the governmental level by some top players, such as the US and France, as well as sustained opposition from some of the leading NGOs. Of particular concern to the NGOs were two aspects of the proposed agreement that had been modelled after the NAFTA provisions. These were the dispute resolution mechanisms that allowed private parties as well as
governments to take action, and the relatively broad definition of expropriation, which led to fears that the rules could be used to bring suits against governments that imposed environmental or safety regulations, which might be expected to negatively affect the value of an investment.

In their assessment of whether a new investment agreement should be sought, Brewer and Young (2000) observed that since the breakdown of talks on the MAI, unilateral (and bilateral) relaxation of restrictions on FDI has continued in the world economy, and that in a climate of liberalisation, it may not be productive to seek a wide-ranging multilateral agreement involving many contentious issues in order to solve a problem that arguably does not exist. Of course, to the extent that multilateral rules would remove any remaining distortions that reduce world output, the implementation of such an agreement would be desirable. However, writing from a US perspective, they argue that the costs of reaching such an agreement are considerable, and that there does not seem to be a great deal of support for it either in the domestic US business community, or in the US government. Neither companies nor countries would wish to surrender their sovereignty, and since the Uruguay round managed to achieve agreement on TRIMs, GATS and TRIPs, it was felt that there was a less pressing need for such an agreement to be reached. Thus, while there are arguments in favour of multilateral rules for investment, there is a low likelihood that they will be achieved. Instead the focus is likely to remain on continued trade liberalisation and policies to encourage (domestic and foreign) investment (Young and Tavares, 2004).

20.5.3 Commitments under the Kyoto Protocol

In addition to the rules of the WTO, and the various codes of conduct that are currently in place to regulate MNE behaviour, one of the key issues of global concern in the early 2000s is that to do with climate change – and, specifically, the commitments made by countries under the Kyoto protocol to reduce their emissions of greenhouse gases. Like many environmental issues, climate change is inherently a supranational issue, and one which cannot be optimally addressed at the national level. Aside from any regulatory uncertainty, the increased incidence of extreme weather events related to climate change is likely to impose significant direct costs on some businesses (and provide business opportunities for others). Indirectly, the impact is likely to be no less great, as eventually all investments in production capacity need to be evaluated in terms of their energy efficiency and the sources of energy used.

In the 1997 Kyoto agreement, which came into effect in 2005, the so-called ‘Annex B’ countries each agreed to reductions of 6–8% in greenhouse gas emissions to be achieved during the first commitment period of 2008–12, using 1990 as the base year. A key feature of its provisions is the inclusion of flexibility mechanisms, which allow countries to meet their emission targets by engaging in so-called joint implementation (JI) or clean development mechanism (CDM) projects in the transition and developing economies, where the unit costs of emission reductions are likely to be lower than in the developed Annex B countries.

In the years immediately following the Kyoto agreement, some US MNEs set up interest groups with the intention of creating confusion about the scientific evidence for, and the uncertainties surrounding, climate change (Brewer, 2004, 2005). However, by the time
the Intergovernmental Panel on Climate Change (IPCC) released its third report in 2001, denial of the human contribution to climate change had begun to dissipate, and it had all but vanished by the time the IPCC issued a draft of its fourth assessment report in 2007. This report indicated that there was at least a 90% probability that the warming over the past half-century was due to an accumulation of greenhouse gases in the atmosphere, resulting from human activities (IPCC, 2007).

Nonetheless, while a broad consensus now exists on the human contribution to climate change, reliable estimates of the range of possible outcomes are difficult to obtain. The influential Stern Review on the Economics of Climate Change (Stern, 2006) in the UK, estimated that addressing the problem of climate change would cost about 1% of GDP per annum for the foreseeable future. Doing nothing, by contrast, would risk the loss of 5% of GDP per annum, rising to as much as 20% if a broader range of risks and impacts was taken into account. As might be expected, such estimates have not gone unchallenged (see, for example, Nordhaus, 2006), and identifying a cost-effective level of response continues to be a subject of intense debate.

The EU has made compliance with the Kyoto protocol a policy goal, and in order to achieve this, it introduced an EU-wide emissions trading system (ETS) in 2005. The entry into force of the ETS puts European MNEs and any foreign subsidiaries operating in Europe in industries such as power generation, oil refining and pulp and paper, in a different position from firms in the US, which is the only developed country not to have ratified the Kyoto protocol.987 In 2007, the EU reached an agreement on extending its commitment to a 20% cut in greenhouse gas emissions by 2020, and it is also considering imposing limits on emissions from air transport and shipping.

The EU scheme is an installation-based cap-and-trade system, in which each large emitter is issued its own allocation of allowances. These allowances can be freely traded within the EU-25, and the ETS is also linked to the carbon trading market resulting from JI and CDM projects under the Kyoto protocol. Since several EU accession countries, such as Latvia, Estonia, the Czech Republic and Slovakia, far exceed the required reductions in greenhouse gases, they are likely to become some of the sellers in the market for tradable emissions permits.988

Much of the viability of the ETS scheme depends on the future price of a ton of CO₂. The uncertainty related to the ETS is increased by the fact that, although all markets are supported by an institutional context, the carbon markets are substantively dependent on administrative intervention. For example, in May 2006, the prices of emission credits on the European market fell from about €30 to €10 in the wake of news that the initial national allocation of pollution permits had been too lenient. Consequently, most European countries faced excess credit, which had the effect of reducing the demand for additional carbon credits.

The idea of the CDM under the Kyoto protocol is to facilitate the transfer of clean technologies to developing countries in exchange for emission credits for firms from Annex B countries.989 In a prototype CDM project, MNEs would undertake FDI to transfer technology, and in addition to the economic return on the investment, they would also receive an additional benefit in the form of emissions credits. By May 2006, 184 such projects were in place, and recent growth in CDM projects has brought their expected value close to a billion tons of CO₂ equivalent emissions by the end of the first commitment period.990 This is roughly equal to the combined emissions of the UK and Spain.
In practice, we may identify three types of CDM transactions: investment in CDM (direct or portfolio investment); forward contracts or options for future credits; and spot market transactions (Arquit Niederberger and Saner, 2005). Due to the uncertainty related to the development of the carbon markets, many of the investment projects so far have involved portfolio rather than direct capital flows, in which the firms buy participation shares in projects that in time generate emissions credits. Indeed, so far, most transactions have involved forward contracts rather than additional capital outlays; and, contrary to some expectations, governments rather than firms have been the most active traders in the carbon market. There have also been a number of unilateral CDM projects initiated by governments in developing countries, mostly involving investment in renewable energy sources, such as wind and biomass.

The main challenge for MNEs posed by the Kyoto protocol commitments lies in trying to anticipate the range of possible prices for the carbon credits that will be generated, which itself is dependent on the smooth functioning of the newly created carbon market. If future CO₂ prices remain high, CDM investment projects are likely to be undertaken, but if the prices are volatile, forward contracts and options, which greatly limit the investment risk, will continue to be preferred. If MNEs do undertake CDM investment projects, another type of risk is posed by the technicalities involved in proving the additionality of such projects, that is, that they contribute to emissions reductions over and above of what would have otherwise taken place.

20.6 CONCLUSIONS: TOWARDS A NEW MULTILATERAL GOVERNANCE

The environment for collaborative action towards MNEs, or as a result of their global activities, is very different in the early 21st century from that of even two decades ago. At that former time, multilateral actions were mainly directed at countering the perceived power of European and US MNEs, to intentionally distort the markets of the host countries in which they operated, and to inhibit these countries from achieving their developmental goals. As a result of a lack of bargaining power, and to avoid destructive competition for inward investment by competing host countries, some forms of supranational action were initiated. Sometimes this took the form of an agreement between host countries (for example, to harmonise incentives offered to inward investors). Sometimes it was an agreement between host and home countries (for example, to reduce disputes on extra-territoriality or over dividend remissions). And sometimes a regional or international regulatory framework was thought to be the appropriate mechanism.

It is, however, worth noting that the emphasis of multilateral action was then directed to strengthening national control procedures over MNEs, which were perceived not only to have too much economic power, but also to have used that power in a socially detrimental way. The facts that these goals were not necessarily consistent with each other, and that many of the government actions used to achieve these goals were structurally distorting in their own right, were largely overlooked in the discussion.

Today, for many of the reasons already identified in this book, the situation is very different. Changes in the world economic scenario, in the character and structure of MNE activity, in the learning experiences of both countries and MNEs, and, most of all, the
growing cross-border linkages of economic activity, have shifted attention away from bilateral relationships between MNEs and nation states to the role that each may play in promoting and sustaining an efficient and socially acceptable market system. This suggests that it is no longer sensible to take a bilateral or compartmentalised approach to the way in which MNEs affect the goals of nation states. Such interaction must be related to a systemic and holistic view of the organisation of international resource allocation.

In this respect, there are indications that MNEs and host governments are viewing each other more positively and constructively than once they did. A caveat to this somewhat sanguine view is that the cooperation between firms and governments may not always be in the broader public interest. For example, firms may encourage governments to engage in strategic trade policies, which, far from reducing cross-border transaction costs and promoting healthy international competition, tend, by imposing artificial costs (for example, non-tariff barriers) on their rivals, to shelter them from the winds of structural change (Rugman and Verbeke, 1991). Moreover, without an overhaul of the institutional machinery of many governments and an upgrading in the competence of the executive bureaucrats, it is doubtful whether even ‘good’ strategic trade policy could be efficiently administered.

More attention is now being focused on the relationship between the policies and actions of nation states and the international economic and financial system of which they are part. Multilateral action may still be necessary and may still be addressed to fostering or regulating MNE activity. However, in the early 2000s its main thrust is to ensure that the global economic order works so as to ensure that MNEs and other cross-border actors optimise their contribution to the institutions, capabilities and competitiveness of nation states.

In helping the international community to achieve these goals, MNEs may, and often do, play a positive and constructive role, not only by influencing the geopolitical alignments between nations and regions, but also by transferring institutional norms and providing many of the technological and organisational capabilities which may help to reduce institutional distance and overcome international market failure. Viewed in this light, an international facilitating framework which embraces the conduct and impact, as well as the government treatment, of MNEs could help to lessen friction and conflict between nations, while encouraging beneficial and sustainable economic growth.

Two decades ago scholars were forecasting an era of increasing supranational institutional controls on the behaviour of MNEs (Robinson, 1983). These have not, in general, materialised, mainly because of the shift in attitudes of both home and host countries towards their respective roles in the emerging global economy, and of how international direct investment may affect these roles.

Yet, although governments are taking a more constructive view of the content and effects of MNE activity, certain systemic characteristics associated with the globalisation of production and markets continue to give concern. Chief among these are the ease and speed with which MNEs are able to restructure their assets and relocate their production, and the cross-border oligopolistic strategies they pursue. Others relate to the perceived lack of cultural sensitivity or environmental awareness of some of the large international corporations. Chapters 18 and 19 showed that these aspects of MNE activity require rigorous monitoring by governments, not so much with a view to affecting the conduct of MNEs, but rather to determine how governments, MNEs and the rest of the constituents
of global capitalism might work together to promote national and international economic welfare.

This chapter has argued that systemic market failure – particularly cross-border market failure – cannot always be fully counteracted, or compensated for, by national government actions because the uncertainties, externalities, and scale and scope of economies endemic in the activities of hierarchies, are no respecters of national boundaries. In such cases, depending on the costs and benefits involved to the participating countries, it may be appropriate for some kind of collaborative action to be pursued between countries – be they host or home or both – towards MNEs. Such forms of institutional partnership between countries might vary from very informal exchanges of information and views about MNE-related matters, to legally binding agreements and the abrogation of the sovereignty of nation states in their acceptance of a common set of rules, regulations and policies towards, or as a consequence of, MNE activity. In between these extremes are a variety of ‘soft’ institutional forms (for example, guidelines and codes); some are industry or country specific, while others are more general.

The main feature of the past decades has been that the thrust of all these efforts has changed from regulating the behaviour of MNEs to conform with national or regional economic objectives, to encouraging cross-border mechanisms that promote a positive interaction between national governments and MNEs. It is also being increasingly appreciated that this interface will be the most fruitful when there are commonly agreed and effective institutions and where international structural distorting and endemic market failure is minimised. Only then can a systemic or mutually beneficial interface between the O advantages of MNEs and the L advantages of the countries in which they operate be fully achieved.994

At the same time, there can be no denying that intergovernment relations, particularly among members of the Triad, have become more competitive as the structures of their economies have converged, and as assets and intermediate products have become more internationally mobile. The result is that governments, like firms competing for the same resources and capabilities, have begun to behave as strategic oligopolists in a variety of policy-related areas, especially trade. But as in the corporate sector, competition among oligopolists can be destructive, unless the ‘rules of the game’ are clearly defined and the ‘playing field’ is reasonably level and agreed upon by the participants. This and the preceding chapter have argued that the existing international institutions for fashioning and regulating cross-border commerce may need a complete overhaul to take account of the globalisation of production and the activities of global companies. Unless this is brought about, there is a real possibility that the substantial benefits which an efficient and socially acceptable global economy offers the peoples of the world will be severely eroded – if not lost altogether.
PART V

Looking ahead

This part consists of just one chapter, the purpose of which is to speculate a little about the future course and characteristics of MNE activity. The chapter suggests that such activity, over the past half-century, has become more diversified in its origin and pluralistic in its organisational form; and that to understand its contemporary and likely future determinants and consequences, it is necessary for the study of MNEs to take on a more interdisciplinary, systemic and institutional approach.

While economists and organisational scholars are making some progress in analysing the competitive advantages of the large MNE in terms of its competence to effectively orchestrate the activities of a network of intra- and inter-firm organisational relationships, much less headway has been made on reviewing the implications of the global economy for the ways in which governments organise for the overall management of the resources and capabilities under their jurisdiction. In particular, what does the dramatic growth of all forms of cross-border relationships by MNEs mean for the policies of their home governments? What are the effects of asset-seeking rather than asset-exploiting investment on the host countries? When are MNEs likely to contribute to institutional upgrading and restructuring in the countries in which they operate? The volume concludes by asserting that it is the juxtaposition between the systemic organisation of the cross-border activities by MNEs, as leading actors in the global market economy, and that by national governments of the location-bound assets within their jurisdiction to promote their economic and social objectives, that promises to be the kernel of fruitful research by IB scholars in the early 21st century.
21. The future of MNEs in a global economy

21.1 INTRODUCTION: THE FIVE STAGES IN THE EVOLUTION OF THE GLOBAL ECONOMY

For the most part, this book has adopted an evolutionary and institutional approach to explaining the value-added activities of MNEs, and their interaction with the economies of which they are part. In doing so, it has used the eclectic paradigm of international production as our framework of analysis. This suggests that both the determinants of MNE activity and the response of policy makers to its economic and social consequences are functions of the dynamic interplay between the competitive or O-specific advantages of enterprises and the competitive or L-specific advantages of countries, and also of the way in which this interplay is governed and organised.

In Chapter 3 we traced the growth of international production and its shifting industrial and geographical structure in terms of the strategic response of firms to a changing OLI configuration. That chapter, as well as Chapters 7 and 8, used the eclectic paradigm to examine the organisational structures of MNEs, while Chapter 10 introduced the concept of the IDP to explain the changing propensity of countries to attract inward direct investment or generate outward direct investment at different stages of their economic development.

In Part III, we explored some of the more important economic consequences of MNE activity for the countries in which they operate. We argued that these, too, could be explained by reference to the interaction between the O advantages of firms and the L endowments of countries, and the relative attractions of exploiting the former across national boundaries through hierarchical, market or cooperative modes. We showed that such effects are likely to be country, sector and firm specific, and to vary according to both the stage of a country’s development, and the management and organisational strategies pursued by MNEs. Part IV demonstrated that the OLI paradigm could also provide a useful framework for understanding the reactions and strategic policies pursued by home and host governments, and how these have changed over the past 20 years or more. Considering both the growth of international production and the reactions of governments to the activities of MNEs, it is possible to trace five stages in the evolution of the global economy, each of which is distinguished by a different configuration of the competitive strengths and weaknesses of both firms and nation states. The following subsections briefly summarise the main features of these five stages.

21.1.1 Stage 1: Up to 1914

The first stage, which lasted from the mid-19th century to the First World War, was one in which the revolution in production and organisational methods and new forms of transport and energy heralded the emergence of the managed multiplant firm, which
occasionally extended beyond its national boundaries when it was commercially or strategically appropriate to do so. The O advantages of the embryonic MNEs lay mainly in the intangible assets they possessed, rather than in the perceived benefits of internalising cross-border markets, while the L advantages of countries rested in the structure of their natural endowments, rather than in that of their created assets and capabilities. Indeed, recent research on the merchant groups that coordinated a wide range of free-standing investments in the 19th century has begun to view them as a cluster of business entities that share some similarities with modern network-based organisations, particularly those found in East Asia.995

For the most part, MNEs acted as economic colonists, often aided and abetted by their mother countries. Host countries took little strategic action to affect inbound investment, either because they were powerless to do so, or because national governments generally played a less important role than they do now in influencing market demand and the disposition of resources. Metropolitan countries were generally only interested in outbound direct investment in so far as it helped them to advance their colonial ambitions, although the initiation of strong anti-trust legislation by some home countries (for example, the US) in the 1890s reduced the propensity of firms to engage in cross-border alliances.996

In modern history, the first movement abroad of firms coincided with a series of technological advances leading to the innovation and commercialisation of new products and production methods, as well as of improved methods of transportation, communications and storage. These, in turn, fostered the search for new materials and energy sources to satisfy the needs of both industrial products, and a rising number of increasingly prosperous consumers. However, because of uncertainties over the willingness or capability of supplying firms (which were mainly located in developing countries) to fulfil the terms of their contracts, buying firms often found it desirable to internalise these markets or invest in the production of the intermediate products themselves. Similarly, to ensure that the products would be effectively marketed, firms integrated forwards into foreign-marketing and -distribution networks. Later, as the roundaboutness of production increased, and R&D became an important link in the value-added chain, manufacturing firms integrated forwards to lessen the risk of their proprietary technology being pirated, dissipated or inappropriately used.

21.1.2 Stage 2: Inter-war Years

The second stage of the evolution of the global economy lasted from 1918 to the outbreak of the Second World War. It was characterised by the maturing of both US and European MNEs, and a general move towards the integration of their affiliates into the economies in which they operated. The variables affecting the location of value-added activities underwent noticeable change as there was a general shift of host industrialised countries towards economic independence and protectionism – together with adoption of Keynesian economic policies. Much MNE activity in this period took the form of defensive market-seeking investment. Most MNEs consisted of a federation of loosely knit foreign affiliates, which were primarily geared towards providing the parent companies with access to foreign markets. Affiliates tended to be set up as truncated replicas of their parent companies.
As in Stage 1, few home or host countries had formulated specific policies towards MNE activity. A study of the literature of the period reveals that, while policy makers paid some notice to the merits and demerits of portfolio capital movements, particularly under a managed currency system, they appeared little interested or concerned about the implications of either outward or inward direct investment.

With the collapse of the international capital market in the 1930s and the growing role of FDI in some economies, notably Canada and Australia, scholars began to pay more attention to the consequences of the activities of the branch plants of foreign (later to be called multinational) enterprises. During this period, too, home countries generally took a more relaxed stance towards mergers and cartels, which led some firms to engage in cross-border alliances rather than FDI. However, as in Stage 1, the main gains of MNE activity arose from the economic rent derived from their proprietary rights rather than from those of multinationality per se. Natural factor endowments together with government-imposed import restrictions remained the main determinants of the location of economic activity. Structural distortions in cross-border markets counteracted the technological and organisational advances of the era and severely hampered international plant specialisation and intra-firm trade.

21.1.3 Stage 3: 1945 to Late 1960s

The third stage of the evolution of MNE activity was between 1945 and the late 1960s. These were the years in which the technological and economic hegemony of the US was at its zenith, and the international agreements forged at Bretton Woods were having their most dramatic impact on trade liberalisation. During these years, too, international direct investment, initially from the US and the UK but later from other continental European countries and Japan, became an increasingly significant modality of international economic involvement. This reflected the growing importance of all kinds of proprietary rights as a form of competitive advantage of firms, as well as the strong pressures and incentives for them to exploit these rights from a foreign location. Inter alia these pressures and incentives reflected the shortage of the currencies of the leading investing countries by the prospective importers; the rapidly rising demand for minerals, materials and foodstuffs by industrialised countries, especially those located in developing countries; and the incentives provided to attract import-substituting investment, especially by Canada, Australia and some of the larger developing countries.

As the significance of foreign production and the number of MNE affiliates grew, the organisational philosophy of MNEs shifted from being ethnocentric to being polycentric, with many companies replacing their international divisions by cross-border functional/product or regional divisions. At the same time, in only a few of the larger high-technology MNEs was there any real attempt to organise their foreign affiliates as part of a closely controlled network of value-added activities, or to fully exploit the risk-reducing or arbitrage advantages of producing in different economic or political environments. This was also a period in which Keynesian economic policies were in full vogue, and governments were assuming a more important role in influencing their national diamonds of competitive advantage (Porter, 1990). Towards the end of the period, the role of ‘created’ factor endowments (for example, entrepreneurship, technology and institutional competence) was becoming a more important feature of the L attractions of countries,
particularly among industrialised developed countries, between which the significance of intra-industry trade was also increasing.

21.1.4 Stage 4: From Late 1960s to Mid-1980s

The fourth stage, from the mid-1960s to the mid-1980s, was distinguished by a series of events which combined both to increase the propensity of MNEs to integrate and control many of their cross-border activities and to take a more geocentric stance towards these activities. The period was also marked by a movement towards regional integration in Europe and, to a lesser extent, in Asia and Latin America. This allowed MNEs in those regions to rationalise their value-added activities, and recoup some of the advantages of product and plant specialisation and intra-firm trade.

The late 1960s saw a new generation of technological discoveries. However, this time the focus of interest was on process technology (notably automation and computerisation) and telecommunications. These were also years of a widespread reduction in trade barriers – notably as initiated by successive GATT rounds, the EC and the European Free Trade Association (EFTA), and by preferential trade agreements, such as those agreed by the Lomé conventions. The developing countries also helped create free trade areas in Latin America, East Africa and the Caribbean, and, towards the end of the 1970s, in Asia. At the same time, both technological and organisational innovations were encouraging the specialisation and common ownership of vertically and horizontally related activities. The idea of a world product mandate took shape; international sourcing in several industries became the norm; and there was a marked increase in the propensity of MNEs to integrate and centrally control their production, marketing and innovatory activities.

During these years, the world was becoming politically and economically less stable. The oil crisis of 1973, fluctuating currencies, uncertainties about the future supply of many commodities and the adversarial stance assumed by several governments towards inbound direct investment, all exacerbated cross-market failure. At the same time, the rapid growth of the economies of East Asia and the establishment of customs unions or free trade zones prompted a new international division of labour both between countries and within MNEs. In fact, as one group of foreign direct investors – mainly in the primary product sectors – was forced to divest, or partially divest, its overseas assets, another group – mainly in the high-technology manufacturing and information-intensive service sectors – was rapidly investing in new wholly owned foreign affiliates.

By the mid-1980s, most developing countries were relaxing some of the restrictive regulatory structures towards inbound investment that had been a characteristic of the early and mid-1970s. This mainly reflected a shift in their macroeconomic policies from import-substituting to export-led or balanced growth, increasing unemployment and reduced rates of growth in these economies, and/or the better understanding and expertise of governments in negotiating with MNEs. The period was also marked by a growth in alternative forms of IB involvement to that of the fully owned foreign affiliate, as well as a more pronounced heterogeneity of these forms across countries, industries and firms.

During these years, too, the international distribution of O advantages leading to MNE activity became more evenly balanced between the leading industrial economies – a fact most vividly demonstrated by the US becoming the world’s largest inward, as well as the largest outward direct investor, by the mid-1980s.
21.1.5 Stage 5: Mid-1980s to Date

The fifth and current state of evolution of the global economy is essentially distinguished from its predecessors by a series of momentous changes in the world economic and political scenario; by an extremely rapid pace of scientific and technological development; and by a range of dramatic advances in IT and organisational methods. Between them, these events are fundamentally altering the structure and organisation of production and the transactional relationships between firms. At the same time, MNEs are becoming increasingly aware of the need to be responsive to the local supply conditions, social mores, institutional systems and markets of the countries in which they operate, and how these, in turn, may be used to strengthen their own O-specific resources and capabilities.

These factors and the response of MNEs to them are also affecting the configuration of the competitive advantages of nations. Already by the end of the 1980s, in most advanced industrial economies, not only were natural factor endowments assuming a less important locational attraction and engineered factor endowments a more important attraction to inward FDI, but also the actions of governments, through their willingness and ability to affect the quantity and quality of these endowments and their organisation, were assuming a new significance.

These developments are causing a realignment of both the strategies of companies as they seek to remain innovatory and competitive in a global economy, and the macro-organisational strategies of countries as they seek to encourage domestic and foreign firms both to upgrade their indigenous resources and capabilities, and to use these more productively in accord with their social and environmental objectives. The rise of MNEs from developing countries, the growth of cross-border strategic alliances, the increasing attention paid by governments to competitiveness as a goal in itself, and the closer interaction between corporate and regional integration, are all illustrations of these developments.

In the early 2000s, the large multinational firm is evolving into a very different sort of organisation. It is increasingly assuming the role of an orchestrator of production, institutions and transactions within a system of cross-border internal and external relationships, which may, or may not, involve equity investment, but which are intended to serve its global interests. At the same time, the activities of large MNEs are complemented by a new generation of entrepreneurial SMEs, some of which use their relationships with large MNEs as a gateway to global markets.

From being mainly a provider of capital, management and technology to its outlying affiliates, each operating more or less independently, and then a coordinator of the way in which resources are used within a closely knit family of affiliates, the decision-making nexus of the MNE has come to resemble the central nervous system of a much larger group of interdependent, but less formally governed activities aimed primarily at advancing the global competitive strategy and position of the core organisation. This it does, first, by efficiently combining its O-specific resources with those it acquires from other firms or the global marketplace, second, by its technology, product and marketing strategies, and third, by the nature and form of network relationships it concludes with other firms.

To give just one example, IBM, the sixth largest industrial firm in the world in 1991, has long been regarded as the leader in new forms of cross-border organisation. Today, the
company has moved away from manufacturing, and instead coordinates a network of relationships to deliver complete service solutions, involving hardware and software, to its global customers (Palmisano, 2006). In its new form, IBM has some similarities with another emerging type of organisation, the metanational MNE (Doz et al., 2001). While established competitors might try to redesign their existing organisations to foster global innovation by investing heavily in better information systems and knowledge management, metanational firms start from different beginnings. The focus of such firms is on identifying and accessing new technologies and innovatory capabilities, turning them into cutting-edge products and marketing them globally. The key to successful metanationals is their unconventional process of prospecting for knowledge everywhere in the firm’s operating environment.

As Chapter 9 has demonstrated, one of the features of the past two decades has been the dramatic escalation in the number of strategic and ‘first-best’ cooperative ventures concluded between large enterprises domiciled in different countries. The express purpose of such alliances has been to reduce the transaction and production costs of activities at different stages of the value-added or supply chain, and/or to gain access to complementary resources and capabilities. Some of these strategic asset-acquiring coalitions are very different in kind, purpose and scope from the joint ventures and non-equity arrangements of the earlier post-war period, which, more often than not, were made for defensive or second-best reasons, for example, in response to the regulatory environments of host governments.

There are several implications of the new-style MNEs for our theorising about the determinants and effects of international production and of the response of governments to MNE-controlled activities. First, they require us to reappraise our thinking about the nature, functions and boundaries of firms and markets, as well as the way each is organised. Second, they cast doubt on the usefulness of some of our existing classifications of economic activities and market forms. Third, they are profoundly affecting the structure, ownership and location of international economic activity. Fourth, they require governments to rethink their domestic economic and macro-organisational strategies in the light of the much greater ease with which resources and capabilities – including some kinds of labour – can now move across national boundaries, and particularly within MNEs.

However, before speculating further about the future interaction between the competitive advantages of firms and nation states, we wish to pay some attention to the main variables which are likely to bring these changes about. Most of these will be familiar to the reader by now, as they have helped to shape the core paradigm of this volume.

### 21.2 THE DETERMINANTS OF INTERNATIONAL PRODUCTION: A REPRISE

Throughout the last century, four main factors have been the driving force behind the emergence, growth and changing structure of IB activity. The first, and in the long run, the most important as it directly affects the other three, has been a series of major technological advances coupled with a continual upgrading in the quality of human capital. These events have not only made possible a new range of materials, goods and services which our forefathers could scarcely have imagined, but have also dramatically impacted
on the way in which assets, goods, people and ideas are organised and moved over space. As a consequence of these advances, both the global structure of value-added activities and the modalities in which goods and services are exchanged across national borders have helped to push back the industrial and territorial boundaries of firms, and have redefined and refashioned the competitive advantages of countries.

The second driving force has been the pace and content of economic development. This may be measured in a variety of ways, but perhaps the most telling are the change in GDP per capita, and a variety of social welfare or human development indicators. Until the turn of the 21st century, the most spectacular economic and social achievements were recorded by Japan and several Asian developing countries. Nations such as South Korea, Taiwan, Thailand, Singapore, Malaysia and Hong Kong are the contemporary equivalents to the UK, Germany, France and the US of the 19th century. In the early 2000s, the emergence of China and India as host and home countries to MNEs, and their engagement, along with Russia and Brazil, in high-technology sectors and cutting-edge technology development is transforming the global economy at an unprecedented pace.

Their progress has fundamentally affected the international allocation of economic activity, and the geographical composition of the world’s largest firms. Moreover, by their very distinctive business cultures, organisational patterns and government–industry relationships, the emerging economies of Asia have helped to fashion new cross-border hierarchical and cooperative business relationships.

The third vehicle of change has been the attitudes of governments towards the limits of their economic boundaries, and the way in which their policies interact with international economic events. Although nation states are no less schizophrenic towards these events than they used to be – in the sense that they want the benefits of economic interdependence without the costs – the general trend, again largely brought about by events beyond their control, has been towards, rather than away from, their participation in the globalisation of production and trade.

Both trade and MNE activity are absolutely and proportionally more important in the world economy than they have ever been. Even countries which, historically, have pursued the most restrictionist policies towards FDI, most notably China and India, are now taking a more open stance to both inbound and outbound MNE activity. Also, the transition economies of Central and Eastern Europe, many as members of the EU, have become important actors on the international stage in their own right. By one means or another, willingly or not, nation states are becoming increasingly locked into each other’s institutional fabric and economic destiny. MNEs are both shaping and being shaped by a range of national government attitudes and policies, and by world economic events. If anything, their role seems likely to become more influential in the future.

The fourth key factor affecting the growth and pattern of international (as well as domestic) business in recent years has been the way in which economic activity is organised. This, in fact, is a consequence of the first three. Nonetheless, it reflects the increasing inappropriateness of traditional producing and transactional modes to cope with the demands of contemporary technology and the economic and social needs of consumers. Historically, as Chapter 3 has shown, for much of the century after the industrial revolution the spot market remained the dominant form of organising cross-border transactions, both among firms and between firms and people. During this period, the single-product enterprise continued to be the main vehicle of production. In the early
2000s, we have seen a resurgence of contractual relationships and outsourcing, facilitated by the digital revolution and improved means of communication.

The stages of the evolution of MNE activity described earlier can be traced to a changing juxtaposition of these four forces, and how these, in turn, have impacted upon consumer tastes and aspirations, market structure, the ownership and management of firms, and the supply of financial capital.

21.3 CONTEMPORARY DEVELOPMENTS

In this section, we review recent developments in four domains, namely, technological advances, economic development, organisational forms and the role of government, none of which is completely exogenous to the MNE. The interaction of all four elements contribute to either increasing or decreasing distance costs, that is, the costs of conducting economic activity across borders, in both the human and physical environments within which MNEs operate.

The costs related to the physical environment, including transportation costs, tariff and non-tariff barriers and communication costs, have fallen considerably over the past two decades, and as a consequence, the scope and form of the international division of labour has been changed to a considerable extent. At the same time, the transaction costs related to human relationships, and the factors affecting cross-border institutional distance, have arguably become higher. These are the transaction costs associated with engaging in economic activity where the goals, perceptions and institutions of the parties to the transaction, which may include actors outside the economic relationship, are very different from one another.

Taken together, in addition to affecting the extent, form and distribution of economic activity, we think that the changes taking place in the global economy also pose a considerable challenge to IB scholarship. We take up this point in the final section of this chapter.

21.3.1 Technological Advances

The creation and dissemination of technology is an important factor in nearly every goods and service sector in the contemporary economy. Even products that do not appear to contain a high-technological content, such as food, textiles or hotel services, often make use of sophisticated inputs related to production processes or logistics, before they enter the market. In high-technology industries, such as biotechnology, aerospace or semiconductors, which are among the highest spenders on R&D, the role of science and technology is paramount. The contribution of raw materials and labour to the total costs of production has declined for many different types of goods, while the value attached to knowledge intangibles and to brand names, has increased considerably. Today, Tobin's $q$, which is a measure of the intangible assets of the firm, and consists of the ratio between the market value of the firm and the replacement value of its (tangible) assets, is greater than 1 for most MNEs, and can easily be three to five times as much.

Contemporary innovatory advances are of two main kinds. First, there are those which are essentially directed towards upgrading the efficiency of production. These include a
The number of core technologies which may be described as generic because they are multi-purpose rather than specific in their application, and affect a wide range of industrial activities. Examples include advances in robotics, nanotechnology, and biotechnology, and the development of ever more powerful microprocessors. Unlike their predecessors, these technologies are not only labour saving, but also economise on capital, raw materials and energy, and are more flexible in their use.

Another feature of the new technologies is that their efficient utilisation frequently requires them to be combined with other technologies produced or utilised by a different group of firms. The latest generation of large commercial aircraft, for example, requires the combined skills of metallurgy, aeronautical engineering and aero-electronics. Medical advances are increasingly based on applications of biotechnology rather than pharmacology, while the development of medical equipment benefits from advances in computer imaging and laser technology. The design and construction of chemical plants involves innovatory inputs from chemical, engineering and materials sectors. New telecommunication devices embrace the latest advances in carbon materials, fibre optics, computer technology and electronic engineering, as well as software development in applications such as voice recognition. Since both the consumption and the production of most core technologies usually yield externalities of one kind or another, it follows that one or the other of the firms involved may be prompted to recoup these benefits by integrating the separate activities, particularly those that draw upon the same generic technology.

The second kind of innovatory advance is that which lowers the transaction costs of doing business. The declining costs of transporting physical goods by air and sea effected by standardised containers and more efficient aircraft have enabled dramatic growth in cross-border trade since the 1970s, although high oil prices and concern about climate change might increase such costs in the future. Contemporary advances in IT are dramatically changing the feasibility and cost of the transfer and manipulation of information. The rise of the digital economy and the emergence of the internet as a platform for organising intra- and inter-firm transactions in the latter half of the 1990s are ushering in a range of new business models utilising the new technologies.

The new ways of processing information are transforming activities such as the selling of books and music, travel and real estate. In other sectors, the impact of e-business is less transformational, but no industry has been unaffected by the advances in the methods of communication and information gathering, both positively in terms of the efficiency gains it offers, and negatively due to increased price transparency and heightened competition. Today, anything that can be turned into bits can be stored, reproduced and transported over large distances at little cost. It is these technologies that have enabled the growth in services outsourcing, which is likely to continue to expand in the foreseeable future.

Following the collapse of the internet bubble in 2000, and the disappearance of some of the experimental business models of the boom period, internet-enabled technologies of the second generation are bringing new tools to the fore, including social networking sites such as MySpace and content-sharing sites such as YouTube, which are fostering social networking on a global scale. While the commercial impact of the second generation of internet-based applications is as yet unknown, one indication of its potential is the $1.65 billion price that the internet search giant Google agreed to pay to acquire YouTube in October 2006.
Also in 2006, *Time* magazine chose you – as in all of us – as their man or woman of the year. The reflective film on the cover of the magazine, framed like a mirror, was meant to symbolise the extent to which the new means of communication are empowering people in all parts of the world to express themselves, and to find like-minded individuals with whom to have a dialogue and share their thoughts. The growth of blogs, which are challenging traditional print and broadcast media, social networking sites and countless enthusiast web pages, are all part of this revolution. Of course, in addition to catering to the very specific preoccupations of individual people, the internet has also provided unprecedented access to a wealth of all types of information. At the same time, the same infrastructure also allows for the dissemination of ideas and beliefs that are contrary to the functioning of open societies, and that seek to actively undermine this openness by means such as terrorism.

The successful production and implementation of both kinds of technology require not only substantial amounts of human and physical capital to exploit them effectively, but also regional or global markets to support their commercialisation. They also demand the presence of a sophisticated educational, transport and telecommunications infrastructure, which governments can and do much to influence. Consumers, too, can play their part by the kinds of demands they place on producers to upgrade and/or lower the costs of their products, as well as being involved in the technology development process itself.

At the same time, the way in which firms acquire and utilise new resources and competences, and the value-added activities flowing from them, has necessitated a variety of equity and non-equity relationships to be forged with other firms in the same or different industrial sectors and/or countries. Advances in IT have fashioned the ways in which firms organise such relationships. For example, where technology which was previously idiosyncratic and tacit becomes standardised and codifiable, there is an increased incentive to externalise its use. The advances in IT are making possible the fragmentation of supply chains, and particularly those across national borders.

It seems likely that the kinds of technological advances just described will have a no less significant effect upon the location and ownership of economic activity than did earlier advances. Recent data on the international distribution of innovatory activity suggest that while the great bulk continues to be undertaken in the seven leading industrial nations, namely, Canada, France, Germany, Italy, Japan, the UK and the US, there has been increasing decentralisation of R&D within the Triad, and the emergence of new countries such as China and India as hosts to R&D-intensive activities.

Countries also vary in their ability to create and use human and physical capital, and to supply or employ different types of technology. Some, including Japan, Germany and Singapore, are particularly adept in innovating technologies for use in the fabricating sectors. Others, like Belgium, the UK and Canada, have long since enjoyed a comparative advantage in some types of process technology. Some do better in manufacturing goods that require mass production techniques; others are particularly competent at operating more-flexible production systems or in supplying idiosyncratic products for specialised niche markets. Partly, at least, this may reflect their willingness and capacity to supply the complementary assets (for example, marketing skills) which technological innovation requires, as well as the presence of the necessary stimulus (provided, for example, by consumers, rival firms and tax incentives) for firms to be entrepreneurial and innovatory. Cultural and institutional attributes, the availability of different sorts of factor inputs, the
character of inter- and intra-firm relationships, and attitudes towards risk and product innovations, are no less important factors. Indeed, the institutional framework for technology creation and deployment – particularly the way in which firms combine their core assets with those acquired from other firms – is increasingly being recognised as being a crucial competitive advantage in its own right (Amable, 2003).

In most countries which have recorded an active innovatory record in recent years, such as South Korea, Taiwan, India and China, the involvement of governments has been directed to the funding of tertiary education and other investments in building the R&D infrastructure. Another more indirect, but important government impact on innovative capacity has been its influence on the demand for and supply of capabilities for innovation-intensive products, and its encouragement of an entrepreneurial ethos and institutional structure for upgrading human and physical capital. This includes the regulatory environment, macroeconomic policy and microeconomic management, attitudes to financial markets and risk taking, fiscal incentives and competition policy.

Indeed, the absorptive capacity of local firms has shown itself to be a significant determinant not only of the ability of those firms to innovate for themselves, but also of their ability to absorb knowledge from other sources, including the affiliates of foreign MNEs. We have seen that at the micro level, there are plenty of examples where the technology transferred and the training and financial support provided by MNE affiliates have helped to upgrade the capabilities of local suppliers. However, at the same time, at the macro level the magnitude of the impact of spillovers and linkages on productivity has varied considerably. In general, there appears to be considerable heterogeneity among firms both as sources and as recipients of spillovers, and the beneficial effects tend to be concentrated in those local firms that possess sufficient absorptive capacity, and the human and technological resources, to become partners in the MNE value-added network.

21.3.2 Economic Development

UNCTAD (2006) estimates the total world outward stock of foreign investment (valued at current prices) to have been $10,672 billion in 2005, which represents a sixfold increase from the estimated stock of $1,723 billion in 1990. Much of this growth was boosted by waves of M&A activity, although FDI is only one component in the financing of such cross-border deals. Particularly notable has been the role of M&As in the service industries; since 2000, for example, these have accounted for about two-thirds of the value of all M&A purchases, with financial services accounting for a large part of that share.

In terms of the geographical patterns of FDI, in 1980, 12 developed countries accounted for 94% of the total stock of outward direct investment. The leading four – the US, the UK, West Germany and the Netherlands – accounted for 73%. By the year 2005, the four leading investors – the US, the UK, France and Germany – accounted for only 48%. In respect of the recipient countries, while over the past decade and a half there has been a substantial increase in the FDI received by all regions, there has also been a shift towards developing countries and countries in transition, as well as an increase in investment that is routed through tax havens. However, as we have already indicated, part of the growth in FDI stock in both developed and developing countries represents a change in ownership of existing assets as a result of cross-border M&As, rather than a redistribution in the geography of economic activity.
For the past four decades, the global economy has been undergoing a major restructuring. As a consequence, the economic alignment of nation states in the early 2000s is very different from that in the 1980s. The contemporary global economy is still dominated by the Triad of three trading blocs – the EU, the Asian bloc led by Japan, and NAFTA. Each of these blocs has its own geographical hinterland, in and between which there are usually close trading and investment relationships.\textsuperscript{1011}

Today, the composition of these blocs has changed, and some of the countries in the hinterland of the Triad have, themselves, become part of its core. The EU has widened to encompass 27 countries, with Russia (outside the Union) playing an increasingly important role; in the Asian bloc, China, India, Taiwan and South Korea have joined Japan as key players; while the hinterland of NAFTA is widening to include Brazil and Chile. As more economies become industrialised and better off, the role of intra-industry trade and investment, which has always been strongly income elastic, is likely to increase, though the geographical composition of the leading MNEs is likely to change.

Although the contribution of the various sectors of economic activity to GDP varies among the member countries of the Triad, the industrial structure of each has tended to converge over the past 40 years, during which time Japan emerged as a major economic power and \textit{Pax Americana} passed the way of \textit{Pax Britannica} some 70 years earlier. Both technological advances and the actions of national governments have helped to bring about this situation.

Within both developed and developing economies, the trend for some time now has been towards an increasing role of both producer and consumer services in the value-added process. Even in the most advanced industrial countries, it is premature, if not misleading, to talk about deindustrialisation, as much of the growth in producer services is directed to improving the long-term competitiveness of the primary and manufacturing sectors. Moreover, it is the case that the composition of output – be it of goods or services – in the emerging global economy is becoming increasingly determined by the disposition and productivity of created assets and capabilities rather than those of natural resources. \textit{Inter alia} this is shown by the quite dramatic fall in the percentage of raw materials and unskilled labour costs in the sales value of most products (Drucker, 1986).

Since the quintessence of the MNE is that it is a producer, organiser, user and disseminator of created assets and competences, it may be expected that these developments will favour its further growth. Much, of course, will depend on the extent to which the new information-based economy lowers or raises barriers to entry into particular markets, and whether it generates its own cross-border economies of scale and scope. As some distance costs have declined, and as the value generated by many MNEs increasingly stems from their intangible assets, including brands, the range of possible outsourcing relationships grows substantially. As a result, the further ‘flattening’ of the global economy is likely to result in a substantial restructuring of activity both within and between countries.\textsuperscript{1012}

Earlier chapters have identified the many ways in which MNEs may affect the development process. Chapter 10 introduced the IDP concept, and suggested that at different stages of a country’s development, the OLI configuration affecting the propensity of its firms to engage in outward direct investment, or for it to be invested in by foreign firms, was both different and, to some extent at least, predictable. Combined with an evolutionary model of technological accumulation, we also demonstrated how both inward and outward investment, through its impact on the institutional structure and competitive
advantage of a country, might affect both the ability of its own firms to develop new competitive advantages in global markets, and the structure and effectiveness of its own L-bound resources.

However, a comparison between economic trends and the role of inward investment in some Asian countries, and many of those in Latin America and almost all sub-Saharan African territories, reveals quite dramatic differences. Within the developing countries, the gap in income levels between the most and the least developed is widening. The conditions making for the success of East Asian countries are conspicuously absent in most other developing countries. Part of the reason for this undoubtedly lies in the burden of foreign debt of the latter countries; part may reflect their geography; but mostly we believe it reflects the failure of their governments to upgrade their human resources and build the necessary institutions to achieve sustainable economic development. We return to the importance of institutions in a subsequent section of this chapter.

However, the major changes in the global economy are due to the phenomenal growth of China, and to a somewhat lesser extent, that of India. The EIU (2006) predicts that by 2010, the areas experiencing above-average growth in inward FDI include some tax haven locations, Central and Eastern Europe, and most of the dynamic economies of East Asia, including China, Hong Kong, India, Japan and South Korea. They also expect above-average growth for Mexico and Russia, while growth that is notably below average is predicted for Australia, Canada, Italy and the UK, but also for Taiwan.

Even so, Sauvant (2006) points out that, although the growth in FDI is likely to continue, it is by no means inevitable. FDI is sensitive to external triggers and uncertainties in the global economy, and the strong growth in FDI that was driven by the ‘new economy’ of the 1990s, turned into a decline following the collapse of the internet boom and the terrorist attacks on the US. For the moment, the pendulum has swung towards FDI openness, as, for example, is demonstrated by the explosion of the number of bilateral investment treaties mainly aimed at protecting foreign investors. Nonetheless, while there are no signs of an imminent backlash, a number of developments in the contemporary global economy have the potential to turn opinion against economic openness and foreign investment. One is the growth of asset-augmenting FDI, which is undertaken via M&As, particularly when the acquiring company is from an emerging economy such as China or India. Chapter 18 illustrated some cases where such acquisitions were blocked on security grounds. Other contentious investments involve those in the extractive sectors in countries such as Sudan and Equatorial Guinea, which face sanctions from much of the world community. Furthermore, the growing need for energy and minerals by the booming economies of China and India is happening at a time when much of the developed world is debating different kinds of policy measures to limit the use of fossil fuels, and to curb the problems associated with climate change. The rise in oil and mineral prices over the past five years, coupled with a resurgence of nationalism in some Latin American countries, has also led some governments to press for a renegotiation of contracts earlier concluded with MNEs (UNCTAD, 2007).

Added to these considerations is the increasing cross-border involvement of private equity groups, which has led to staunch opposition, particularly in Germany, where they were likened to a ‘plague of locusts’ for ruthlessly restructuring companies and cutting jobs. The foreign outsourcing of many services – including those involving highly skilled personnel – is also likely to remain a contentious issue, particularly in the forthcoming US
Overall, the growth of services FDI and contractual outsourcing suggests that major restructuring of economic activity both within and between countries will take place. Such readjustments will favour the more highly skilled workers, and the costs of adjustment are likely to be substantial, and to require coordinated government action to mitigate the negative effects. Indeed, we would agree with Dani Rodrik that one of the dangers of the global economy might well be its very success, as this makes it possible to overlook its costs. Unmanaged openness can give rise to social unrest, and in his words, ‘globalisation rests on delicate social and political pillars’, which need to be strengthened if the growth of the global economy is to continue in a peaceful and sustainable manner.

Finally, a considerable uncertainty is related to the economic and political development of China. Tens and even hundreds of millions of people have been lifted out of poverty, but many more still remain. Unlike in India, which is a successful democracy, in China, political participation is curtailed, and if growing nationalism were to replace communism as a guiding ideology, the consequences for Chinese economic and foreign policy would be unpredictable. In his recent assessment, Dollar (2007) identifies the trade imbalance with the US, energy and water scarcity, unsustainable use of natural resources, growing inequality and social tension as the main threats facing China. He concludes that we are more likely to be facing a multipolar century, rather than an Asian- or Chinese-led century.

In any case, the emergence of a scenario of continued economic growth and political stability is likely to require close cooperation, particularly between China, the US and the EU. Among other things, such efforts might include encouraging China to increase its private consumption and public spending, inter alia by building better social safety nets and increasing public spending on education, health and environmental protection. Efforts will also need to be directed towards obtaining cooperation from all the emerging economies on the issue of climate change, whether following the Kyoto protocol, or some other scheme, possibly championed by the US. Finally, the way in which Western countries choose to respond to the rise of political Islam, including the treatment of Muslims in Europe and the US, is likely to have a significant impact on the likelihood of a peaceful and prosperous world economy.

21.3.3 New Organisational Forms

The third development of the early 2000s relates to changes in the nature and scope of business enterprises, and especially the burgeoning of various forms of cross-border corporate alliances and contractual outsourcing. At one time the boundaries of a firm were assumed to be constrained by its own entrepreneurial vision, technological capabilities, financial resources and organisational strengths (Penrose, 1959). Where firms diversified into new product lines or sought new markets, they usually did so in the belief that they could benefit from the economies of vertical or horizontal integration. Moreover, when considered at all, most inter-firm relationships were assumed to be combative, unstructured, short term, and to involve little or no control or influence by one party over the value-added activities of the other. Possible exceptions included some dealerships in durable consumer goods.

In the early 2000s, the situation is very different. Even in an era of the fragmentation of supply chains, when firms are not vertically integrated by ownership, the importance
attached to ensuring that upstream and/or downstream value-added activities are undertaken at the lowest production and transaction costs is increasingly demanding a more cooperative stance between suppliers and customers. In some countries (for example, the US and Germany) it is usual for the terms of the relationship to be formally codified in a legally binding contract. In others, notably in Japan and South Korea, though no less binding, the ties may take the form of a moral commitment of the transacting parties based on forbearance, trust, reputation building and allegiance to group values.

Horizontal relationships are even more heterogeneous. The acquisition, merger and joint equity venture are all well known, and cross-licensing agreements have been common since the turn of the century. What is new, however, is the extent of asset-augmenting M&As, and the increasing involvement of private equity investors in cross-border activities. Another notable feature is the continued growth of non-equity strategic alliances between enterprises who, outside the alliances, may fiercely compete with one another, but choose to collaborate, particularly in R&D activities. Chapter 9 has already examined the structure and raison d’être for these alliances, which represent a hybrid between markets and hierarchies.

Furthermore, the internal innovative activities of the MNE, as represented by its R&D expenditures, are being increasingly complemented by external activities, such as contract research and R&D alliances (UNCTAD, 2005c). Affiliates of MNEs are more likely to be given mandates of both competitive exploitation and competence creation, as their parent companies are increasingly seeking to augment as well as to exploit their global competitive advantages. Here, we might mention just two emerging forms of MNE organisation discussed in Chapter 8, namely the ‘born global’, and ‘metanational’ firms. Although such firms differ considerably in terms of their size and degree of internationalisation, each is fully aware of the opportunities for outsourcing activities and engaging in ‘open innovation’ with their network partners.

In Chapter 5 we described the modern MNE as a ‘coordinated system’ of domestic and cross-border value-added activities. The content and structure of such a system is determined by the hierarchical costs of production, the market costs of exchange, and the interdependence of production and exchange relations. Some of these value-added activities the MNE will undertake itself; others it will undertake jointly with other firms. However, over each and all of these activities it will seek to exercise systemic control or influence. At the same time, the motivation for, and outcome of, any particular alliance formed is not only dyadic, as each relationship must also take account of the effects it has on the network of relationships forged by the initiating firm.

Robertson (1948) once described firms as islands of conscious power in this ocean of unconscious cooperation, like lumps of butter coagulating in a pail of buttermilk. However, the modern large firm, particularly the large MNE, is not an island set within an ocean of unconscious cooperation – except in so far that it is set apart from (that is, can be identified as being different from) other firms (islands). Between the islands are a series of causeways which are linked to each other by mutual self-interest; these causeways help forge conscious, rather than unconscious, cooperation.

The Robertson analogy is deficient in another respect, in that it assumes that the size of firms (islands) is constant and independent of each other. Perhaps a more apt parallel might be drawn from molecular biology. Firms, like organisms, though separate entities, are inextricably linked with each other and, according to the nature and strength of the
link, affect each other’s form and structure. In addition, the way in which each organism is constructed and sustained will affect its characteristics and functions, as well as its willingness and ability to interact with, and impact on, other organisms. Finally, since organisms are constantly changing, as is their interaction with other living entities, they can only be fully understood by examining each within an evolutionary and systemic context.

Finally, we would note that as the boundaries of a firm’s activities become increasingly difficult to draw, the architecture of contestable markets, as traditionally perceived, will require redefining. Indeed, the main emphasis of competition is likely to switch from the kind of product portfolio a firm may offer its customers, to its ability to manage and coordinate complementary inputs – especially those of diverse technologies and human capabilities – to produce a group of quite disparate products. At the same time, it remains the case that any cooperative relationship between firms has the potential to involve some (potentially adverse) collusionary aspects as well.\textsuperscript{1017} It is thus not really a question of whether close relationships might become collusionary, but whether the efficiency gains derived from better information and access to complementary resources outweigh any collusionary strategies that such a relationship might engender.

\subsection{21.3.4 The Role of Government}

The final element likely to determine the future course of MNE activity concerns the role of governments. We have already argued that national administrations have come to accept the fact that the economic prosperity of their constituents is as much determined by what is happening in the world economy, as by what is transpiring within their boundaries; and that it is in the interests of the leading industrial nations, at least, to coordinate their macroeconomic and organisational policies in a way that minimises disturbances, instabilities and structural rigidities in the world economy. Yet, this collaborative stance is not inconsistent with the actions which national governments might take to ensure that they can maintain and advance the competitiveness of their indigenous resources and capabilities.

However, the principle of comparative advantage, which was enunciated on the assumption that the factor endowments of nations complement, rather than compete with, each other, may require some reassessment in a world in which cross-border failure and the increasing mobility of critical resources and capabilities are the norm rather than the exception, and where knowledge and entrepreneurship, organisational systems, institutional structures and country-specific cultural values, are the critical determinants of the structure of a nation’s competitive advantages.

In early 2007, the global economy is very much ruled by market-based economies. However, between the political right and the left, there is an ongoing debate on the merits of the market as a mechanism for delivering economic restructuring and growth, and how best to address the questions of redistribution that market-based economic growth brings to the fore.\textsuperscript{1018} In this process of revaluation, the legitimacy of some of the supranational institutions of the global economy, as well as that of MNEs themselves, has been called into question. At the same time, increasing attention has been paid to the growing income gap between the wealthiest and the poorest countries in the world, and to the role of business–government and business–civil society partnerships in addressing issues of development and social equity.
In this context, we think that there are three issues worth stressing. The first concerns the role of governments in helping to create and sustain the institutions that are conducive to advancing economic and social welfare; the second relates to their strategies in promoting their nation’s competitiveness relative to that of other nations; and the third relates to a number of global problems that might require the creation of new supranational institutions.

The importance of institutions

As this volume has frequently emphasised, in most areas of economic activity both natural resources and labour – particularly unskilled or semi-skilled labour – are accounting for a decreasing proportion of the value-added activity. Increasingly significant are the costs and availability of created capabilities and competences, the transport, communications and information-facilitating infrastructure without which these assets could not be efficiently used, and the role of governments as fashioners of a supportive economic ideology and an effective institutional regime.

While all of these last variables affect the revenue and production costs of firms, they have a much more profound influence on their intra- and inter-firm transactional costs and benefits. These transaction costs are in no way reduced by the liberalisation of markets. This is because much of the kind of cross-border market failure which MNE activity internalises is not a result of government-imposed distortions, but that which stems from the inability of the market system to optimise the creation and allocation of resources under conditions of uncertainty, and where the impact of the decisions dictated by market forces affect individuals and institutions which are not party (that is, external) to the goods or services being exchanged.

In Chapter 10, we demonstrated that in our contemporary global economy, the attractiveness of a country to foreign investors is being increasingly influenced by the content and quality of its institutional infrastructure. This comprises the formal institutions to enforce the rule of law, promote competition, protect property rights, encourage innovation and entrepreneurship, and facilitate efficient capital markets, as well as the traditions, norms and values that make up the social capital of society, and encourage trust and cooperative behaviour among and between its constituents. A form of government that allows for open political participation and a widespread ownership of productive assets is likely to reinforce all the above components. In addition, governments that have effective means to reduce the impact of ethnic or religious divisions, and provide a reasonable level of income equality and universal access to education, are more likely to offer a climate conducive to long-term investment.

Among the institutions critical to enabling host countries to derive benefits from inbound direct investment that we have already mentioned is its absorptive capacity. Without such institutions, growth by upgrading the productivity of indigenous resources and capabilities becomes difficult, and is unlikely to be boosted by the beneficial effects of FDI. There is also evidence to suggest that countries which practise more-democratic forms of governance are likely to be more robust in their quality of formal institutions, and in sustaining the inevitable shocks that can occur in an open economy.

As countries progress up their development paths, growing uncertainty and technological change will shift the focus from controlling (minimising volatility and uncertainty) in the physical environment, to attempts at controlling the human environment. As a result
of the growing complexity of exchange, there are likely to be pressures on the mindsets and belief systems of individuals, which can either inhibit or promote the evolution of an appropriate institutional structure for the sequential stages of development. It is at this point that differences in the effectiveness of institutions, entrepreneurship and adaptive efficiency, both at a corporate and a national level, are likely to generate divergent paths of economic growth. The increasing number and complexity of transactions that are necessary for the scope of wealth-creating activity to be expanded, and that results from a more complex division of labour, introduces uncertainties which require new forms of institutions to mitigate them.

We have indicated that such institutions are of two basic kinds: formal institutions such as laws, regulations and contracts, and informal institutions such as values and belief systems. Primary among these are the formal institutions that protect private property and provide for the enforcement of contracts. However, to minimise the costs of transacting, the presence of supportive informal institutions, including trust, forbearance and reciprocity, is required, since this reduces the likelihood of conflict and contract renegotiation in the event of unforeseen contingencies. As countries move along their development paths, institutions that not only protect the parties to a contract, but also safeguard society at large, are also likely to play a more critical role. Such institutions include many forms of social regulation, including those dealing with the hiring and firing of employees, or environmental and health protection measures, such as caps on carbon emissions or food-safety regulations.

With the broadening of the goals that national governments are called upon to pursue as development proceeds, the ability of individuals and organisations to solve collective action problems, and the social capital required from them to do so, gains in importance. Among the factors contributing to the formation of social capital discussed in Chapter 10 are a variety of different forms of civic engagement and the presence of generalised trust, which itself is likely to be influenced by the prevailing extent of social and economic equality and lack of discrimination. Such features tend to be more prevalent in countries with democratic forms of government, although by itself, democracy is no guarantee of the accumulation or upgrading of social capital. However, in general, in countries with more abundant social capital, government policies are more likely to be consistent, and the formal institutions transparent and credible, which makes them desirable locations for economic activity (Rodrik et al., 2002). In the absence of such conditions, many forms of bad governance, such as corruption and policy reversals, abound, making it difficult for such countries to sustain socially acceptable economic growth.

As the primary actors engaged in shaping the global economy, MNEs respond to the institutional signals flagged by host countries. With the exception of the natural resource-exploiting sectors, even in the poorest parts of the world it is clear that MNE activity is overwhelmingly concentrated in countries with good governance, leaving those plagued by inequality and unrest without the benefits of such investment (UNECA, 2006). At the macro level, it is also clear that being able to attract MNE activity is no guarantee of economic growth. The countries that seem to benefit the most are again those that have been able to upgrade their institutions, particularly by investing in education and technological capability (Glaeser et al., 2004). These are also countries that have successfully adapted their institutions to the demands of the global marketplace, and to use inward (and outward) MNE activity as a tool in the restructuring process (Ozawa, 2003, 2005).
However, even in these cases, increased investment in tertiary education, and the prospect of lifelong learning after graduation, is needed to ensure that people are able to respond to, and benefit from, the challenges of the global economy, wherever they live. Appropriate and robust host country institutions not only enable the indigenous labour force to attain the training and skills demanded by a global economy, but they also help to ensure that the restructuring of the quality and use of human resources that is inevitable as a country moves up its development path, occurs with the least transaction costs and disruption to the lives of all of its citizens.

Governments as strategic oligopolists
In addition to their role as institution builders, national governments are also increasingly taking (or contemplating taking) more proactive strategies to protect and advance the competitiveness of their resources and capabilities. Increasingly, too, governments are beginning to view their role as harvesters of at least part of the rent generated by global economic activity of firms, and as protectors of their own enterprises from unacceptable economic strategies pursued by other governments. In a very real sense, national administrations are assuming the role of strategic oligopolists in a world economy dominated by the activities of large integrated MNEs. Sometimes, this role is played out at a micro-organisational level (for example, in strategic tax, trade, technology and FDI policy) and sometimes at a systemic or macro-organisational level.

Nonetheless, as yet, the explicit acceptance by governments of this function and its implications for the wide range of economic and social policies has so far been limited to a relatively small group of mainly Asian countries. In the main, many Western governments still confine their macro- and microeconomic actions to offering investment grants, subsidies or fiscal incentives to selective firms, industries or regions; to providing information about foreign market opportunities; to financing or subsidising some kinds of R&D and training programmes; and to participating in international fora (for example, the WTO, the G-8 meetings) to ensure that the international playing field for trade and foreign investment is kept as level as possible. Sometimes, too, Western governments take direct retaliatory measures against foreign firms that are perceived to operate against their national interests, for example, by means of anti-dumping legislation against exporters, or the imposition of performance requirements (for example, TRIMs) on inward investors. Although these – and many other measures – may add up to an impressive package of interventionism, more often than not the strategies are piecemeal and uncoordinated, and are intended to achieve very specific goals other than that of advancing national competitiveness.

Perhaps the most dramatic evidence of a systemic approach of a large country to competitiveness and international business is that practised by the Japanese government. Throughout the last 40 years, the Japanese government, by a variety of means, has actively and consciously influenced the level, direction and location of economic activity. In so doing, it has not attempted to replace the market, but to work with it to achieve an efficient and sustainable structure of innovatory and productive activity following a strategy of ‘collaborative symbiosis’ between government and industry (Ozawa, 1991). In the early post-war period, and up to the mid-1960s, government intervention was direct and all-pervasive. In subsequent years, it became much more indirect and selective. Yet even today, it is still underpinned by an integrated macro-organisational strategy and a complementary
set of institutions, geared to a continuous upgrading of indigenous technological assets and human skills, and to sustaining and enhancing the competitiveness of Japanese firms in global markets.

For example, in the first stage of its post-war development, Japan concentrated on revitalising its heavy metal and chemicals industries. However, this made enormous demands on various primary products (for example, oil and hard minerals) which Japan could not produce for itself. Hence, outbound investment by Japanese MNEs was directed towards guaranteeing a reliable and inexpensive supply of the necessary raw materials, minerals and energy. Later Japan moved to produce less resource-intensive and more knowledge-intensive goods. To do this, it needed Western technology and the latest management and marketing skills. However, rather than obtaining these assets via inward direct investment – as Germany had done earlier – Japan chose to acquire the necessary product and process technology by way of reverse engineering, licensing and other cooperative arrangements with Western firms, as well as by the training of Japanese scientists, engineers, educators, administrators and managers in the US and Europe.

As Japan restructured its industries, it did not completely surrender its involvement in sectors in which its comparative advantage was declining. Instead, backed by low interest loans and tax breaks from the government, by strong technical and financial assistance from the *sogo shosha*, the banks and by the Japan Overseas Development Corporation, and by one of the earliest overseas investment guarantee programmes, Japanese firms were urged to transfer their resource- and labour-intensive activities to developing countries. In so doing, they practised what Ozawa has called a ‘hand my clothes down’ strategy.

In the 1980s, the focus of Japanese investment shifted to Europe and the US. This again was a deliberate strategy on the part of the Japanese MNEs, though it was spurred on by a bout of Western protectionism and a rising trade surplus with Japan’s major competitors. The more comprehensive Japan’s development strategy became, the more it was prepared to offer a helping hand to its own firms and to developing countries to promote that strategy. It also fostered outward FDI in developing countries, either as procurement bases for the labour-intensive manufacturing products, or as points of entry into European and US markets which wished to reduce their imports from Japan.

As is well known, by the early 1990s, the Japanese economic ‘miracle’ came to an end with the collapse of a speculative real estate market, which resulted in a decade-long series of recessions and stagnating growth. This led to extensive domestic restructuring, and raised questions about the appropriateness of the existing institutional structure, including a lack of transparency and aspects of crony capitalism (Ozawa, 2003). However, having emerged from the recession, in the mid-2000s, Japan was taking measures to attract more inward investment, including the introduction of legislation to allow for M&A activity, long thought to be alien to the Japanese market. What, however, is particularly interesting for our purposes, is that at this stage of its development it would appear that Japan is also actively seeking to emulate some of the institutional practices of foreign countries – and particularly the US – and that the transfer mechanism for so doing is inward FDI (Ozawa, 2005).

The Japanese case is also interesting, because it has some parallels with the most dynamic economy of the early 2000s, namely, China. However, whereas the early post-war growth of Japan was fuelled by outward investment, that of China between 1979 and
2005 was mainly driven by inward investment. Today the Chinese government is actively encouraging outward investment, and particularly that of resource- or asset-seeking M&As by its firms. These differences aside, however, both countries have amassed large surpluses on the current account, which have become politically sensitive, and neither ‘miracle’ would have come about, or come about so quickly, had Western industrial nations not been prepared to allow Japanese and Chinese producers (largely) unrestricted access to their markets, natural resources, technology and educational facilities.

Supranational problems and solutions
Finally, we might mention some major challenges to sustainable growth in the global economy that are likely to require extensive international cooperation, and almost certainly the reconfiguration of most of the major supranational institutions. These are issues related to global financial imbalances, poverty and climate change, and a range of other problems influenced by one or more of these factors, such as the HIV/AIDS epidemic, water shortages and terrorism. As regards the growing global imbalances, however much MNEs may or may not be instrumental in the accumulation and geographical profile of such imbalances, they cannot in any material way be held accountable for finding a solution. One almost inevitable consequence of globalisation, and its associated unpredictable and far-reaching technological, environmental and social changes, is that it has resulted in greater economic and financial instability in the international economy. Open economies are vulnerable to the influence of such instabilities generated by other markets, while international transactions involving investment and trade act as conduits that transmit the shocks from one economy to another. If such shocks are small in relation to the size of the domestic economy, and if that economy enjoys a set of robust economic and financial institutions, the costs of openness to global events are likely to be more than offset by the gains (Gray and Dilyard, 2005).

However, if and when these conditions are not met, financial integration and the removal of restrictions on capital mobility can become a major source of instability, as seen in the financial crises in Russia, Latin America and East Asia in the mid- and late 1990s. To be successful, any liberalised trade and investment regime must rely upon the efficiency and strength of the financial institutions of the global economy, and their ability to withstand unforeseen strains. In recent years, growing global imbalances, including, but not limited to, the size of the US trade deficit, the position of the US dollar in the global economy, and the increasing international indebtedness of the US, have raised concerns about the prospect of a slowdown, or even a crash landing, of the global economy. The solution in this case has to be found in closer coordination among the leading economies, including emerging economies such as China.

On the issue of poverty, at least some progress has been made towards the attainment of the Millennium Development Goals. According to Chen and Ravallion (2007), the percentage of people who are absolutely poor declined in the developing world over the 1981–2004 period. However, there has only been mixed success in reducing the total number of the poor, with countries outside of China experiencing little or no sustained progress.

To address this paramount problem of our time, some scholars, such as Lodge and Wilson (2006), have argued for the establishment of a new supranational agency through
which MNEs, national governments and other supranational entities might work together
to alleviate poverty, and also enhance each other’s economic and social legitimacy. In pursuance of these objectives, the authors suggest the establishment of a new non-profit organisation – the World Development Corporation – which would in their words ‘harness the skills, capabilities and resources of leading global corporations to reduce poverty and improve living standards in developing countries’ (p. 157). The corporation would be organised and managed by representatives of the leading MNEs under the auspices of the UN. In its identification and facilitation of commercially viable projects, it would work closely with other international development agencies and civil society organisations.

As we discussed in Chapter 18, other scholars have suggested that by focusing on the markets at the ‘bottom of the pyramid’, MNEs could play an active role in alleviating poverty by improving the buying power of the poor. At the same time, others have argued, rather persuasively, that engaging the poor as producers rather than as consumers is likely to prove a more fruitful long-term strategy (Karnani, 2007).

We believe that the principal responsibility of corporations is to engage in value-adding activities and the transactions associated with them in a way that best satisfies the objectives of the society of which they are part. As we have already indicated, these objectives may extend well beyond the profitable creation of material wealth, and include a range of desirable social goals such as environmental protection or poverty reduction. On the other hand, if there is great demand for cheap consumption goods, and little real demand for social performance, MNE activity is likely to reflect this balance as well. Furthermore, even in cases where MNEs may behave in a socially responsible way, it is not their primary responsibility to deal with such issues as environmental protection, security, labour standards or human rights. In recent years, one might go as far as to say that too many efforts have focused on voluntary initiatives and the ability of the market to deliver solutions, while political efforts have failed. The evidence to date suggests that the ability of MNEs to address the major social issues of the day is limited, and that such efforts are critically dependent on the existence and quality of extra-market institutions.

For example, MNEs can and do transfer advanced and cleaner industrial technologies to developing countries. However, even with improved technologies, increasing industrial production and economic growth will almost inevitably result in higher absolute levels of pollution. Furthermore, environmental quality is at least as much an issue about how to deal with waste, water and air pollution from local sources (including local firms), and pollution arising from transportation, as it is to do with industrial pollution caused by MNEs. In developing countries, issues related to subsistence farming, illegal logging, and the soot from wood-burning stoves and land clearing contribute to environmental and health problems. These problems are the direct consequence of poverty and in some cases, of bad governance, and they are not likely to be alleviated by the presence of MNEs.

The use of child labour, excessive working hours, and a lack of sufficient attention to health and safety standards, are all brought about by poverty and a lack of the kinds of substantive freedoms described by Sen (1999). While many MNEs in the sporting goods, textile and furniture sectors have instituted benchmarks of best practice in their foreign affiliates, most of their suppliers fall outside of their ownership influence, and even the leading MNEs acknowledge their inability to effectively monitor their entire supply chains. Again, public–private partnerships with local governments offer a promising
way to improve standards, but this presupposes that local governments already have policies in place, and are able to tackle the problems and their underlying causes.

In Chapter 19, we examined the use of the US Alien Tort Claims Act to bring prosecutions for violations of human rights by MNEs. Although one of the few available means, the ATCA is probably not the best means to try to set the limits of acceptable conduct in the global economy. We agree with Kobrin (2005), that as soon as a firm’s responsibility extends beyond that to its shareholders, defining its wider boundaries cannot be left to the firms themselves, but is the province of society at large. The guidelines published by the UN and the OECD go some way towards articulating the content and extent of that responsibility.

Indeed, many of the challenges of the 21st century require a supranational approach to find solutions. In helping the international community to achieve these goals, MNEs may, and often do, play a positive and constructive role, partly by influencing the geopolitical alignments between nations and regions, and partly by transferring best-practice institutional norms and organisational capabilities, which may help reduce psychic distance and overcome international market failure. Viewed in this light, an international facilitating framework which harmonises key aspects of the conduct of MNEs, as well as their national treatment, could help both to lessen friction and conflict between nations, and to encourage beneficial and sustainable economic growth.

Two decades ago scholars were forecasting an era of increasing supranational institutional controls on the behaviour of MNEs (Robinson, 1983). For the most part, these have not materialised. This is mainly because of the shift in attitudes of both home and host countries towards their respective roles in the emerging global economy, and of how international direct investment may affect these roles.

This volume has argued that systemic market failure – particularly cross-border market failure – cannot always be fully counteracted, or compensated for, by the actions of national administrations because the uncertainties, externalities, and scale and scope of economies endemic in the activities of hierarchies are no respecters of national boundaries. In such cases, depending on the costs and benefits involved to the participating countries, it may be appropriate for some kind of collaborative action to be pursued by them – be they host or home, or both – towards MNE activity. Such forms of institutional partnership between countries might vary from very informal exchanges of information and views about MNE-related matters, to legally binding agreements and the abrogation of the sovereignty of nation states in their acceptance of a common set of rules, regulations and policies towards, or as a consequence of, MNE activity. In between these extremes there are a variety of ‘soft’ institutional forms (for example, guidelines and codes), some of which are industry or country specific, while others are of a more general nature.

The market for carbon credits presents an interesting case study of some of the difficulties attached to the creation and operation of new supranational institutions. In addition to the problems arising from the initial and unduly lenient allocation of the ETS permits, a recent investigation by the Financial Times uncovered substantial irregularities in the carbon market. These included the selling of credits that had not yielded any emissions reductions, and those being issued for activities that were not ‘additional’ in the sense intended, because of inadequate or inappropriate systems of verification. However, the above examples should not be taken as a censure of supranational solutions,
but rather as a representation of the fact that institutional evolution is a gradual, and often experimental, process which might yield both successes and failures. Better and more effective institutions will need to be developed, but the agreement on the Kyoto protocol has been instrumental in raising awareness, and in building a consensus around the need to tackle the issue of climate change.

21.4 CHALLENGES FOR SCHOLARSHIP IN THE 21ST CENTURY

In Chapter 5, we argued that since MNEs are not simply neutral and stateless profit-maximising entities, it would be fruitful for future scholarship to clearly and explicitly separate the institutional effects from other influences on the activities and strategies of MNEs. This is partly to do with an increasing imperative to accommodate the demands of extra-market actors, and the wider interests of shareholders, but it is not limited to the issues and concerns posed by them. Indeed, an institutional view makes no presumptions about whether the macro or micro institutions that develop are beneficial or not, or whether new institutions will develop at all (North, 2005).

Our contention is that formal institutions cannot be studied apart from the motivations and belief systems that underlie them. Static comparisons of institutional forms have ignored the fact that functionally equivalent institutions can take on many different configurations, and it is the underlying informal institutions that are likely to determine the sustainable outcomes in the long run. We have also argued that in a dynamic, complex and volatile global economy, the role of both firm- and location-specific institutions in reducing the transaction costs of cross-border value-added and exchange activities is becoming more significant. Consequently, the cross-border activities of firms deserve to be studied, not just in terms of the different product–market combinations they bring under one system of governance, but with respect to the informal institutions they embody.

We recognise that this introduces not only a vast new area of unexplored territory, but a territory that is moving further and further away from the area within which economists and business analysts feel most comfortable, namely, analysing the structures of firms, markets and national economies, and assessing their performance on efficiency-based criteria. The question we wish to explore in this final section is whether such an expansion of the IB domain is desirable, or even allowable, according to the established norms of the field of study.

Of course, debates and circumspection including concerns about our collective scholarly pursuits ‘running out of steam’, are, in many ways, par for the course, and it would be relatively easy to dismiss them as being perennial. It is also true that the lens through which one sees one’s own work often shows it to be insightful and relevant, while that cast on the work of others is more likely to reveal it as shallow and trivial. Recognising all this, an exercise of this type provides a unique opportunity to gain an overview of the field, and it is without any sense of satisfaction that one is forced to admit that the impression is not entirely favourable. Indeed, one might go so far as to lament a considerable waste of effort by talented and dedicated people, whose energies could perhaps have been directed to worthier causes.
It will not come as a surprise to anyone who has read this volume that to us, this appears to be an institutional problem, involving both motivation and incentives. Of course, we are not the first to observe that in the course of reviewing a great deal of scholarly literature, one cannot help but feel that its contribution to our understanding of the dynamics of the global economy is not as great as one might have wished. The reasons for this have been articulated on a number of occasions. Basically, they have to do with two things: motivation (the purpose of scholarship) and incentives (what gets rewarded).

In our view, one of the critical objectives of academic scholarship is to achieve an understanding of the phenomenon we are trying to study. To achieve such an understanding, the role of the scholar is not only to conduct research, but also to engage in a wider debate about the political and social significance of what is being studied. For most scholars, we would surmise that the purpose of his or her research is not simply to generate journal articles, but to generate knowledge that has an impact, possibly on multiple levels. The first level should rightfully be the impact on our colleagues and academia in general. This impact may arise from an insightful theoretical contribution, from pathbreaking empirical work, or from a methodological contribution. Journal rankings and impact scores go at least some way towards providing a measure of this kind of impact, although like any measurement tool, they have their limitations. However, the second kind of impact, without which we think the first is of questionable value, is the broader impact that the work has on informing managers of MNEs and public decision makers about our evolving understanding of the phenomenon at hand. This requires that scholars should be willing and able to discuss the meaning, relevance and implications of their research efforts, and to place them in the context of those of their colleagues.

At the risk of oversimplification, and borrowing from Boddewyn and Iyer (1999), the first level of impact is favoured by scholars in the US, and has gained ground in many parts of Europe as well. In general, US academics are more likely to see themselves as professionals – that is, as experts possessed of a neutral body of knowledge, reduced mainly to its technical dimensions. By contrast, scholars in the European tradition are likely to assign more value to the latter kind of impact, and to see the role of a scholar as that of an intellectual, including some form of political or social engagement.

The second issue of incentives seems to be connected to the growth of IB as a field of study over the past decade and a half. This, in itself, is a welcome development, and indeed, the wealth of studies that we were able to draw on when putting together this volume is very impressive. At the same time, publications, particularly those in the leading journals, have become almost exclusively focused on reporting empirical results instead of regularly offering reviews of the literature, comparative essays, or other forms of synthesising work. The empirical studies generally draw on a narrow range of literature, and what is missing is probing discussion about what is the purpose of the research, and what the findings actually mean.

Partly we suspect that this reflects the fact that of the different kinds of scholarship, empirical studies are the easiest to review, while conceptual pieces require the availability of reviewers whose scope matches that of the work being considered. Indeed, one cannot help but feel that much of the debate in the academic literature is focused on quasi-scientific abstractions that lend themselves to measurement. This must have some connection to the far greater number of submissions to journals, where empirical submissions
that follow a set structure, and are confined to readily identifiable topics, are easier to review, and therefore easier to steer through the process.

However, it is not necessarily the case that if one pursues a wider and deeper understanding of issues, one necessarily has to sacrifice academic rigour. Some of the well-known work by scholars such as Raymond Vernon or Sumantra Ghoshal, which has had a great deal of impact, does not score very high on narrow definitions of scientific rigour, but does address the complexity and seeks to better understand the issues being examined. If one accepts the non-ergodic nature of the global economy, then the explanatory models derived from the physical and biological sciences need to be complemented by other paradigms and ways of approaching scholarship that are more appropriate to the social sciences.

Such methodologies acknowledge the embeddedness of all social and economic phenomena in an institutional context, the complexity of that context, and its ability to affect the object of our study and vice versa. As social scientists, IB scholars are like the proverbial fish studying aquarium life, and there is no way for the scholar to place him- or herself outside of that system in order to engage in neutral scholarship. Consequently, we need to produce scholarship that reflects a diversity of methodologies and motivations, which includes both rigorous empirical work and thoughtful essays, reviews of the literature, and works that aim to synthesise.

We also believe that the content and range of IB as a field of study puts it in an excellent position to advance such scholarship, and that an explicit incorporation of institutions in their various forms into the discipline could be a moment of triumph. This is because the field embraces the production and exchange activities of firms in situations where institutionally related transaction costs are the highest, and where the human environment is likely to be the most complex and uncertain.

There has been a tendency in the social sciences to try to gain legitimacy by adopting the methodologies of the natural sciences. However, the growth in the prominence of the IB field suggests that we have succeeded in that task, and that it may be time in the words of Ghoshal (2005) to ‘relegitimise pluralism’ (p. 88) and to allow for the ‘scholarship of common sense’ (p. 81) and ‘disciplined imagination’ (p. 81), even if that means losing a degree of the coherence and rigour that comes from only focusing on particular types of scholarship.

The institutions involved in the assessment of scientific work are geared to sorting out good ideas from bad ones. This being the case, it is understandable that the process for doing so tends to be a conservative one. After all, most ideas, including those that involve synthesis and incorporate multiple perspectives, are likely to be either derivative or bad. There is no need to embrace every new idea, but at the same time, restricting scholarship to only dealing with issues that have been stripped of much of their original complexity, while making it easier to sort out the good ideas from the bad, does not amount to rising up to the intellectual challenge posed by social science. Much like the MNEs we study, we have to be willing to risk a few bad ideas in order to get a good one.

In their article, Boddewyn and Iyer (1999) cite Aristotle, who classified different types of explanation by distinguishing among conditions (what makes things possible), motivation (what drives people to make things happen), and precipitating circumstances (what triggers something that was possible and wanted but had not happened so far). While the authors are correct in saying that in the first edition of this volume, we were operating
mainly in the realm of conditions (that is, ownership advantages make it possible for firms to internalise intermediate markets), this volume is more balanced in the sense of also considering the motivations and precipitating circumstances. Much more work can be done, but the first steps have to be taken. The challenges presented by the global economy are too large and multifaceted to be simply reduced to a small number of abstractions.

21.5 CONCLUSIONS

Let us now draw together the threads of this chapter. A review of the dynamics of international production over the past three or more decades suggests a number of characteristics. The first is the movement towards the globalisation of production and markets by the leading MNEs, and a more integrated governance of their operations. Second, we observe a variety of structural changes in both the geographical and industrial composition of MNE activity. Especially noticeable in the 1980s were the emergence of Japan as a major outward investor, the rise of inward investment into the US, the growth in two-way intra-industry investment and the increased role of M&As as a form of entry. In the early 1990s, the opening up of Central and Eastern Europe, the completion of the Single Market in the EU, and regional integration in North America, and to a lesser extent in East Asia and the Pacific, broadened and intensified the role of MNEs and cross-border strategic alliances in the global economy. In the mid-1990s, the emergence of the digital economy and the internet boom, the ‘gold rush’ of investment into China, the beginning of outward investment from some emerging economies and the increase in contractual outsourcing, all helped to shaped the contemporary global economy.

All these events have led, or are likely to lead, to a changing interface between the role of firms in response to a particular configuration of OLI variables, and the policies of national governments in response to their perception of the position of their countries in the world economy; and of how the latter believe their own policies and institutions can – within the framework of a market system – facilitate the competitiveness of their indigenous firms and resources.

The changing political and economic scenario of the 1970s and 1980s led to a considerable acceleration in the proactive strategies of firms and governments. Corporate strategies are now fashioning world economic events as much as they are being fashioned by them. Governments have also become more active in shaping the dynamic restructuring of international production in several ways. At the same time, sharp differences between Asian and Western government strategies towards competitiveness have revealed themselves. In the West, such strategies have been mainly directed at disengaging the government from the marketplace, although in the international arena there has recently been an increasing pressure for selective protectionism. By contrast, in Asia the philosophy evolved has been one largely of symbiosis between governments and the private sector, geared towards promoting a systemic economic strategy to achieve continual upgrading of the productivity of domestic resources, and of the competitive advantage of home country firms in international markets.

The developing interface between governments, MNEs, markets and civil society, and the ways in which MNEs shape or are shaped by that interface, continue to be among the critical questions likely to engage the attention of the IB scholar in the next decade or
more. In particular, governments are now increasingly valuing the presence of MNEs because they realise that to maintain or increase their competitiveness in global markets, they need to foster the unique technological and organisational assets of these firms, including those which arise from their multinationality per se.

Governments are also beginning to acknowledge that markets are not a free good. They have to be created, monitored and nurtured, and this takes both time and resources. Moreover, since, when markets operate well, they do so to the benefit of the community as well as to that of the participants in the markets, governments have a responsibility to see that these net social benefits of markets are maximised. This role of government is as far removed from the laissez-faire role recommended by the 19th-century liberal economists as it is from the interventionist role advised by socialist economists in the 1960s and 1970s.

The chapters in Part III looked in detail at the different kinds of contributions made by MNEs to the host and home countries in which they operate. Such effects include technology transfer (to and from the host country), the provision of employment opportunities and training, the effects on competition and supply conditions, and the linkage or spillover effects on local firms. The sum total of these effects, some of which are likely to be negative, and some positive, reflects the multifaceted contribution made by MNEs to their home and host countries.

The multitude of extra-market actors that can affect the value-added activities of MNEs has grown with the spread of democracy and the availability of better means of communication. The complexities present in the physical environment, and even more importantly in the human environment, provide the context in which MNEs make decisions about the best way in which they can serve their customers, and satisfy the demands of various stakeholder groups. For the IB scholar, the contemporary global economy offers a wealth of possible subjects for research. There are new types of FDI, including so-called ‘born global’ firms, ‘metanationals’, and the emergence of private equity management as a form of MNE ownership. Finally, there are a number of emerging countries entering the global economy as hosts to FDI, but also acting as outward investors, particularly in the case of China, but also India, Brazil and Russia.

However, none of these topics, by themselves, reflects the true complexity of the global environment. Achieving this requires that the intersection of the major issues of economic and social concern, such as persistent poverty in large parts of the world, energy supplies and global warming, security concerns, the impact of an ageing population in the developed countries, and endemic health crises in the developing world, should also become incorporated into our studies. In this volume, we have tried to embrace this complexity, and yet approach it within a framework that we think is parsimonious, but suitable for beginning an exploration of the various issues raised by the contemporary global economy.

The first edition of Multinational Enterprises and the Global Economy concluded by predicting that the 1990s would see a continuation of the growth in foreign investment and world trade, and that an increasing proportion of that trade would be MNE related in some way or another. Even if economists ‘rank second only to astrologers in their predictive powers’ (Rodrik, 2000a:177), this prediction was relatively easy to make. The uncertainties in the contemporary economic environment make future predictions much more difficult, and rising to the challenge posed by the non-ergodicity of the global
economy we believe requires that IB scholarship will need to once again embrace a broader range of methodologies, and to entertain a wider range of research questions than has been the case over the past decade or so. In a networked global economy, MNEs have both the means and the motivation to engage in the development of new cross-border institutions. We believe that, by analysing their successes and failures in this process, it is possible to uncover valuable insights about the varied and diffuse interconnections that make up the global economy, and in so doing help to provide the means for governments to develop more appropriate public policies, and for firms to upgrade their corporate strategies.
Notes

Introduction

1. See also Toyne et al. (2001) and Kotabe and Aulakh (2002) on the practical challenges of conducting and publishing cross-border research.


PART I FACTS, THEORY AND HISTORY

Chapter 1: Definitions and sources of data

3. In this volume, we shall use the terms ‘transnational’ and ‘multinational’ interchangeably. The former terminology was adopted by the United Nations Centre on Transnational Corporations (UNCTC) in 1974, at the request of some Latin American countries who wished to distinguish between companies domiciled in one country of Latin America, which might invest in another, from those originating from outside the region. The latter is the preferred nomenclature of the developed countries, the business community and most academic scholars, and it is the one we shall most frequently use in this volume. Over time, the terminological differences have become increasingly obscure, and today the terms ‘multinational’ and ‘transnational’ are often used interchangeably. However, in connection with the model introduced by Bartlett and Ghoshal (1989), the term ‘transnational’ is generally used to mean an ‘MNE that practises a fully integrated and multidimensional organisational strategy’. The terms ‘enterprise’, ‘firm’, ‘corporation’ and ‘company’ also tend to be used synonymously, although we recognise that each has a particular legal connotation. The term ‘global’ corporation has a more specific meaning, referring to an enterprise that engages in value-added activities in each of the major regions of the world, and which pursues an integrated strategy towards these activities. See, for example, Yip (2003) and Part II of this volume.


5. For a review of this literature, see Sullivan (1994, 1996) and Ramaswamy et al. (1996). Broadly speaking, scholars have tried either to quantify the value of an enterprise’s foreign production (or some proxy for it), or to identify the extent to which its management attitudes, organisational procedures, operational strategies and performance calculations are internationally rather


7. Further details on the TNI are presented in Chapter 2 of this volume.

8. Although while in 1995 71.3\% of the sales of the European MNE were in Europe, the corresponding share for non-European companies was 20.8\%.

9. See also Dunning et al. (2007) for a complementary macro-level view on the regionalisation/globalisation debate.

10. In this volume, we refer to the MNE-related \textit{activities} to embrace such forms of organisation which may be appropriately considered as part of the MNE’s governance system. See also Chapter 5.

11. A single economic activity is defined as an activity that adds value by converting an input or combination of inputs into a single identifiable output. The end product of such an activity may be an intermediate or final good or service. Final goods and services are defined as those that are used for consumption only. Intermediate goods and services are defined as those that are used for further value-added activity. These may include finished goods or services that still require additional production (for example, marketing and distribution) before they are sold to the final consumer.

12. The proposed relocation of its (regional) head office by the oil services company Halliburton from Houston, Texas to Dubai is a recent example (‘Halliburton to move its head office to Dubai’, \textit{Financial Times}, March 11, 2007, www.ft.com).


14. Similarly, the separate transfer of the other assets or intermediate products that make up FDI, for example, technology, managerial capability and marketing rights, may be perceived as a form of portfolio resource transfer. This idea is explored in Dunning and Dilny (1999).


16. Countries that have treated an investment by foreigners within its boundaries (inward investment) or investment by its own individuals or companies outside its boundaries as direct, rather than portfolio, whenever the ownership of ordinary shares or voting power is 10\% or more, include the US, Canada and Australia. By contrast, the normal cut-off percentage for Germany and France used to be 20\%, and for New Zealand 25\%.

17. For further details, see Chapter 2. For example, the top 100 non-financial MNEs accounted for about 10\% of all the foreign assets held by MNEs in 2004.

18. In his pioneering study of the extent and pattern of the foreign activities of MNEs in the 1960s, Raymond Vernon took as his criterion an enterprise that owned manufacturing affiliates in at least six countries.

19. Jack Behrman, in particular, has always been particularly careful to distinguish between discrete and largely self-contained acts of FDI by firms and the pursuit of an integrated and coordinated strategy towards a firm’s global operations. He prefers to limit the expression ‘multinational’ enterprise to these latter groups of enterprises. See, for example, Behrman (1969).

20. The first directory was an extension of an earlier statistical survey co-edited by Dunning and Cantwell (1987).

21. In balance of payments data, investment flows are referred to as ‘transactions’, while investment stock is referred to as a ‘position’.

22. See also Stopford (1982, 1992) and Stopford and Dunning (1983) for earlier data on the activities of the largest multinationals.

23. Since 2006, \textit{World Investment Prospects} has been published jointly with the Columbia Program on International Investment at Columbia University, New York.

24. Thus, for example, the US now undertakes quinquennial benchmark surveys on US direct investment abroad, while the UK collects data on the foreign assets of UK companies and assets of foreign-owned companies in the UK every three years. The different attitude of countries towards publishing data on the activities of multinational firms reflects partly differences in their capability to collect such data, partly the importance they attach to them, and partly their attitudes towards publishing the data. Several developing countries collect quite a lot of data on inward direct investment, but choose not to release it. Other countries, including some developed countries (for example, Switzerland) do not conduct official enquiries on the activities of either domestic- or foreign-based multinationals, and the information we can glean about their activities comes primarily from private enquiries.

25. It should be noted that data such as this is necessary but not sufficient to make such an assessment. For example, the actual employment of
MNEs or their affiliates must be set against the employment that would have been generated in their absence. The methodology of assessing the impact as opposed to the extent and pattern of multinational activity is discussed further in several chapters in Part III.

26. See Lipsey (2001a) on the history of the data collection efforts of the BEA, and other sources of MNE-related data. For a guide to the data on inward investment in the US, see Quijano (1990). For outward investment, see Mataloni (1995).

27. The BEA data are available for download at the industry level, but access to the firm-level data is restricted to researchers working directly under the auspices of the BEA.

28. Examples include the MERIT-CATI database on strategic technology alliances compiled by scholars at the University of Maastricht in the Netherlands, and the commercial databases of Thomson Financial Securities Data (formerly Securities Data Company) and Mergerstat. The investment advisory corporation Translink International also publishes annual reviews of mergers and acquisitions.

29. Lipsey (2007) presents evidence using US data from the BEA benchmark surveys that shows FDI data to be a reasonable proxy for the sources and destination of MNE activity, but a poor approximation of the changes in the industry and country distribution of activity over time. He suggests two reasons for this, one of which is that since intangible assets generate most of the wealth of many MNEs, and since these are allocated inside the firm, their geographical location is difficult to determine. Another reason is that MNEs are increasingly likely to adopt complex holding structures, and use a variety of means to shift their intangible assets across borders, motivated by tax considerations. Chapter 17 will discuss the issue of transfer pricing, and the resulting distortions in the measurement of many kinds of real economic activity, in more detail.

30. Estimates by UNCTAD suggest that round-tripping might account for 25–40% of the inward FDI stock in China, where in addition to Hong Kong, the larger estimate includes investment that is routed through the tax havens of the British Virgin Islands, Bermuda, Panama and the Cayman Islands (UNCTAD, 2004:26).

31. For example, according to the balance of payments data published by the IMF, during the 1994–2005 period, the average annual gap between world exports and imports amounted to 1%, while that between inward and outward flows of FDI amounted to 7%, and that between inward and outward flows of portfolio investment to as much as 22%, with considerable variation from year to year in the last two measures. See Bellak (1998) for a thorough discussion of some of the underlying reasons for such discrepancies.

32. Valuation adjustments, which occur either when FDI stocks are adjusted to reflect exchange rate changes, or when foreign assets recorded at historical value are sold and their value is adjusted to reflect the market price, is another component of the foreign investment stock that does not represent a direct transfer of resources from the home country.

33. See also Miranti and Gray (1990) for an argument on the differential impact of a change in exchange rates on valuation adjustments depending on its cause (that is, differential rates of inflation or changes in the terms of trade).

34. See also Eisner and Pieper (1990) for older estimates. The current cost method employed by the BEA uses the current cost of replacement for the affiliates’ investment in plant and equipment, general price indices to revalue land assets, and replacement costs for inventories (Nguyen, 2006).

35. For an analysis of differences in accounting and reporting conventions between countries, see Nobes (1999).

36. The results of the study were published in an IMF/OECD (2003) joint report.

37. Policies of investment attraction and retention are discussed further in Chapter 19.

38. This was the case for example in 1992–97 in Argentina, China, Hungary, Indonesia, Mexico, the Philippines, Singapore, Thailand and Uruguay, while in Brazil, Chile and South Korea, direct investment was actually more volatile than portfolio investment flows.

39. The Mexican (and Argentinian) currency crisis took place in 1994–95. The Asian crisis started in Thailand in 1997 and spread to Malaysia, Indonesia and the Philippines, and a bit later on to Hong Kong, South Korea and Indonesia. In 1998, it was the turn of the Russian and Ukrainian crises, and in 1999 a currency crisis erupted in Brazil (and Argentina). The internet bubble began to deflate in the first half of 2000, and the terrorist attacks against the US in 2001, followed by the war in Iraq, further undermined investor confidence in all the major markets of the world.

Chapter 2: The extent and pattern of foreign investment

40. The first compendium of statistics on international investment and production was compiled by John Dunning and John Cantwell for the Geneva-based Institute of Research in Multinationals (IRM), and published in 1987. With the demise of the IRM, UNCTAD took over the responsibilities for the production of a
much more ambitious directory under the initial guidance of the same authors.

41. As a percentage of GDP, the combined outward and inward FDI stock rose from 12.5% in 1980 to 17.9% in 1990 to 38.9% in 2000 and 43.9% in 2002 (UNCTAD, 2003).


43. Gross output equals the value of output produced; net output, or value added, equals gross output less purchases from other firms. Net output is the value of the firm’s contribution to economic activity and is available for distribution to the factors of production responsible for that output and to governments (for example, through direct taxes).

44. This estimate is derived from (and cross-checked with) a variety of sources, including that contained in Stopford (1982, 1992) and Dunning and Cantwell (1987), the 1982 and 1989 Benchmark Surveys on US direct investment abroad, and data on the value added of foreign affiliates of MNEs compiled by several leading host countries.

45. Derived from the above data and that contained in Dunning and Pearce (1985).

46. Derived from data on cross-border royalties and fees between non-affiliated companies published by the US, German and UK governments. See also Dunning and Cantwell (1987: Table A11).

47. For example, if one assumes that royalties and fees represented 10% of value added of the companies paying them, and adds this figure to the value added generated by multinational enterprise, the 25–30% of GDP would rise to 30–35%.

48. For the most part, until the late 1980s the former group of activities was limited to some joint venture activity by Western European and US MNEs in Yugoslavia, Hungary and Poland (for further details, see McMillan, 1987).

49. Especially by developing country MNEs, for example, Chinese FDI in oil exploration and mineral extraction in Africa (UNCTAD, 2007).

50. For example, according to BEA data, during the 1982–2001 period, US MNEs reinvested on average 46% of the income earned by their affiliates abroad.

51. The unusually high repatriation of profits by US MNEs in 2005, is due to specific provisions of the American Jobs Creation Act of 2004, which allowed US MNEs to repatriate earnings from foreign affiliates in either 2004 or 2005 at a reduced tax rate, provided that such money was reinvested in business operations in the US.

52. There is no single definition of what constitutes a developing country. The tables presented in this chapter follow the reclassification of the countries of Central and Eastern Europe introduced by UNCTAD in 2005. In this classification, the EU accession countries, with the exception of Bulgaria and Romania, are included as developed countries in the EU-25, while the remaining countries are classified in South-East Europe and the Commonwealth of Independent States (CIS). Developing countries include both NICs (newly industrialising countries), often referred to as emerging economies, as well as those classified as LDCs (least developed countries), which are characterised by low income (GDP per capita), weak human resources and a low level of economic diversification.


54. Past examples include the purchase in 1988, by the Indonesian MNE Mantrust, of ‘Chicken of the Sea’ in the US, and in 1989, that by the Thai company Unicord of ‘Bumble Bee’, the third largest canning firm in the US.

55. While outward FDI from the new EU member states and South-East Europe/CIS is beginning to grow, it is dominated by the outward investment of firms in the primary sector, particularly from Russia.

56. The characteristics of the new generation of MNEs from developing countries have been examined by, for example, van Hoesel (1999) and Kumar (2007).


58. However, due to their integrated nature, the revenues earned by these companies from the sales of gasoline, diesel and various petrochemicals, are substantially higher than those of the new Seven Sisters.

59. From the host countries’ point of view, there is some concern that the current resource boom might lead to a renewed ‘resource curse’ due to an appreciating currency and declining manufacturing exports, as well as due to the rent seeking and corruption that has often accompanied natural resource investments in the past (UNCTAD, 2007). In several African countries, the growing exports of oil, metals, wood and cotton, particularly to China, have been more than matched by manufactured imports, leading to growing trade deficits.

60. Some attempted takeovers, particularly by Chinese firms in the US, have also run into political opposition. This is discussed in Chapter 19.


62. In 1958, for example, developing countries were host to 66% of the estimated cumulative stock of FDI.
63. Due to space considerations, there is no table on inward flows of FDI comparable to Table 2.4 on outward flows.
64. Although since 2000, the Caribbean, which is dominated in investment terms by financial centres such as Bermuda, the British Virgin Islands and Cayman Islands, has accounted for about a quarter of the inward investment stock in the region.
65. This trend was broken in 2001 and 2002, however, as the growth in world FDI flows fell below the growth in GDP (UNCTAD, 2003b:3).
66. Bulgaria and Romania joined the EU in 2007.
67. The relationship between changes in the net outward investment positions of countries and changes in relative exchange rate is a complex one. Most certainly, because they affect the comparative profitability of investment in different countries, some kinds of investment respond to (that is, lag) changes in exchange rates. However, others lead or reinforce movements in exchange rates, such as capital exports generated by a low expectation of the future economic opportunities in the home countries. It is also important to distinguish between fluctuations in the short- or medium-term competitiveness of countries, such as the UK and the US, and the long-term consequences of industrialisation and income growth, as in the case of Japan and the NICs.
68. While data on investment flows following the industrial classification used in Tables 2.8 and 2.9 are quite readily available, those on the geographical distribution of stocks of outward and inward investment are more variable in terms of the industry breakdown applied in the data. For this reason, only the totals for the broad categories of activity are shown for our earlier data from the late 1980s, and recent data are unavailable for some sectors.
69. In Table 2.8a data for the pharmaceutical sector is not separately available, but other sources indicate that it has been a significant component of UK FDI abroad.
70. For further details, see Dunning (1988a) and Dunning and Narula (1996a).
71. See Lundan and Jones (2001) for evidence of such clustering among countries of the British Commonwealth.
72. This kind of reasoning is further explored in Chapter 4.
73. A possible explanation for the seemingly low share accounted for by the top 100 MNEs may be due to the fact that the estimates of the total assets, sales and employment of all MNEs presented in Table 2.1 are based on regressions, which may have overestimated the true value.
74. In 2006, the index was expanded to encompass the top 100 MNEs from developing countries.
75. The Global 500 list is published annually by Fortune magazine, and it is also available online.

Chapter 3: The motives for foreign production

76. The term ‘foreign production’ rather than ‘foreign investment’ is used throughout this discussion to emphasise the control aspect of direct investment. Production is taken to encompass both the output of tangible final or intermediate goods as well as services, including investments made in marketing and distribution outlets.
77. In a sense, the government is also a stakeholder in that it receives taxation from any profits earned.
78. II, of course, represents the difference between TR and TC. Clearly, to maximise II over a three-year time period a firm will attempt to earn as much of the (total) revenue in the early part of the period and postpone the incurring of its (total) costs to the latter part of the period.
79. Under perfect competition, it is assumed that in conditions of equilibrium, all factors of production, including entrepreneurial capital, earn only the opportunity cost of their services.
80. The London Times, for example, regularly conducts corporate profiles which include its evaluation of such components as social responsibility, share performance, attitude to employees, innovation, financial record, strength of board and a ‘fat cat’ quotient!
81. The research linking different models of corporate governance to performance is reviewed, for example, in Cohen and Boyd (2000) and Verbeke (2003a).
82. See also Thomsen and Pedersen (1996) for a study of the ownership patterns of the largest firms in six European countries.
83. We use these words interchangeably, although some writers use ‘international’ to embrace both the foreign and domestic activities of firms. We accept, however, that to undertake foreign production there must be a linkage between domestic and foreign operations through the internal trade of intermediate products. We further accept that, in globally integrated MNEs, the prosperity of domestic and foreign operations is closely intertwined.
84. See particularly the work of those scholars who have attempted to explain the geographical distribution of the US foreign direct stake in Europe as, for example, reviewed by Yannopoulos (1990) and UNCTAD. A related approach, relying on differences in post-tax rates of profit, has been used to explain the geographical pattern of FDI within the US and the EU (Altshuler and Grubert, 2001; Gorter and Parikh, 2003).
85. To be more explicit, theories of the firm are concerned with identifying the optimum levels of investment, output or price. To determine these levels, some assumptions must be made about the motivation of firms. Such assumptions are not necessary to explain foreign production or changes in foreign production.

86. See UNCTAD (2004) for a variety of examples related to the outsourcing of business services, including call centres.

87. For example, to overcome import quotas set up by EU countries on Japanese produced goods, some Japanese firms set up or acquired manufacturing facilities in South-East Asia (for example, Singapore and Malaysia) and exported to the EU from there.

88. See, for example, earlier studies by Dunning (1959) and Amey (1964).

89. According to UNCTAD (2003b) the total number of BITs rose from 385 in 1989 to 2,181 in 2002. Since the second half of the 1990s, their number has almost doubled, and they now encompass 176 countries. BITs are most widely used as an instrument for protecting FDI.

90. See Chapter 11 for more details.

91. Upwards of three-quarters in the case of the larger developing countries such as India and China.

92. Including venture capital, but not including hedge funds, which generally have purely financial objectives.

93. For a detailed review of the reasons for cross-border acquisitions, see UNCTAD (2000a).

94. Several years ago, Kopits (1979) attempted to give a breakdown between the first three groups of investment, and came to the conclusion that the proportion of the FDI stake owned by US multinational companies, which can be classified as conglomerate investment, rose from 14.1% in 1962 to 23.3% in 1968.

95. See Table 2.2.

96. According to a UK government report, no less than 40% of the private savings of individuals and corporations in sub-Saharan Africa in the 1990s were held abroad rather than invested in domestic economic development (HMSO, 2000).

97. However, as Japanese MNEs are increasingly undertaking the marketing and distribution function themselves, the trade-facilitating role of the sogo shosha has declined (UNCTAD, 2004:133).

98. See, for example, earlier studies by Dunning and Normen (1983, 1987), Daniels (1986, 1987) and more recent research findings by Enright (2000b), Yue (2000), UNCTAD (2004), and Birkinshaw et al. (2006).

99. For a discussion of the determinants of each, see Dunning and Dilyard (1999).

100. In the latest wave of investment directed to the UK, in 2007 investors from Dubai, Saudi Arabia and Qatar have acquired stakes in such household names as the HSBC bank and the supermarket chain J. Sainsbury (‘Gulf investors stake out UK’s high streets’, Financial Times, May 22, 2007, www.ft.com). See also Chapter 19 for more background on the Dubai Ports case.

101. As first described, for example, by Penrose (1959) and Amey (1964).

102. See also Dunning (1993a).

103. For example, nearly all of the firms in the oil and gas sector in the Top 100 of MNEs from developing countries are state owned (UNCTAD, 2006:137). Indirect state ownership and/or influence in other sectors is also commonplace in, for example, Chinese MNEs.

104. For a further discussion of the role of paradigms and theories in explaining the determinants of MNE activity, see Chapter 4 and Dunning (2000a).

Chapter 4: Theories of foreign direct investment


106. Also referred to as sequential investment (Kogut, 1983).

107. Although various economists from the time of the Mercantilists onwards had something to say about the subject. Their views are set out in Cantwell et al. (1986) and Dunning (1988b:Chapter 3). For some explanations of even earlier activities by MNEs, see Moore and Lewis (1999).

108. It is only very recently that we came to know about the early work of the Danish economist Arne Lund, who published a pathbreaking article on FDI in a Danish journal. His work, which Pedersen and Strandskov (2007) have recently reviewed, contains several ideas which predate IB scholarship in the 1960s and 1970s, and indeed includes certain elements of our own OLI paradigm set out later in this chapter.


110. These include language barriers, lack of knowledge about the local business customs, laws, suppliers and industrial relations, and the possibility of discrimination against foreign firms, of expropriation and of exchange risks.

111. See also some earlier empirical studies by Southard (1931), Barlow (1953) and Dunning (1958).

112. For a critical analysis of Hymer’s contribution to IB theory, and particularly his overemphasis on value capture at the expense of value creation, see Dunning and Pitelis (2008).
Notes

113. As summarised by Hufbauer (1970) and Stern (1975). See also Hirsch (1967).
114. See, for example, Gray and Gray (1981) on multinational banks.
115. See also Yu and Ito (1988).
116. All characteristics of cross-border market failure later identified by the internationalisation economists (see Section 4.3).
117. See Verbeke (2005) for a selection of papers that reflect on Rugman’s original work on risk diversification and internalisation.
118. To the extent that such barriers are rapidly vanishing (even outside of the Triad), the motivation to use multinationals as a proxy for international diversification is disappearing.
119. Tobin’s \( q \) is usually defined as the ratio of the market value of the firm to the replacement cost of its assets, and it is often used as a measure of the intangible assets of a firm.
120. There are, of course, other reasons why cross-border activity might result in higher profitability of MNEs, and these are explored in more detail in Chapter 15. The present discussion is restricted to the risk diversification argument, which treats the MNE as a geographically mixed portfolio of real assets.
121. In distinguishing between the goals of the portfolio capitalist and the direct investor, Kindleberger (1969) gives the capitalisation formula as \( C + Ir \), where \( C \) is the value of the capital asset, \( I \) is the income stream it produces and \( r \) is the return on investment. “The theory asserts that direct investment occurs when the foreign firm can earn a higher \( I \) than the local firm whereas ordinary capital movements reflect a lower \( r \)” (Kindleberger, 1969:24).
122. For example, although the Aliber thesis helps to explain the sharp upward movement of the acquisitions of US companies by UK firms in the late 1970s when the US dollar was undervalued in relation to the pound, it does not explain a similar sharp upward movement in the mid-1980s when the dollar was probably overvalued in relation to the pound.
123. Furthermore, the focus of some of the earlier studies on the Japan–US investment relationship obscures this fact due to the very low levels of FDI into Japan.
124. See Buckley and Casson (1998) on the need for IB scholarship to account for environmental volatility by adopting dynamic models of MNE behaviour.
125. The concept of psychic distance as an impediment to trade and/or FDI was first developed by Beckerman (1956) to explain intra-European trade patterns. It was subsequently taken up by Hornell et al. (1973) Vahlne and Wiedersheim (1973) and Nordstrom (1991) to explain the geographical distribution of the foreign subsidiaries of Swedish firms. For further discussion and refinement of the concept of psychic distance, see O’Grady and Lane (1996) and Dow and Karunaratna (2006).
126. See also Luostarinen (1980) on ‘lateral rigidity’ in response to uncertainty, and Luostarinen and Welch (1990) for another stage-model of internationalisation.
127. See also a 2007 special issue of the Management International Review (MIR) on the work of Edith Penrose.
128. More comprehensive reviews of the Uppsala model can be found in Petersen and Pedersen (1997) and Forsgren (2002).
130. A classification of the different theories of trade and their relevance to FDI theory is set out in Chapter 5 of Dunning (1997a), and is also comprehensively analysed by Gray (1999).
131. See Ietto-Gillies (2000) for a review of how MNEs have been incorporated into the theories of international trade and location.
132. The exception being the work of strategic trade economists. For a useful appraisal of this literature, see Stegemann (1989) and Gray (1999).
133. We are indebted to Masahiko Itaki, a one-time visiting research scholar at the University of Reading, for his observation that the value of an ownership advantage must be expressed in terms of the capitalisation of the income stream generated by such an advantage, which accrues to the owners of that advantage. The greater that income stream (net of payments made to other factor inputs that helped create that advantage or add value to it), the greater the advantage. We also accept that the ability of the owners of the firm to extract the maximum value added from the various factor inputs it utilises, and the way in which it coordinates these factors, will determine the size of its ownership advantage. For a detailed criticism of the eclectic paradigm, see Itaki (1991).
134. For a recent attempt to formalise the predictions of the paradigm, see König (2003).
135. For example, as a condition for entry into a country, an MNE may insist on a host government granting it protection from competitive imports. Alternatively, it may ‘bargain up’ the tax concessions offered or ‘bargain down’ the performance requirements imposed by the host government.
136. Other macroeconomic explanations put forward by trade economists have already been alluded to earlier in this chapter.
137. The limitations of neoclassical international economists to encompass FDI within their frames of reference are explored in some detail in Chapter 5 of Dunning (1997a), and are fully acknowledged by such trade economists as James Markussen (2001).

138. At the same time, Kojima claims that Western economists and business analysts tend to stress those internalising advantages that are market distorting rather than market facilitating. For a riposte to this assertion, see Buckley (1991).

139. For an attempt to embrace dynamic and organisational factors in extending internalisation theory, see an interesting paper by Hill and Kim (1988). For a more general analysis of the dynamics of international production, see Dunning (1993a).

140. For example, in their exploitation of economies of scale, MNEs are in a better position than their uninational counterparts to practise a balanced strategy of national product segmentation and international aggregation of demand, whereas their ability to update and monitor cross-border information and to acquire their inputs from the cheapest source, helps them further build on their learning advantages, and those that arise from the geographical dispersion of plants.

141. Hence the parallel of this evolutionary approach to the Uppsala model of internationalisation.

142. See, for example, the work of Dunning (Dunning, 1996; Dunning and Lundan, 1998), Kuemmerle (1999a) and Makino et al. (2002).

143. For reflections on Caves (1982 [1996]), see Brewer et al. (2003), which is based on a 1998 special issue of the Journal of International Business Studies. For reflections on Buckley and Casson (2002), see the 2003 special issue of the Journal of International Business Studies.

144. This is not to deny the trenchant and useful criticisms of the eclectic paradigm (circa 2001) put forward by several contributors to a volume edited by Cantwell and Narula (2003).

145. Including, for example, relationships between MNEs and governments, MNEs and supranational organisations, and MNEs and civil society.

Chapter 5: The determinants of MNE activity: the OLI paradigm revisited

146. The original articles that have shaped the eclectic paradigm over the past three decades have been published in Dunning (2002d).

147. Including, for example, relationships between MNEs and governments, MNEs and supranational organisations, and MNEs and civil society.


149. Hennart (1993) emphasises the distinction between prices and hierarchies as methods of organisation, and markets and firms as institutions. While we accept his argument, our use of institutions in the Northian sense prevents us from adopting his terminology.

150. For example, due to the difficulty in monitoring the quality of more complex services such as advertising, legal advise or consulting, such firms tend to use owned affiliates as opposed to more standardised services such as fast food and car rentals, where franchising is more common.

151. See, for example, Milgrom and Roberts (1992) for a good description of contractual hazards.

152. See also Cantwell (2000:18) on the limits of internalisation in defining the boundaries of the firm and the importance of O advantages in explaining firm growth. Restricting the definition of the MNE to activities governed by an employment contract in different countries, as Hennart does, results in a much cleaner definition of the firm, but we believe that this definition leaves out many activities resulting from the coordination function of the firm that matter to the assessment of the impact of MNEs.

153. Relevant here is the distinction made by Dunning (2003b) between the exchange and transformation functions of the firm. It is our considered opinion that the principles of internalisation can be applied to both functions – particularly when the dynamics of MNE activity are the focus of interest. See also Rugman and Verbeke (2003) on reconciling the theory of internalisation with the structural complexity of the integrated network MNE.

154. Following Hirschman (1970) we have also characterised alliances as a ‘voice’ strategy, and internalisation as an ‘exit’ strategy (Dunning, 1995).

155. If one takes the transaction cost argument at its broadest, it encompasses not only the internalisation of intermediate product markets, but of any market, including those for labour (intermediate services) and capital. For a contrasting view, see Casson (1994, 1998) who argues in the context of free-standing firms (discussed in Chapter 6) that the transaction cost argument should be restricted to intermediate product markets, where it originated, and not extended to include the internalisation of capital markets as suggested by Hennart (1994a, 1998).

156. While under a licensing arrangement, the MNE receives a payment for the use of its technology that is applied by another firm to produce the final good, in the latter case the contractual original equipment manufacturer (OEM) receives the know-how free of charge, but the product is marketed by the MNE itself.
157. Such resources may embrace both physical and human capital. They may include both tangible and intangible assets, the latter being variously referred to in the literature as capabilities and competences.

158. In addition to the many existing reviews of the resource-based (and dynamic capabilities) literature (Barney, 1991; 2001; Conner, 1991; Peteraf, 1993; Wernerfelt, 1995; Teece et al., 1997; Eisenhardt and Martin, 2000; Peng, 2001), there is a collection of critical writings edited by Foss (1997), which also includes contributions by evolutionary economists.

159. In this case the resources themselves do not actually have to be unique; it is sufficient that value-adding combinations are unique, and able to be shielded from imitation.

160. One exception is the work of Oliver (1997).

161. For an acknowledgement that institutional complexity needs to be embraced by evolutionary economists, see Nelson (2006).

162. See, for example, Nonaka and Takeuchi (1995) for a classic text in the field of knowledge management.

163. Another way to look at the role of social communities in knowledge sharing is to focus on the process of exclusion, and the economics of 'club' membership (Sandler and Tschirhart, 1980; Lundan, 2003a).

164. See also Verbeke (2003b).

165. Some of the organising principles are also likely to be industry rather than firm specific, like the industry recipes described by Spender (1980; Lundan, 2003a).

166. For a critical assessment of how the IB literature has dealt with (regional) geographical issues, and how MNE location questions have been largely absent in the geographical literature, see McCann and Mudambi (2004).

167. See McClintock (1988) for a review of some early institutional contributions in FDI theory.

168. See Boddy (2005) for a review of this literature, particularly in connection with business—government relations.

169. Indeed, Leung et al. (2005) argue that there is a need to build more complex conceptualisations of culture, and to integrate cultural elements as major building blocks in all IB theory. They also argue that this should be done while giving consideration to socio-economic and political variables, due to the dynamic interaction between culture and institutions.

170. For example, Peng (2001) has called for the resource-based view to be better integrated with institutional theory. This point is also echoed in the overview by Ricart et al. (2004) on the present state and future challenges for research on strategy in international business.

171. Although our discussion is focused mainly on the institutional literature in economics and political science, institutional analysis in the management and organisation field is equally lively, as demonstrated by an Academy of Management Review special issue in 1998, a special issue of Organisation Studies in 2001, and a special issue of Organisation Science in 2003.

172. See, for example, Haveman (1993) for a classic study of mimetic isomorphism, that is, of firms imitating the behaviour of other successful firms.

173. These include, at a firm level, organisational capabilities, and at a national level public and private expropriation hazards. Public hazards include inconsistency in policy or regulatory regime, while private expropriation includes hazards such as the unintended leakage of technology to a venture partner.

174. See also Dyer and Singh (1998), and Kale et al. (2000) on relational capital.

175. Other approaches to defining and measuring institutions have been described by, for example, Williamson (2000), Nelson (2002) and Mudambi and Navarra (2002).

176. One exception is the work of Oliver (1991, 1997).

177. Again, there are exceptions, such as the work on the rationale and effectiveness of investment incentives.

178. The moral underpinnings of modern capital—ism were explored by Dunning (2003c).

179. As documented, for example, by Fagerberg and Srholec (2005) and UNIDO (2005).

180. Adam Smith's underlying theory of human nature is articulated in his Theory of Moral Sentiments (1790).

181. Historical examples of inventions that led to non-ergodic change include the advent of marine insurance, and the evolving technologies of warfare. In both cases, subsequent changes to the physical and human environment were profound, but unforeseen at the time of each invention (North, 2005:20).

182. See also Casson and Lundan (1999) for a critique of the top-down approach of comparative institutional studies. Instead of explaining how national-level institutions constrain or enable economic activity, they suggest a bottom-up approach centred on explaining differences in rates of entrepreneurship.

183. Nelson (2002) uses the metaphor of a makeshift road across a swamp. While the road restricts where one can travel on the swamp, focusing on this restriction is to miss the point of the possibilities created by the existence of a road.

184. Elsewhere we refer to these as resource, capability or market (RCM) exploiting advantages (Dunning, 2006c).

185. The transactional (Ot) advantages arising from the economies of common governance are essentially unaffected by the inclusion of the Oi.
186. Noorderhaven and Harzing (2003) define the country-of-origin effect in MNEs as arising from the tacit beliefs and implicit values of key decision makers.

187. See also Hoffman (1997) on the changing attitudes concerning environmental issues in the chemical industry.

188. North (2005) agrees when he asserts that changes in the human environment are much more difficult to predict as they involve non-ergodic uncertainties.

189. Alternatives to a strong corporate culture can be an encompassing total quality orientation, or a focus on shareholder value maximisation. Both make it clear what the corporate objective is, and how uncertainty should be resolved.

190. The narrow focus on financial performance in much of the management literature has also helped to reinforce the importance of a ‘business case’ for CSR, rather than directing attention to investigating the multiple ways in which large firms interact with their environment, whether for good or bad (Margolis and Walsh, 2003). See also Chapter 18.

191. Both Zysman (2004) and Nelson (2005) provide arguments that highlight the importance (and difficulty) of conscious experimentation to achieving growth in an increasingly uncertain environment.

192. See also Ozawa (2003).

193. This is not to suggest that the process of intra-firm transfer is either easy or predictable. See, for example, Jensen and Szulanski (2004).

194. The Public Company Accounting Reform and Investor Protection Act of 2002, known as Sarbanes–Oxley, was enacted in response to numerous accounting scandals, most notably those involving Enron and WorldCom. It requires that corporate officials personally certify that the reported figures fairly represent the financial condition of the firm.

195. See also Ostry (1998) on the emerging challengers to the Western ‘universal’ model of the firm.

196. One could argue, as Nelson (2002) does, that while classical economics was both evolutionary and institutional, neoclassical economics has been neither, and thus the current trend represents a return to old themes.

197. Although our focus in this discussion is mainly on the national level, the co-evolution of firms and industry-level institutions is equally important, and may sometimes be more important than the national institutional structure in shaping (and being shaped by) the behaviour of MNEs. See, for example, Djelic and Quack (2003) for several European case studies on such patterns of evolution.

198. On occasions, for example, of political revolutions, there may be rapid institutional realignment, even though the effects of such a realignment may take some time to work themselves through. The fall of communism is an obvious example.

199. Indeed, there may be a kind of absorptive capacity on the national level that allows for the transfer and implementation of new institutions. See, for example, Rodrik (2000b).

200. See also Phelps (2006) for an examination of the informal institutions impeding economic growth in Europe.

201. A partial exception is the work of Yeung (2002) who focuses on the impact of domestic institutions on entrepreneurship and the internationalisation of firms from Hong Kong and Singapore.

202. See also Peng and Delios (2006) for an extension of these ideas.

Chapter 6: The emergence and maturing of international production: an historical excursion

203. By foreign, we mean outside the physical confines of a particular country. Using this definition, colonies and overseas possessions are treated as foreign territories.

204. All these companies, save the Hudson’s Bay Company, which is still in existence, had been disbanded or wound up by the mid-19th century.

205. Carlos and Nicholas (1988) argue that the basic raison d’être of the early trading companies was to economise on a high number of cross-border transactions. This they did by replacing owner-managers of single product firms with a team of salaried managers organised into MNE hierarchies. By internalising market imperfections across time and space, they helped to reduce transaction costs and exploit the economies of governance of separate, but related, activities. Jones (2000) provides extensive evidence of the transformation from merchants to multinationals by British trading companies in the 19th and 20th centuries.

206. According to Joseph Fuhrmann, as quoted in McKay (1970:339), between 1637 and 1662, Dutch entrepreneurs built 10 iron factories in Russia, while Russian nobles built three and the state one.

207. Further details of early cross-border entrepreneurial ventures are given by Clark (1929), Lewis (1938), Coram (1967) and Wilkins (1988a).

208. The extent of invested capital is always a lower estimate of the true extent of cross-border activity, since other significant forms of financing, such as debt, are ignored.

209. The free-standing firm presents a definitional problem, since it is unclear how much control was exercised from the headquarters in the home country. If little or no control was exercised, the headquarters becomes a financial
arm, and its role approaches portfolio investment. If notable control is exercised, the firm is no longer free-standing. These issues are addressed extensively in Wilkins and Schröter (1998). See also Casson (1994) and Hennart (1994a) for a debate on whether free-standing firms internalise the market for project management skills or the market for capital, or both.

210. However, as Rio Tinto and Consolidated Goldfields were registered in the UK, they could be considered free-standing companies (Wilkins, personal communication).

211. Jones reinterpreted these investment groups as ‘business groups’ that functioned as quasi-venture capitalists who came to control, through a range of equity and non-equity ties, large numbers of separately quoted companies – the so-called free-standing companies. The parallel between these groups and those found today in Asia and Latin America is drawn explicitly in Jones and Khanna (2006).

212. Tomlinson (1989) notes that managing agency houses run by British expatriate businessmen were involved in ‘almost all sections of the organised economy of the Indian continent’ (p. 96) by the late 19th century, and that by 1914 foreign firms exercised a dominant influence over much of the non-traditional marketing processes (p. 97).

213. By the 1880s, continuous processing machinery and plant had been developed for the production of such products as cigarettes, matches, breakfast cereals, flour, soap and a wide variety of canned goods (Chandler and Daems, 1974). See also Wilkins (1976, 1977a, 1977b, 1989).

214. By contrast, Austrian outward (and inward) investment was very low compared to the Swiss, Swedish or Dutch examples, and only took off in the early 1990s with investment to Central and Eastern Europe (Bellak, 1997).

215. For more details, see particularly the History of the Western Electric and NEC (Nippon Electric Company, 1984).

216. In particular, the failure of UK companies to adopt hierarchical organisation systems, to update their management practices or to encourage the recruitment of university trained engineers and business graduates, led to their inability to participate fully in the newer and internationally orientated sectors such as electrical engineering, standardised machinery and vertically integrated branded packaged products (Chandler, 1980, 1990).

217. Archer (1986, 1990) also gives examples of UK companies with unimpressive records of internationalisation, which he puts at the door of poor entrepreneurship. These included Rio Tinto Zinc (prior to 1900), Burmah Oil (prior to 1904) and Bryant and May (prior to 1901).

218. In general, investors regarded the geographical diversification of their factories with some unease. The view of Western Electric (quoted by Wilkins, 1970:51) is fairly typical: ‘This multiplication of factories is an evil imposed by the necessity of working for Governments which refuse to buy outside their own countries’.

219. By 1900, Wavre (1988) reports that there were 46 Swiss-owned cotton manufacturers producing in Italy.

220. One example was the Swedish Vulcan’s decision to establish a match factory in the UK in 1910 to export to Australia where matches of UK origin paid only 50% of the standard import duty.


222. In a study of British MNE investment before 1939, Nicholas (1982) found that 88% of the firms entered into an agency agreement prior to making an investment in a sales branch abroad, and that few British market-seeking MNEs began overseas production without first establishing sales subsidiaries. In another article (Nicholas, 1983:684–5), the author concluded that the propensity of UK firms to set up foreign sales units was greater: ‘the larger were the number of sales, the more complex the product, the greater the idiosyncratic investment in spearhead capital and brand name by the principal, and the greater the appropriate rents from opportunism by agents’.

223. Since no official records of FDI stocks or flows exist in Britain prior to 1963, the data were compiled by charting the entry and exit of every identifiable FDI into British manufacturing, including many SMEs. See also Jones and Bostock (1996), which contains more extensive data and analysis of the patterns of entry and exit into British manufacturing, and the propensity of the affiliates to export and to engage in R&D.

224. Of the 1,007 affiliates in the Bostock and Jones database, 327 were UK firms acquired by foreign investors, and 80 were foreign affiliates in Britain acquired by other foreign investors in the 1850–1962 period.

225. Hagen (1999) identified 61 German units engaged in production in the UK, which is a notable increase from the number arrived at by Bostock and Jones. The methodology in this study is different, however, in that it worked backwards from a list of ‘survivors’ that were sequestrated and sold during the First World War.

226. Even today, MNEs engaging in resource-seeking investments also make investments in infrastructure. The implications of such
investments are explored in more detail in Part III.

227. There are no details of intra-firm trade in this period. However, from company records we do know that in several industries (cocoa, rubber, tropical fruit, petroleum and so on), most of the leading producers were affiliates of MNEs from developed countries.


229. This was not an untypical practice among MNEs investing in poor agricultural areas. Lever did the same in the Belgian Congo in the early 1900s.

230. As described, for example, in Wilkins (1970:168–9).

231. See, for example, Munro (1934) and Bemis (1943).

232. Chapter 9 in Jones (2000) has an extensive discussion on the investments coordinated by the British business groups in minerals, oil and commodities such as rubber, tea and timber.

233. This appeared to be particularly important in the tin industry. Indeed Hennart (1986c) claims that the inability of the Malayan tin companies to obtain the necessary finance for capital development (for example, in dredging techniques) explains the dominance of Western enterprise in that sector.

234. In their article, Harvey and Taylor provide some fascinating glimpses of the costs and benefits of resource-based investment to the host country. In particular, they quote (1987: 187–8) the opinion of one Spanish mining engineer, expressed in 1891, that while foreign investors had provided the Spanish mineral sector with ‘capital, spirit of enterprise and business ability’ the Spanish mineral industries had failed to promote ‘the permanent good of the country’ merely creating ‘a fugitive and ephemeral prosperity’. A more virulent attack on British investors was contained in a Spanish pamphlet issued in Huelva in 1913, which stated that ‘the English burgess has entered this province, and with the cunning of a Carthaginian, the ambition of an American, and the arrogance of the British, threatens to rend it, gouging its flesh, sucking its blood, into slavery’.

235. Indeed, Wilkins gives examples of UK iron and steel manufacturing firms investing or participating in the formation of free-standing US iron mining companies not to access raw materials but to market their UK manufactured products.

236. Oil was discovered in the Dutch East Indies in 1880. A decade later, the forerunner of Royal Dutch Shell was set up in the Netherlands to work these properties. It built a refinery in Sumatra in the Far East. In 1895–96, the English firm M. Samuel & Company, which became Shell Transport and Trading Co Ltd in 1897, was producing oil in Dutch Borneo. In 1894 the Swedish Nobel family invested in Russian oil.

237. Franko (1976:52) reports that 49% (68% if Shell’s operations are excluded) of the extractive operations of all continental firms were located in the continent before 1946. Commercial oil was discovered in Titusville, US, in 1859 and by 1871 US-refined products were exported, mainly to Europe. In the mid-1880s, US oil products met competition in Europe from Russian oil.

238. The evolution of the European and American firms that built the railroads, dams, bridges and canals required by the second industrial revolution, and that were the predecessors of the dominant MNEs in the construction industry today, is provided by Linder (1994).

239. Indeed, the persistence of family-owned firms in many parts of the world suggests that this form of ownership is not incompatible with the management of large firms. For example, a third of Fortune 500 firms are family owned, and in countries such as Portugal and Italy, 70 and 95% of registered firms are family owned (Colli and Rose, 2003). The South Korean chaebols, the overseas Chinese business networks, and the grupos in Latin America are further examples of family ownership or family-like structures. For the (positive) role of family firms in Dutch business history, see Sluyterman and Winkelman (1993) and Jones and Sluyterman (2003).

240. Since free-standing firms typically had no domestic operations of the kind they were seeking to finance abroad, Hennart (1994b) treats the free-standing firm as having internalised the market for capital. Among modern MNEs, diversified conglomerates operate an internal capital market, where coordination at the corporate level results in synergy benefits that have led (successful) conglomerate firms to be valued more highly than their component parts. Venture capital firms present another modern form of capital market internalisation, where the uncertainty concerning the success of entrepreneurial ventures encourages investors to become active owners. Both conglomerate parents and venture capital firms aim to gain an information advantage through the act of ownership. It would appear that for the free-standing firms, the information advantage was based on knowledge about the entrepreneur, obtained through personal connections, and reinforced by the social context.

241. The definition of FDI – in so far as 19th-century investment is concerned – is still a matter of dispute among economists. But
current thinking, as articulated especially by Stone (1977), Svedberg (1978, 1981), Wilkins and Schröter (1998) and the authors of industry and country studies, suggests that quite a large part of investment originally classified as portfolio by the statisticians of the day was, in fact, managed or controlled by non-residents, whose contemporary estimates of direct investment often exclude reinvested profits.

242. Using data derived from business histories and company archives, Nicholas (1982) has set out details on the industrial structure of 119 UK MNEs which made an FDI between 1870 and 1930, and has compared this with that of a sample of pre-1914 US MNEs and of the largest 50 UK firms in 1919 and 1930. His findings about the structure of large UK and US firms at that time closely correspond to those of earlier writers, such as Chandler (1977). However, his study also reveals a considerable similarity between the sectors that dominated the UK corporate economy and those that dominated UK direct investment.

243. Although it is possible that the share of investments in electric light and power was more substantial. See Hausman et al. (2007).

244. Particularly in textiles and branded consumer goods in which the UK had a previous comparative trading advantage.

245. See Wilkins (1989).

246. This is borne out by recent developments, as cross-border venture capital and private equity investments are once again giving rise to a hybrid form of investment, which is neither purely portfolio investment, nor traditional FDI (UNCTAD, 2006). See also Hausman et al. (2007).

247. German investments are also underrepresented in the official statistics in this period, since they were often routed through the Netherlands, Switzerland or Sweden to avoid adverse attention and, ultimately, expropriation (Wilkins, 2004:371). Although such 'cloaking' strategies have been traditionally seen as evidence of the collusion of German MNEs with the Nazi war machine, new research suggests that cloaking may have been driven more by business interests and long-term strategy, than by the Nazi regime, which appears to have been very inconsistent and fleeting in its support of such efforts abroad (Kobrak & Wüstenhagen, 2006).

248. Wilkins (1970) quotes the case of the Diamond Match Company which once had a world leadership in matchmaking technology. By the 1920s it had lost much of its technological supremacy to the Swedish Match Company.

249. US foreign subsidiaries were also the first to introduce new methods of instrumentation. Jones (1988) quotes the case of H.J. Heinz installing automatic controls in their London factory in 1929 before British food canners had introduced any form of control.

250. As a general observation, business historians are increasingly providing the IB scholar with illustrations and case studies of the O advantages possessed by the early MNEs, and how these have impinged upon the economies of the nation states in which they operate. For a review of some of the more important contributions in this area, see two edited volumes by Wilkins (1991) and Jones (1993b), and more recently, Wilkins (2001) and Jones (2004).

251. In particular, the recurrent fear of naval blockades constituted a powerful incentive to countries to reduce their dependence on some imported raw materials (Franko, 1976:39). In other cases, for example, oil, by keeping the price high, foreign cartels encouraged the users to seek substitutest (in this case electricity).

252. The preference for Commonwealth markets could be taken as a sign of strength, or as a sign of weakness. The argument presented by Lundan and Jones (2001) is that institutional similarity and a shared language made it easier for UK firms to develop advantages in these markets. This does not need to mean, as has sometimes been suggested, that the empire markets were a 'soft touch', contributing to the decline of British manufacturing during the second industrial revolution. Indeed, by examining the patterns of trade in the major markets for British goods, Thompson and Magee (2003) found no evidence that British industry could have used the empire markets to escape competition in the period prior to the First World War.

253. Nicholas (1989) records that 11% of post-1914 UK MNEs were set up in the US (compared with 13% pre-1914). The corresponding percentages for Europe were 43 and 27%. He also reports that two-thirds of all UK post-1918 investment in Germany occurred between 1918 and 1933.

254. Of 55 UK industrial companies with producing subsidiaries in at least four foreign countries in 1938, no less than 40 were in the processing industries, with only 15 in the engineering and metal product sectors.

255. In writing on Sir Harry Jephcott, Davenport-Hines (1986:140) writes: ‘His strategic perception of Glaxo Laboratories’ business dominated its decisions and performance in Britain and abroad from 1935 until the mid-1960s. Its major product diversifications, into vitamin foods in 1924 and into antibiotics twenty years later were also substantially at his initiative’.

256. Archer (1986) gives several examples of mergers or amalgamations between UK MNEs where there was little organisational rationalisation and, in consequence, many economies of
common governance, including (in the case of ICI) those of R&D, were not realised. See also Stopford (1974) and Hannah (1976).

257. Nicholas (1982) and Archer (1986) give examples. They include Thomas Fenner, maker of leather belts for machinery, who established a branch selling outlet in India in 1929 after reporting that Indian sales agents were unsatisfactory, and Brunner Mond’s preference for owning its overseas selling companies because it did not trust independent agents to look after its interests properly. Glaxo, on the other hand, internalised its finished good markets in the belief that its success depended on ‘precise and systematic marketing by carefully selected men bound by exact instructions and contracts’ (Archer, 1986:246).

258. For example, Union Minière du Haut Katanga was partly owned by the Belgian government; Compagnie Française des Pétroles was partly owned by the French government; while Vereinigte Aluminum Werke (VAW) was owned by the German government.

259. See also the edited volume by Mason and Encarnation (1994) on Japanese FDI in Europe.


261. For example, of 1,369 instances of nationalisation recorded by the United Nations (UNCTC, 1978) between 1960 and 1976, 67% was recorded in the final six years. Of some 19 producers associations existing in 1976, only one (OPEC) existed in 1960.

262. The corresponding figures for pre-1914 and 1919–39 were 62 and 63%, respectively. Throughout these years, the propensity of US MNEs to operate wholly owned subsidiaries was greater than that of non-US MNEs.

263. Divestment resulted in liquidation in only a small number of cases; much more commonly the affiliates were sold off to British interests.

264. This is also consistent with the fact that while the productivity-enhancing effects of FDI in British manufacturing are widely recognised, the innovations brought about by FDI in the retailing sector were relatively modest (Godley, 2003).

265. Furthermore, if history is any guide, the transition from one hegemon to another is not likely to be smooth, since, as Gray (2004) points out, a hegemon is unlikely to acknowledge its exhaustion.

266. See Chapter 2. To repeat just one set of figures: as a proportion of world GDP, the combined inward and outward capital stake rose from 7.8% in 1967 to 12.5% in 1980, to 17.9% in 1990 and to 43.9% in 2002 (UNCTAD, 2003b). However, as discussed in Chapter 2, part of the investment classified as FDI in official statistics may in fact be portfolio investment as no de facto supervision is exercised over the capital exported. A great deal of Middle Eastern direct investment in Europe and the US falls into this category.

267. For an elaboration of the meaning of a geocentric and transnational organisational strategy, see Chapter 7.

268. For more details, see Chapter 8.

269. See also da Silva Lopes (2002) for a study on the importance of brands in the evolution of multinationals in the alcoholic beverages sector from 1960 onwards.

270. See, for example, Jones and Bostock (1996), Jones (2005) and Jones and Miskell (2007).

271. In addition to anti-trust issues, problems in controlling the American operations seem to have plagued a number of (European) foreign investors, who felt a need to ‘Americanise’ their businesses, and to allow for considerable affiliate autonomy (Jones, 2002; Jones and Gálvez-Muñoz, 2002). It seems reasonable to assume that at least a part of the reported profitability gap between foreign investors and US firms might be due to such issues of control. Other reasons include the use of transfer pricing and other tax-related considerations, which are discussed in Chapter 17.

272. At the same time, the fact that Unilever was committed to ‘localisation’, and to ensuring that local nationals could rise to senior positions within the operating companies, had its advantages as well. For example, Hindustan Lever, the Unilever affiliate in India, established a management training scheme in 1949, and by 1961 it became the first major foreign company to appoint an Indian chairman. Hindustan Lever also operated an R&D lab, aimed particularly at the exploitation of indigenous materials, which by the end of the 1960s employed over 30 scientists and 200 staff in total (Jones, 2005). Probably not by coincidence, in addition to being a profitable affiliate, Hindustan Lever today is an often-cited example of an MNE that has successfully tapped the low-income market at the Bottom of the Pyramid, by coming up with new formulations of its products, and by introducing low-cost forms of packaging and distribution (Prahalad and Hammond, 2002).

273. This point is further taken up in Chapter 15.

274. The term ‘offshoring’ is sometimes used to refer specifically to the cross-border outsourcing of services, although the process is not essentially different from the outsourcing of production. Offshoring, that is, the relocation of outsourced production or service activities across borders, can involve a relocation of activities with the MNE, or it can involve (a long-term) arm’s-length contractual rela-
tionship. For recent examples, see Chapter IV in UNCTAD (2004).

275. In addition to the US and Europe, the edited volumes by Chandler et al. (1997) and Amatori and Jones (2003) present reviews and contributions to the business history literature from Latin America and Asia, including Argentina, Japan, South Korea and the Chinese-speaking regions.

PART II INSIDE THE MULTINATIONAL ENTERPRISE

276. We use the term ‘internationalisation’ to describe the process whereby a firm becomes more multinational. Internationalisation can be the result of a deliberate strategy, but it can also simply be a response to changing market conditions.

Chapter 7: Entry and expansion strategies of MNEs

277. For a review of this literature see, for example, Putterman (1986) and Ricketts (1989).

278. See, for example, Guiso and Parigi (1999) on the effect of (subjective) uncertainty on investment for a large sample of Italian firms.

279. Though some products may be either intermediate or final depending on whether they are sold to the final consumer or are bought by producers for further value-adding activities. A rubber tyre is an example.

280. Although the benefits of outsourcing in terms of cost savings can be considerable, Chesbrough and Teece (2002) warn that the ‘virtualisation’ of much of production also has a potential cost, in terms of weakening the ability of the firm to engage in product and process innovation.

281. Chapter 9 will discuss the mode of foreign entry in more detail.

282. The general trading companies are par excellence examples of diversified MNEs, the advantages of which stem both from their ability to coordinate many different kinds of complementary trade-related activities (including shipping, insurance, foreign exchange transactions and information gathering) and from their privileged access to both intermediate and final product markets. For a description of the different strategies pursued by the general trading companies from 13 countries in Asia, see Ozawa (1987). For a comprehensive historical study of British trading companies, see Jones (2000).

283. These include commission, brokerage, wholesaling, retail distribution, consignment sales, warehousing, shipping, finance, project organising, information gathering, marketing research, insurance and consulting.

Notes


285. See Autio (2004) for an overview of the central themes and research directions in this field.

286. Another pertinent question concerning ‘born global’ firms is whether they are better at learning from inter-firm relationships than their large MNE counterparts due to fewer pre-existing learning rigidities (Autio et al., 2000). See also Liesch and Knight (1999) on the ability of small firms to learn about foreign markets in order to reach their ‘hurdle rate’ of internationalisation.

287. Import restrictions are rarely the only (and, even more rarely, the most appropriate) instrument used by governments to promote inward investment. More often than not they have been accompanied by a gamut of trade-related investment measures (TRIMs) and/or performance requirements. The efficiency of these and other government actions to encourage or discourage FDI is dealt with in Chapters 19 and 20.

288. In addition to the effects of increasing product or geographical diversification, Vermeulen and Barkema (2002) suggest that the speed or pace of internationalisation may be a separate factor affecting the subsequent performance of the MNE parent.

289. Chapter 2 presents some evidence of the share of reinvested earnings in total FDI. Lundan (2006) presents a conceptual model of the reinvestment decision.

290. For example, Hennart and Park (1994) found some evidence of ‘follow the leader’ behaviour between manufacturing firms of rival Japanese enterprise groups when entering the US.

291. Some forms of medical consultancy, such as, the interpretation of radiographic images, can also increasingly be done remotely from anywhere in the world.

292. See Boddewyn (1983) for an examination of the similarities and dissimilarities in the investment and divestment decisions.

293. Although, de facto, an MNE may produce more than one product and the geographical distribution of the activities along the value-added chain across national boundaries may differ between these products.

294. This does not preclude the possibility that production may be considerably more global than sales, particularly if contractual outsourcing is taken into account. Chapter 2 presents more evidence on the internationalisation index of large MNEs, that is, the proportion of sales, assets and employment accounted for by their foreign operations.

295. See, for example, Casson (2000) and Buckley and Hashai (2004) for a systems view of the MNE.
Chapter 8: The organisation of MNE activity: the internal network

298. In particular, Chandler (1977) argued that had changes in business procedures and practices been patentable, the contribution of business change to the economic growth of the US would have been as widely recognised as the influence of mechanical inventions or the inflow of capital from abroad. In a similar vein, and some years earlier, Arrow (1970) had expressed the opinion that among men's innovations, the use of organisation to accomplish his ends is among his greatest and his earliest.

299. We should emphasise that this chapter will deal with only very selective issues relating to the organisation of MNEs and their affiliates. For a more specialist treatment of organisational issues and the MNE, see the edited volumes of Bartlett et al. (1990), Ghoshal and Westney (1993 [2005]), Hedlund (1993) and Birkinshaw et al. (2003), books by Birkinshaw (2000a) and Verbeke (2007), as well as the chapters by Westney and Zaheer and Birkinshaw in Rugman and Brewer (2001).

300. For example, a historical analysis extending over 100 years by Henisz (2002) demonstrates that the ability of the government to commit to a set of policies and to control abrupt policy reversal are preconditions for investment in infrastructure.

301. The reader will observe that these risks are all aspects of market failure, dealt with in Chapter 4.

302. For the influence of exchange rates on the timing and form of FDI, see, for example, Barrell and Pain (1996) and Blonigen (1997).

303. An exception is the work of Scott-Kennel and Enderwick (2004), which incorporates both the internal and external network in an empirical study of MNE subsidiaries in New Zealand. See also an edited volume by Birkinshaw and Hagstrom (2000), which offers a wealth of empirical studies that aim to identify distinct capabilities, and how rents are derived from the external and internal MNE network.

304. Some commentators describe a prior stage to the international division as the 'mother–daughter' structure in which the corporate headquarters is in charge of each and every foreign unit serving its own market, and which, for the most part, is given a fairly free hand in the operation of the business.

305. A term originally coined by Akio Morita of Sony.

306. These structures follow the dimensions of differentiation and integration first introduced by Lawrence and Lorsch (1967).

307. Although Nokia dates back to the second industrial revolution, it bears little resemblance to its former incarnation as a manufacturer of paper, industrial cable and rubber products.

308. As the authors acknowledge, such a framework identifies the new archetypes, while any particular firm may well have characteristics that belong to two or more quadrants.

309. As explained in Chapter 3.

310. These refer to all the unique advantages possessed by a firm, including those specific to its ownership (our O-specific advantages). We treat these other FSAs as contextual variables affecting its O-specific advantages (see Table 4.2).

311. The idea of an MNE as an institutional network is yet to be fully explored in the literature, but a useful start has been made by Mudambi and Navarra (2002) and Maitland and Nicholas (2003). It is also implied by the work of various other scholars dealt with in this section.

312. See also the collections of papers edited by Lundan (2002) and McKern (2003) on the various kinds of network relationships formed by MNEs.

313. Birkinshaw (2001) provides a more detailed classification and a very useful discussion on the different strands of the affiliate literature. For an excellent earlier review, see Martinez and Jarillo (1989).

314. Rugman and Bennett (1982:58) defined a WPM as a 'charter to develop, produce and market a new product line worldwide'.

315. Using a panel of firm-level data from the US BEA, Feinberg (2000) also found that Canadian subsidiaries with world product mandates were less vulnerable to downsizing.

316. However, viewing the MNE as a network of affiliates with distinct and clearly identified centres of excellence is at odds with the metanational view discussed earlier, because it predisposes firms to confine their search to pre-selected locations and types of information.

317. An exception is Lundan (2006), who examined the determinants of affiliate reinvestment drawing on the literature on taxation.

318. This is building on the results of Shin and Stulz (1998), who found that internal capital markets were actively used but inefficient in diversified US firms, mainly due to the information asymmetries between divisional and corporate managers.
Although the knowledge-based view of the MNE essentially rejects transaction costs or market failure as an explanation for the internalisation of technology transfer, we believe that the two views can be reconciled (see also Verbeke, 2003b). The tacitness of knowledge can lead to market failure, and in a static situation, this can explain the choice to internalise a particular transaction. Dynamic growth requires an explanation that incorporates the firm’s ability to generate new knowledge by exploiting its path-dependent resources and capabilities (Madhok, 1997, 2002). See also Chapter 5.

Another way to look at the role of social communities in knowledge sharing is to focus on the process of exclusion, and the economics of ‘club’ membership (Sandler and Tschirhart, 1980; Lundan, 2003a). The dynamics of club-like behaviour within the firm are likely to be similar to club-like behaviour between firms, such as occurs in a variety of formal and informal business groups (Granovetter, 1995; Guillén, 2000a). Some of these groups are exclusionary and efficient, while others merely appropriate rents from non-members.

Matching same year and class of patents.

One issue we have not addressed in this or other chapters concerns the determinants of the financial performance and survival of affiliates. See, for example, Delios and Beamish (2001) for a study that examines how experience, intangible assets and entry mode influence affiliate profitability and survival.

More details on this and other related surveys are found in Pearce (1997) and Papanastassiou and Pearce (1999).

The bargaining power of the affiliates was derived particularly from their strong knowledge outflows to other MNE units.

Chapter 9: The organisation of MNE activity: the external network

See Hennart (1993) for an excellent analysis of the price system and hierarchy as two complementary methods of organisation.

Side-payments (for example, licence fees) are particularly prevalent in cases where there are transaction costs or moral hazard or adverse selection in the joint venture (Chi and Roehl, 1989). Psychic distance and lack of experience in the host country also increase the use of licensing over greenfield investment (Arora and Fosfuri, 2000).

For example, a study reviewing 15 years of research on joint ventures in just 10 journals included 191 studies (Reus and Ritchie, 2004).

In an interesting integrative contribution, Martin and Salomon (2003) examined the effects of knowledge tacitness and firm-specific transfer capacity to predict which entry mode (exports, licensing, alliance or wholly owned affiliate) the firm would choose. They predicted that a firm with stronger transfer capacity would be able to use wholly owned affiliates at higher levels of knowledge tacitness, whereas a weaker firm would turn to export or alliance. Correspondingly, at low levels of tacitness, a strong source firm would use alliances where a weaker firm might license, and license where a weaker firm might forgo entry altogether.

See also the earlier results of Erramilli and Rao (1993) for a range of service firms.

Recognising that the contractual forms are also likely to require some degree of cooperation due to the incompleteness of contracts.

See Zhao et al. (2004) for a meta-study covering 38 articles on the transaction cost determinants of the choice of entry mode.

See Foss (1996a) for a thoughtful discussion on the knowledge-based approaches to the theory of the firm.

Different forms of governance can also be seen as offering different kinds of option value. This is particularly salient in the case of subcontracting and franchising, which offer high flexibility combined with low resource commitment (Buckley and Casson, 1996, 1998; Chi and McGuire, 1996).

For example, Hennart et al. (1998) present a carefully controlled study where they distinguish the selling of an equity stake to one of the partners from an actual liquidation of the venture. They found that while joint ventures by Japanese firms in the US were more likely to be sold off to a partner, after controlling for age and size, JV instability might be comparable to that of wholly owned affiliates. See also Hennart et al. (1999), who found no evidence that Japanese JVs in the US in 1980–89 were used as a ‘Trojan horse’ to appropriate the intangibles of the US partner.

See also Kogut (2001) on the methodological strengths (and weaknesses) in IB research.

See Chapter 4 for the Uppsala internationalisation model, which is driven by experiential learning by the MNE.

See, for example, Scott-Kennel and Enderwick (2004) for examples of how learning takes place in the internal and external network.

For some of the earlier theoretical contributions, see, for example, Hladik (1985), Beamish and Banks (1987) and Kogut (1988).

Or, putting it another way, the cost to one group of shareholders if another shareholder withdraws from the venture.

Using data on 12,984 overseas affiliates of Japanese MNEs, Dhanaraj and Beamish (2004) found that the mortality of JVs was high in the range below 20% equity participation, possibly
due to insufficient commitment, while the survival rate of equity participations of 80% or more were nearly indistinguishable from a wholly owned affiliate.

341. However, Nanjing Automobile is not the only Chinese company with rights to the Rover name, and Shanghai Automobile is introducing its own model, the rights to which it acquired before Rover declared bankruptcy (‘Rover versus Rover on streets of China’, Financial Times, March 24, 2007, www.ft.com).

342. For example, in a study of Japanese firms’ investments into the US, Hennart and Reddy (1997) found that JVs (rather than acquisitions) were preferred if the firm had little experience in the US, and somewhat surprisingly, when the partners were manufacturing the same products. JVs were also preferred in industries that were highly concentrated.

343. For an excellent study on knowledge acquisition in JVs, see Lyles and Salk (1996).

344. See Currall and Inkpen (2002) and Inkpen (2002) for a conceptualisation of trust at the personal, group and firm levels, along with operational measures of trust in the JV context.

345. For example, with respect to such values as truthfulness, trust, accountability, transparency and respect of human rights, and to such malpractices as corruption and tax evasion.

346. The controls employed include diversification (making a product abroad which the firm does not make at home), R&D intensity, experience in venturing, size, the concentration ratio and growth rate of the target sector, natural resource intensity and entry by greenfield or acquisitions.

347. Although there are also likely to be institutional reasons that explain why Japanese parent firms may not be inclined to buy stakes in one another while investing abroad.

348. These measures consisted of the managers’ assessments of their satisfaction with the management of the JV, its financial and efficiency-enhancing contribution, and its impact on competitiveness.

349. A different approach was adopted by Brouthers (2002) who added institutional (legal restrictions on foreign ownerships) and cultural variables (market potential and investment risk) to a transaction cost-based model of entry mode choice. Using data on a sample of large European MNEs in 1995, he found that superior financial and non-financial performance was associated with the firms whose actual mode of entry matched that predicted by the extended model. In line with the analysis of Shaver (1998) discussed earlier, his results indicated that while adopting the correct modal choice mattered for the performance of a particular firm, across firms, there was no suggestion that one mode was superior to another.

350. Public hazards included inconsistency in policy or regulatory regimes, while private hazards included those such as the unintended leakage of technology to a venture partner.

351. See also Delios and Henisz (2003) on the sequencing of modes of entry in a given host country depending on uncertainty in the policy environment.

352. See also Yiu and Makino (2002), who used the three basic forms of institutions identified by Scott (1995) to assess the entry mode choice of 364 Japanese affiliates. These were, respectively, regulative institutions (from the World Competitiveness Report), normative institutions (from the World Competitiveness Report and Kogut and Singh, 1988), and cognitive institutions (the extent to which firms copy the entry choice of other firms in the sample, or follow their own historical record).

353. It should also be noted that this discussion is concerned with cooperative forms of governance in Western enterprises that have traditionally been organised along hierarchical lines. Another form of partnering is evident in the socially conditioned business networks of the overseas Chinese. The guanxi or social relationships that connect the entrepreneurs in mainland China, Hong Kong, Singapore and Taiwan are based on trust, and on personal recommendation and referrals (Yeung, 1997; Mathews, 2002a, 2006).


355. A complement to the ex post cross-licensing or patent pooling, are the cases where companies file jointly for new patents. Empirical evidence presented by Hagedoorn (2003) indicates that while joint patenting has grown in absolute terms, it has maintained a constant 1.3% share of all US patents in 1989–98. In general, joint patents are seen by firms as a second-best option, and they tend to be the result of small-scale research projects, particularly in the chemicals and pharmaceutical fields, and in instrumentation and IT.

356. A concession gives the investor the right to exploit a resource or to operate a service for a fixed time period. Since concessions may involve investment in physical assets, they are likely to give rise to larger flows of foreign investment than management contracts, where the investor’s responsibility for the physical assets is minimal.

357. The terms ‘strategic alliance’ and ‘alliance’ are used interchangeably in much of the literature. This may reflect a preference by firms to predominantly characterise their activities as ‘strategic’ in the alliance announcements that have served as the basis for the empirical data.
358. As acknowledged by Burt (2004), this is not a novel idea, and it has a number of predecessors in the social sciences, including the work of Casson (1982a, 1997) on the bridging role of the entrepreneur. What makes it timely, is the growing appreciation of the economic importance of network forms of organisation.

359. See, for example, Walker et al. (1997) and Podolny (2001) for a theoretical discussion.

360. This is known as the ‘small world’ phenomenon, first examined by Stanley Milgram, and popularised in the 1990 play Six Degrees of Separation by John Guare, as well as a subsequent film based on the play. See Uzzi and Spiro (2005) for a recent empirical examination.

361. A home-country (cultural) bias towards a particular entry mode would also be reflected in the firm’s Oi advantages. However, even here, an individual firm’s Oi advantages due to, for example, prior experience with partnering, are likely to be very different from those of other firms of the same nationality.

362. In the alliance literature, repeated ties with the same alliance partners have been used as a measure of trust (Gulati, 1995).

363. Doz (1996) demonstrates how learning and readjustment within an alliance can reinforce either a virtuous or a vicious cycle, so that even in cases where, for example, the market for a new product clearly exists, collaboration will not necessarily bring about the desired result. See also Simonin (1999, 2004), using survey evidence from US MNEs on the effects of knowledge ambiguity (tacitness) on the transfer of technological and marketing knowledge in strategic alliances. He finds that learning intent (as the driver) and knowledge ambiguity (as an impediment) appear to be the most significant determinants of knowledge transfer.

364. The need to develop some areas of technological overlap with potential alliance partners can be related to the absorptive capacity of the firm that is needed to access and utilise external sources of knowledge (Cohen and Levinthal, 1989). The need to build up absorptive capacity is also frequently given as the reason why some knowledge-intensive firms engage in non-commercial research.

365. However, in spite of their popularity, the general finding from the literature is that M&As seldom increase shareholder value in the long run, and often contribute to ongoing managerial problems within the firm (Agrawal and Jaffe, 2000; King et al., 2004).

366. For example, a Japanese firm would invest in the US, and its US rival would retaliate by investing in Japan. See also Chapter 4.

367. Indeed, while many scholars have emphasised the coordination problems arising from cultural distance, using a sample of 52 cross-border acquisitions between 1987 and 1992, Morosini et al. (1998) found support for their hypothesis that national cultural distance enhances cross-border acquisition performance by providing access to the target’s and/or the acquirer’s diverse set of routines and repertoires.

368. This finding also illustrates why looking at modal choice in cross-sectional samples, rather than longitudinally, may be potentially misleading. For example, an effect favouring greenfield investment over M&As could simply indicate a higher proportion of firms in the exploitation stage than those in the exploration stage in the sample.

369. This is building in part on the theoretical framework set out by Hill et al. (1990).

370. See Chapter 6 for a historical perspective.

371. Quoted in Wilkins (1970:96) as meaning an environment protected from the free play of competitive forces.

372. Exceptions include a copper cartel initiated by the Americans in the 1920s.

373. Franko (1976), in particular, cites the case of the agreements between IG Farben and members of the Swiss Interest Association.

374. For example, considerable research has been done on the contrasting effects of interlocking corporate boards on informational efficiency and collusion. See, for example, Haunschild and Beckman (1998).

PART III THE IMPACT OF MNE ACTIVITY

Chapter 10: FDI, growth and development

375. See also Meier and Stiglitz (2001:3) for an illustration of the evolution of development thought.

376. See, for example, Sunkel (1972) and Biersteker (1978) in respect of the dependencia school and the Marxist approach. See also several contributions in Moran (1986).

377. See Rosenstein-Rodan (1943), Prebisch (1950), Nurkse (1953) and Hirschman (1958).


379. These included a resource gap (between desired investment and locally mobilised savings), a foreign exchange or trade gap between foreign exchange requirements and foreign exchange earnings plus official aid, a budgetary gap between target revenue and locally raised taxes, a management and skill gap between the supply of and demand for these capacities, a technology gap, an entrepreneurship gap, an international marketing gap, an employment gap and a market structure (improvement) gap.

380. Hirschman and Balassa were exceptions. In particular, Hirschman viewed investment (both
foreign and domestic) in time ‘t’ as a pacemaker for further investment in time ‘t + 1’. He was one of the first economists to suggest that foreign investment was one of the main catalysts of 'unbalanced' growth. Balassa’s main contribution was to introduce the concept of dynamic comparative advantage in his analysis of the interface between trade policy and economic development. For a discussion of the relationships between Hirschman’s work and that of Buckley and Casson’s seminal volume (1976), see Agmon (2003).

381. In addition, several UN agencies (for example, UNCTAD, ILO, UNIDO) also took a broad perspective on development. By contrast, the World Bank, IMF and GATT took a narrower economic efficiency-enhancing approach.

382. The former were most influenced by the dependencia group of scholars; and the latter by a Western-based neoclassical approach modified to include the role of the state as an enabling and participatory form of governance.

383. For example, the number of nations belonging to the UN at the end of 2003 was 215 compared with 90 thirty years ago.

384. To the extent that one sees freedom as development, some cultural traditions, such as those relating to the position of women in society, may be in conflict with the overall goal of freedom. North’s (1990, 2005) analysis of the process whereby new institutions are created indicates clearly that some cultural traditions, such as a reliance on personal relationships and particularistic forms of exchange, may inhibit economic growth and restructuring. Regardless of their possible appropriateness in a given cultural context, practices that restrict the freedom of a (large) part of the population are not likely to be conducive to expanding the scope of economic activity in the global economy.

385. See Williamson (2004) on the history of the Washington Consensus and Chang (2002) on the extent to which the consensus may have centred on policies that were not practised by the developed countries themselves during their process of development. For an interesting discussion concerning the growing demand for institutional reform in Latin America in the wake of the ‘first-generation’ reforms adhering to the Washington Consensus, and the difficulties associated with increasing the supply of good institutions, see Burki and Perry (1998).

386. In 2002 the Monterrey Consensus set out a strategy to achieve the UN Millennium Development Goals by 2015 through a combination of trade, private sector investment and aid. In addition to cutting in half poverty and hunger, and reducing child mortality by two-thirds, other goals include universal primary education, reducing maternal mortality, promoting gender equality, addressing youth unemployment, and combating HIV/AIDS, malaria and tuberculosis. On environmental sustainability, the goal is to significantly improve access to safe drinking water and sanitation.

387. For example, the Global Competitiveness Index published by the World Economic Forum has incorporated institutional factors since 2005.

388. On the importance of geography and institutions, particularly in tropical areas, see Easterly and Levine (2003). On trade openness and institutions, see Dollar and Kraay (2003).

389. These have been superseded by the Governance Matters IV indicators (Kaufmann et al., 2005, 2007). The indicators are culled from a variety of sources, and they are grouped along six dimensions, all measuring the perceived level of: 1. Voice and Accountability – measuring political, civil and human rights; 2. Political Instability and Violence – measuring the likelihood of violent threats to, or changes in, government, including terrorism; 3. Government Effectiveness – measuring the competence of the bureaucracy and the quality of public service delivery; 4. Regulatory Burden – measuring the incidence of market-unfriendly policies; 5. Rule of Law – measuring the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence; 6. Control of Corruption – measuring the exercise of public power for private gain, including both petty and grand corruption and state capture.

390. See also Dore et al., 1999 and Amable, 2000.

391. For example, following La Porta et al. (1998, 2000), one way of assessing how well the institutions underpinning the financial markets are functioning is to examine how well the investors, both shareholders and creditors, are protected from expropriation by the managers and controlling shareholders of firms. From this perspective, the different systems of corporate governance in existence today are not merely different, since their results demonstrate that common law countries generally have the strongest legal protections of investors, while French civil law countries have the weakest, and the German–Scandinavian civil law countries fall somewhere in between.

392. See Dixit (2006) for a critical review of the often contradictory literature on the institutions of economic governance, and its relevance for public policy. See also Kaplinsky (2000) for a framework that seeks to explain why the outcomes for the countries that participate in the global economy are highly unequal, depending on the conditions for rent appropriation at different stages of the global value chain.

393. Ritzen et al. (2000) present a similar argument by suggesting that ‘good’ politicians inadvertently engage in ‘bad’ policies in countries
where social cohesion is low and institutions are weak. Acemoglu and Robinson (2001) suggest that a highly unequal society is likely to fluctuate in and out of democracy. This is because in a non-democratic state, the poor are more likely to attempt a revolution, particularly at times of economic recession. The threat of revolution can induce the elite to implement democracy, but since democracy implies a redistribution of income, this leaves the elite with an incentive to restore autocratic rule by means of a coup.

394. Successful recovery will also depend on the degree to which political entrepreneurs are powerful and willing enough to implement the necessary changes (North, 2005).

395. The Gini coefficient of income inequality is a number between zero and one, where zero corresponds to perfect equality (everyone receives the same income) and one corresponds to perfect inequality (one person receives all the income, while everyone else gets nothing). See also Glaeser (2005).

396. Recent research suggests that there may not be a trade-off between poverty and income inequality either (Ravallion, 2005). See also Goldsmith (1995) on the positive relationship between democracy, property rights and growth.

397. Although this is a necessity in quantitative analyses.

398. The cross-country results emphasising the importance of education were also confirmed by Glaeser and Saks (2006), who found that convictions for corruption in the US in 1976–2002 were higher in states that had lower levels of education, and higher levels of ethnic fragmentation and income inequality.

399. However, Barro (1999) found considerable evidence that economic growth is accompanied by more democratic forms of government, rather than the other way around. Similarly, Glaeser et al. (2004) found that the accumulation of human capital underpins the development of institutions and subsequent growth, and that poor countries that have achieved growth as a result of autocratic policies tend to improve their political institutions subsequent to growth.

400. In his influential book *The Mystery of Capital*, de Soto (2000) argues that the absence of well-defined property rights is holding back the opportunities for economic growth for the majority of the poor outside of the Western developed countries.

401. For example, arguing that an informed citizenry curbs the possibilities of politicians to engage in corrupt acts, Adserà et al. (2003) found consistent support for the positive relationship between newspaper readership and the quality of government.

402. This section is focused mainly on the literature in economics and political science on social capital, trust and economic growth. A vibrant discourse of these topics is also ongoing among scholars of management and organisation, as demonstrated by an *Academy of Management Review* special issue in 1998, a special issue of *Organisation Studies* in 2001, and a special issue of *Organisation Science* in 2003.

403. Collective action problems arise when the pursuance of individual interests would result in no action, as individual costs outweigh individual rewards, but where the ability to commit to collective action allows for a better equilibrium to be reached on account of sizeable collective rewards.

404. In the classic prisoner’s dilemma, if the two prisoners were able to cooperate, neither would be convicted. However, since they cannot cooperate, each will implicate the other, and both end up being convicted.

405. Other standard references are Coleman (1990) and Putnam (1993). The latter deals specifically with the role of social capital in explaining the difference in economic growth between northern and southern Italy.

406. Using the Pew Global Attitudes data, Noland (2004) also found that countries with higher levels of tolerance received more FDI and exhibited higher levels of entrepreneurship. See also recent editions of the *Human Development Report* (UNDP, 2004) on the importance of cultural liberty and tolerance and the *World Development Report* on the importance of social equity and minority protection (World Bank, 2005).

407. The World Values Surveys have been conducted four times since 1981, and the latest survey conducted in 1999–2002 consisted of representative national samples of at least 1000 respondents from 60 countries (Inglehart et al., 2004).

408. The key question from the World Values Survey on trust is the following: generally speaking, would you say that most people can be trusted, or that you just can’t be too careful in dealing with people? This measure does leave open the extent to which trust is meant to extend beyond the people you know. People in low-trust environments are more likely to deal frequently with people they already know, and thus trust for them would primarily reflect trust in the inside group. People in high-trust environments are more likely to deal with a variety of people at arm’s length, and trust is more likely to refer to situations not conditioned by prior experience.

409. The question on civic norms in the World Values Survey asks whether it can always be justified, never be justified or is something in between for the following five issues: 1. claiming
government benefits that you are not entitled to; 2. avoiding a fare on public transport; 3. cheating on taxes if you have the chance; 4. keeping money that you have found and; 5. failing to report damage you’ve done accidentally to a parked vehicle. There is likely to be a more substantial degree of measurement error associated with the measure of trust that asks one to volunteer information on one’s own cheating, rather than the measurement of the norms of civic cooperation, which asks the respondents to assess the trustworthiness of others.

410. Although kinship ties embody high levels of trust in lieu of formal contracting, low-trust countries exhibit low levels of generalised trust outside the family.

411. See La Porta et al. (1999b). See also Casson (1993) on culture and religion and Dunning (2003c, 2005b) on religion and institutions.

412. Thus trustful relationships that are formed in the course of repeated interaction are not based on blind trust, but, at least in part, on better information.

413. The better educated and economically well off are also likely to be able to absorb the consequences of misplaced trust more easily.

414. In this sense, street gangs in deprived urban areas in developed countries are similar to the criminal gangs that have appeared in some transition economies and developing countries.

415. Finland was not only the most competitive and least corrupt country in the world (in 2004), it also had the highest quality of educational achievement in mathematics at a secondary school level according to the OECD (2004). In Finland, jaywalking continues to be quite rare, even at times of day when traffic is low, and the chances of getting fined are even lower.


417. Recent years have also seen a number of conceptual studies on the role of institutions in IB (Hoskisson et al., 2000; Mudambi and Navarra, 2002; Peng, 2003; Meyer, 2004).

418. All of these indices are publicly available on the internet.

419. However, all three groups of measures used by Globerman and Shapiro are determinants of economic and social development as well as representing an outcome of the process, which is an endogeneity problem common to many studies on development. There are also likely to be problems of multicollinearity, since countries with good governance tend to fare better on each and every dimension. For example, the Environmental Sustainability index is highly correlated (0.78) with the Governance Matters index.

420. Chapter 19 will examine corruption as an issue of social responsibility. Rose-Ackerman (2002) makes a reasoned argument that MNEs should, at a minimum, publicise attempts at bribery, and cooperate with governmental institutions combating bribery.

421. Although it should be noted that most FDI still takes place between the less corrupt countries. Lundan (2003b) makes a similar argument concerning the composition of FDI, arguing that low environmental standards and/or inadequate enforcement in the transition economies risks creating a ‘market for lemons’ (Akerlof, 1970) in terms of investor quality.

422. As the authors note, these effects correspond quite closely to the coercive, mimetic and normative isomorphic pressures identified by DiMaggio and Powell (1983).

423. Instrumental variables should be closely correlated with the variable they replace, while not being correlated with the error term of the model. When reverse causality is suspected, the instrument should be related to the dependent variable, but not be influenced by it. Consequently, finding suitable instruments is often quite difficult in practice.

424. Interaction effects measure the effect of one independent variable on the dependent variable, depending on the level of another independent variable.

425. Earlier reviews of the research concerning cross-border industrial relocation can be found in Pearson (1985; 1987), and evidence concerning patterns of trade is reviewed in Low (1992) and Tobey (1993). A review by the OECD (1999) concluded that the evidence in favour of the pollution haven hypothesis remains lacking. The best-known example involves the relocation of some Japanese pollution-intensive investment in the late 1970s (Mani and Wheeler, 1998), and some more recent cases can be found in the relocation (through increased outsourcing) of the European leather tanning sector to Eastern Europe and developing countries (Jenkins et al., 2002).

426. The home country for most investors in Mexico and Venezuela was the US, and in Côte d’Ivoire and Morocco it was France.

427. A study of cross-country differences in environmental policy and performance in 31 developed and developing countries revealed a strong correlation between environmental performance, GDP per capita, property rights protection, and the overall development of the legal and regulatory system (Dasgupta et al., 2001).

428. Measured as biological oxygen demand (BOD).

429. It is not the only way. Indeed, to help achieve the Millennium Development Goals, aid, loans and the removal of trade barriers are considered equally important mechanisms (Brown, 2003).

431. However, in this case, the MNE *qua* MNE is not a significant factor, as inefficient producers rarely benefit from the presence of a more-efficient producer, whether domestic or foreign.

432. This was confirmed by Nunnenkamp and Spatz (2004a), who compared the relationship between FDI and growth in countries that were below the median in their general attractiveness to FDI, and those that were above. They found that well-developed institutions and sufficient absorptive capacity were necessary for the beneficial effects from FDI to appear, and the effect was stronger for countries that had attracted more FDI.

433. Such as a global recession, which might be sparked off by the inability of the US to finance its trade deficit.

434. These results were broadly confirmed by de Mello (1997) who reviewed the evidence on FDI and growth from 11 studies and found the effect to be positive with a stronger effect for countries that were more open and relatively more developed.

435. Such efficiency gains are likely to reflect both allocative efficiency, as FDI is likely to be concentrated in higher growth sectors, as well as technical efficiency, on account of the higher productivity of MNEs. See also Chapter 15.

436. However, using data on 72 countries over the 1960–95 period, Carkovic and Levine (2002) found that FDI did not have an independent effect on growth.

437. See also Liu et al. (2002) for an examination of the two-way causal links between FDI, trade and growth in China between 1981 and 1997.

438. Using panel data for 18 Latin American countries in 1970–90, Bengoa and Sanchez-Robles (2003) estimated two simple models, one on the determinants of FDI and the other on GDP growth and FDI. An index of economic freedom and market size were the most important determinants of FDI, while FDI and economic freedom had a strong positive impact on economic growth.


440. The distinction between the physical and human environment is explored at some length in North (2005) and Dunning (2007).

441. See also Table 5.1.

442. Notably some first-time small and medium-sized foreign investors.

443. As summarised, for example, in the first edition of this volume (Dunning, 1993b).

444. An exception includes some of the early reports of the United Nations Centre on Transnational Corporations, for example, UNCTC (1978, 1983).

445. Some of these are identified by Gray (2002b) and Rondinelli (2005).

446. A report by the UN Economic Commission for Africa (UNECA, 2006) concludes that over the past four decades, capital flows into Africa have not been followed by economic transformation, except where the development of domestic institutions and policies preceded the inflow of capital, as was the case, for example, in Mauritius and Tunisia.

447. See, for example, Xu and Shenkar (2002) and Dunning (2006b) on institutional distance. The theory here, which dates back to the seminal contribution of Seev Hirsch (1976), is that if the costs of reconciling different incentive structures associated with the production of a particular product in a foreign country exceed those of exporting the same product from the home country, then exports will be the preferred route of servicing the foreign market.

448. In his ‘stages of development’ model, Ozawa distinguishes between three main phases of development, namely factor, investment and innovation driven, and he relates Japan’s structural transformation and its concomitant FDI to these phases.

449. However, Scott-Kennel and Enderwick (2005) have taken a step in this direction by mapping out the developmental impact of inward FDI on host countries in terms of the opportunities for local firms to appropriate spillovers and to engage in linkages with MNE affiliates, which increase at each stage of the IDP.

450. As Giddens (1990) has noted, in an increasingly integrated and interdependent world, trust in a number of expert systems, which one cannot effectively control or monitor, is an indelible feature of modern life.

451. For example, the sales of the world’s largest MNEs are predominantly regional rather than global (Rugman and Verbeke, 2004b; Rugman, 2005), investors hold disproportionate shares of home-country securities in their portfolios (Strong and Xu, 2003; Stulz, 2005), and the patterns of foreign investment stocks reflect institutional and cultural proximity (Petersen and Pedersen, 1997).

Chapter 11: Technology and innovatory capacity: the role of firms

452. For contrasting overviews on globalisation and the technological activities of MNEs, see the monographs by Kumar and Siddharthan (1997) and Narula (2003), as well as the edited volume by Cantwell (1999).

453. The somewhat disproportionate focus on high-technology sectors also reflects the extant
literature, and the available sources of comparable data on technology alliances and patenting.

454. In a sample of 89 firms from the S&P 500 in 1994–97, the average Tobin’s $q$ was 3.53 (Dowell et al., 2000).

455. However, in some sectors, the contribution of innovative small firms can be significant (Acs and Audretsch, 1988; Acs et al., 1994). See also Eden et al. (1997) for a review of the role of MNEs in the production and transfer of technology and a comparison of MNEs and SMEs as technology producers.

456. Romer (1990) emphasises the distinction between ‘ideas’ that are nonrival goods that can be stored as a series of bits, and ‘things’ which are rival goods that generally embody mass or energy. While technology belongs to the world of ideas, and is nonrival (one person’s use of a revealed idea does not diminish the value of the original), it is only partially excludable by means of secrecy, patents or copyrights.

457. See also the discussion on the investment development path (IDP) in Chapter 10.

458. One way to characterise the technological profile of a country is by using a composite index that incorporates a number of individual measures of technological activity. There are several such indices available, including the Technology Achievement Index by the UNDP, the Competitive Industrial Performance Index by UNIDO, and the UNCTAD Innovation Capability Index. Archibugi and Coco (2004) have recently developed an alternative index which, while giving very similar rankings to the existing indices, has the advantage that none of the components of the composite indicator is based on monetary values, which may reduce the risk of collinearity in analyses employing trade or value added as additional explanatory variables.

459. Industrial R&D refers to research financed and/or carried out by all firms, including state-owned firms, and it includes R&D in the service sectors.

460. The current members of the OECD are Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the UK and the US.

461. Using the broadest measure of research, which includes defence and civilian research by all funding sources, including the government, private universities and research institutes, and industry.

462. In 2004, US MNEs performed $180 billion of R&D, of which 15% was by their foreign affiliates. US MNE parents accounted for 73% of the industrial R&D in the US (Yorgason, 2007).

463. See for example, Kanerva et al. (2006) for a discussion of the problems related to the measurement of innovation in services.

464. Although in part this may reflect some reclassification of sectors that were previously classified as manufacturing under SIC, and that are now classified as services under the North American Industry Classification System (NAICS).

465. This can be compared to the case of Japan more than a decade earlier, where real R&D expenditure increased more than threefold between 1970 and 1987, the number of R&D personnel more than doubled, and there was a sixfold increase in the number of patents registered (National Science Foundation, 1989).

466. The focus in this chapter is on tertiary education in the science and engineering fields. Data on rates of educational enrolment for the primary and secondary (as well as tertiary) school-age cohorts is available from the World Development Indicators of the World Bank, which is based on data compiled by UNESCO (United Nations Educational, Scientific and Cultural Organisation).


469. Although following the events of September 11, 2001, there was a dip in the first-time enrolment of foreign graduate students in science and engineering in the US in 2002 and 2003 (National Science Board, 2006). According to Arora and Gambardella (2004), the development of the software industry in Ireland, India, Israel, Brazil and China relied on the large available pool of well-educated engineers, combined with growing demand from domestic firms or foreign MNEs (particularly in Ireland), or demand from the government in the case of Brazil. In addition to the domestic supply of engineers, the ‘diaspora’ of talented individuals who went abroad to either work or study has been an important contributor to the competitiveness of the indigenous software firms in these countries.

470. Patel and Pavitt (1991) also used patenting in the US as a proxy for foreign innovatory activity in a sample of 686 of the world’s largest firms, which accounted for just under half of the world’s innovatory activities between 1981 and 1986. Their results confirmed that for small home countries, the patents attributed to foreign affiliates often make up quite a high
proportion of the total US patenting of the home country.

471. For example, in 1996, the foreign share of patents was 44% (National Science Board, 2006).

472. As Griliches (1990) points out in his classic discussion about the limitations of patent statistics, the requirements for novelty in patenting are not unlike the requirements for novelty in academic journals—not very high. Indeed, new concerns have been raised in recent years in the US concerning the erosion of the non-obviousness standard in the granting of patents, and the growth of ‘upstream’ patents, particularly in biomedical sciences, which might impede further research (National Science Board, 2006).

473. See also Tables 14.1 and 14.4.

474. The budget for research and technological development activities within the EU has grown from 3.7 billion ecus for the first framework programme (1984–87) to €17.5 billion for the sixth framework programme (2002–06).

475. For example, while asset-seeking investment may increase the R&D intensity of the investing firm, it has no immediate effect on the host country.

476. For example, using European data, Bottazzi and Peri (2003) found that the elasticity of innovation (patenting) to the R&D conducted within a region declined with increasing distance, and that R&D spillovers could not be observed beyond a 300 km radius.

477. For example, Young and Lan (1997) employed a simple model incorporating both host and home country policies and incentives, as well as the willingness and ability of both the sender and the recipient firms as critical factors in technology transfer. Their study on technology transfer to China revealed considerable differences on the latter dimension, where Western firms were seen as both willing and able to transfer technology, while Japanese investors were seen as able but unwilling, and Chinese investors from Hong Kong, Macau and Taiwan as unable but willing.

478. See also Chapter 8.

479. Real labour and capital costs are the costs of labour and capital adjusted for the quality of the two inputs. Thus, low wages do not necessarily mean low real labour costs. It is quite possible that a higher wage cost might be more than outweighed by higher productivity of the labour. At the same time, it would be wrong to conclude that because some kinds of labour are inexpensive, all labour is inexpensive. An ILO report (ILO, 1984:23) cites the case of foreign affiliates in Nigeria using more automated processes than in developed countries in order to economise on skilled labour.

480. See especially those of the ILO (1972), Morley and Smith (1977), and Langdon (1978). Earlier studies that found MNE affiliates to be more capital intensive than indigenous firms in the same industry include Agarwal (1976) for India, Balasubramanyan (1984) for Indonesia, Newfarmer and Marsh (1981a) for Brazil, Forsyth and Solomon (1977) for Ghana and Biersteker (1978) for Nigeria. By contrast, other studies, for example, Chung and Lee (1980) for Korea, and Willmore (1976) for Costa Rica, found that there was no consistent tendency for the production methods utilised by foreign and domestic firms to be different.

481. However, this argument applies only on the engineering or ‘hard’ technology side. On the ‘soft’ side, how well the technology will perform relative to its potential also depends on the skills and incentives of the employees using it.

482. See, for example, the 2005 special issue of the Academy of Management Executive on the global transfer of management knowledge.

483. In Finland, the home country of Nokia, their well-known advertising slogan acquired a critical modifier, connecting people-disconnecting families.

484. Although it should be noted that the empirical results are based on a series of transfers in only eight firms.

485. Petit and Sanna-Randaccio (1998) present an interesting analytical model where a firm makes three kinds of decisions: whether to export or to invest abroad; how much to invest in R&D; and how much to sell in each market. They assume that technology is transferable, but only imperfectly. Their model indicates that where the cost of technology transfer is low, there is a two-way relationship between the level of R&D and FDI, which suggests that the presence of R&D activities makes FDI more likely, and FDI in turn results in a higher level of R&D.

486. Indeed, as Cohen and Levinthal (1989) have argued, firms would have little incentive to carry out any basic research, if it weren’t for the need to build absorptive capacity that enables the firm to utilise publicly available research results in their own R&D endeavours.

487. See, for example, Ivarsson and Jonsson (2003) on asset-seeking investment in Sweden.

488. See also Shan and Song (1997) for an analysis of the foreign sourcing of knowledge in the pharmaceutical industry.

489. This classification draws on the work of Ghoshal and Bartlett (1990), Pearce (1990a) and Pearce and Singh (1992).

490. However, using data for MNE affiliates in the UK, Cantwell and Mudambi (2005) show that in addition to locational factors, specific attributes of the MNE at the affiliate and group levels also influence the R&D intensity of MNE affiliates.

491. Zander (1999) presents a taxonomy of technological capabilities based on their degree of
duplication and diversification. This yields four basic types: the internationally duplicated, dispersed, home centred and internationally diversified affiliates.

492. See Zanfei (2000) for a review of the literature on the innovative activities of MNE affiliates and the tension between affiliate autonomy and centralised control. See also Cantwell and Mudambi (2005).

493. See also Florida and Kenney (1994a) on Japanese R&D in the US.

494. See Pearce (1997) and Pearce and Papanastassiou (1999) for further analysis, as well as the discussion in Chapter 8 on affiliate autonomy.

495. The \( RTA \) can be expressed as: \( RTA_p = \frac{(P_p \Sigma P_{ij} - \Sigma P_{ij} \Sigma P_p)}{(\Sigma P_{ij} \Sigma P_p)} \). A score above one would indicate that a firm is comparatively more advanced in a given technological sector relative to the other firms in its own industry.

496. The large domestic market induced manufacturing firms in 19th century America to produce standardised goods from interchangeable parts, and it also encouraged the growth of markets for specialised machines. Machine shops that had previously made machine tools for one industry, such as textiles, could now sell them to a number of different industries utilising different materials (Rosenberg, 1963). The difference to the current situation is that while specialised machine-tool firms could make machines to suit a variety of industries, the majority of large firms today have at least some background capabilities themselves in the key technologies, such as software engineering.

497. See also Fai (2003) on the historical evolution of corporate technological competences.

498. Additionally, Cantwell and Vertova (2004) show that since the mid-1960s, despite considerable overall increase in technological activity, there has been a tendency for countries to increasingly concentrate their technological activities. Thus MNEs and their affiliates seem to retain their own profiles, and to complement the national profiles of technological specialisation of host countries, rather than change them towards greater diversity.

499. For example, Penner-Hahn and Shaver (2005) reveal that international R&D increased the innovative output (patenting) of Japanese pharmaceutical firms in 1980–91 only when the firms had sufficient underlying capabilities in research.

500. Granstrand (1998) suggests that technology diversification is a fundamental causal variable determining corporate growth, even when controlling for product diversification and acquisitions. Diversification leads to a growth in R&D expenditures, which in turn leads to increased demand, and an increased supply of technology using external technology sourcing. See also Granstrand et al. (1997).

501. Several of the studies in this section come from a special issue of Research Policy in 1999 on the internationalisation of industrial R&D. See particularly Serapio and Dalton (1999) on the R&D conducted by foreign affiliates in the US.

502. See also Rugman and D’Cruz (2000) on the role of the multinational as a flagship firm.

503. The composition of the CATI database has been discussed in, for example, Hagedoorn (1993).

504. Now part of Thomson Financial Securities Data.

505. While 81% of high-technology alliances in 1998 were contractual, only 52% of medium-technology and 62% of low-technology were.

506. See Håkanson (1995) on the managerial and sociocultural, technical and procedural integration challenges encountered by MNEs when they acquire knowledge-intensive assets such as R&D facilities.

**Chapter 12: Technology and innovatory capacity: the role of government**

507. Of course, local firms may also be highly motivated and capable, making it difficult for the MNE to prevent some of its technology from being appropriated by them. While, in general, technology is considered to be less costly to transfer within the MNE than between unaffiliated firms, it is likely that some technology can be inadvertently transferred to highly motivated outsiders, just as it is likely that other technology cannot effectively be transferred to reluctant insiders.

508. In a study specifically comparing foreign affiliates that undertake R&D in Ireland with those that do not, Kearns and Ruane (2001) found that R&D-intensive affiliates had a longer duration in Ireland and better quality (duration) of employment, once factors such as plant size and sector-specific influences were controlled for.

509. The issue of the influence of bargaining outcomes on the policies of home and host countries is explored in Chapter 19.

510. In a world where intra-firm trade exceeds arm’s-length trade, industrial policy and restrictions on FDI can also be considered a form of strategic trade policy (Hart and Prakash, 1997).

511. For example, a parent company may prefer to receive licence payments or royalties rather than interest payments or intra-firm dividends from its affiliate, depending on the treatment of affiliate income in the home and host country systems of taxation. This point is taken up again in Chapter 17.
512. This need is also stressed in two UNCTAD reports – one on the internationalisation of R&D, and the other on FDI by MNEs from developing countries (UNCTAD, 2005c, 2006). For a schema suggesting an integrated FDI policy, with particular respect to the Korean economy, see Dunning (2006a).


514. There have been several others, including RACE, a programme which was designed to promote technical collaboration and common standards among European companies in the field of telecommunications, and BRITE-EURAM, which provided support to industry, academia and research organisations for pre-competitive collaborative and cooperative research in materials, design and manufacturing technologies. For analysis of these and other programmes, see Mytelka and Delapière (1987) and Mytelka (1991). Peters et al. (1998) have explored the networks that were formed between publicly funded research institutions and firms under two EU-funded technology programmes, BRIDGE in the field of biotechnology, and BRITE-EURAM in materials technology, both of which involve technologies that can lead to a range of applications in multiple industries.

515. However, the explanation offered by Narula (1999) relies more on the benefits to be gained from collaborative R&D, and the increased gains to European firms from partnering with their non-European counterparts, particularly American firms, due to their technological superiority in specific fields.

516. Past examples of exclusionary projects in the US include the symposium on high temperature superconductivity organised by the White House Office of Science and Technology Policy and the National Science Foundation, and the restricted membership of foreign firms, including those with US subsidiaries, in the Sematech initiative and DARPA (Defence Advanced Research Projects Agency).

517. In addition to SDI, other well-known initiatives combining public and private participation include the Sematech consortium in semiconductors and the National Flat Panel Display initiative in the US, and the Very Large Scale Integrated Circuits (VLSI) programme in Japan.

518. See, for example, Mowery and Oxley (1995) for an analysis of the role of national innovation systems in the transfer of technology and the building of ‘national absorptive capacity’ in Japan and other East Asian economies. However, with the advent of globalisation, weaknesses in the Japanese institutional framework have been laid bare; inward FDI from Western economies, which have fully embraced and participated in the opening up of international markets, is now being welcomed as a vehicle demonstrating the advantage of market-facilitating institutional reform (Ozawa, 2003, 2005).

519. Fukuyama (1995) links the preference for small firms in Taiwan to the importance of family ties in Chinese culture.

520. Particularly, as shown by recent research of the determinants of FDI in Central and Eastern Europe, encouraging responsible entrepreneurship, protection of property rights, a favourable tax structure, a culture of social responsibility and the provision of adequate safety nets to ease economic restructuring (Rondinelli, 2005; Dunning, 2007).

521. The transition from political and economic centralisation to decentralisation has not always been simultaneous, such as in the case of Chile, South Korea, Singapore or China, where periods of political centralisation have coincided with economic decentralisation. However, in the long run, one would expect such countries to move towards greater economic and political democracy, which is occurring in the cases of South Korea, Singapore and Taiwan.

522. The question of whether institutional development leads or follows technological development is an intriguing one, and it is examined by Glaeser et al. (2004). Their view supports that of Mahmood and Ruﬁn (2005), although they also ﬁnd that as countries become more industrialised, the role of institutional upgrading as a lead variable becomes more likely.

523. Notably, in the cotton and woollen textiles, metal, canning and brewing, carpet, pottery, jute, silk and cutlery industries. For a more detailed examination of the role of European technology in the pre-Civil War development of the US, see Coram (1967) and Wilkins (1989). For a stimulating historical analysis on the broader role of technology in economic growth and human well-being, see Mokyr (2002). See also Chapter 6 of this volume.

524. See Chapter 14 for further details.

525. See, for example, Håkanson and Nobel (2001) on the factors affecting the transfer of technology from Swedish R&D affiliates to their parents.

526. However, it should be noted that this study focuses solely on knowledge transfer facilitated by trade, and ignores the contribution of FDI.

527. The impact of offshoring is discussed in more detail in Chapter 13.

528. Which, in fact, is what has happened, though one suspects accidentally, more than deliberately, as a result of the introduction of robotics...
and computer-aided design and manufacturing equipment.

529. An interesting historical review of the evolution of the IPR system is provided by Granstrand (2005).

530. An evolutionary and historical view on the role of innovation in economic growth, and particularly in the catch-up growth of lagging countries, is offered by Fagerberg and his colleagues (Fagerberg and Verspagen, 2002; Fagerberg and Godinho, 2005; Fagerberg and Srholec, 2005). See also the provocative analysis by Chang (2002) on the variety of institutional devices used to support innovation-driven growth historically, and how these are largely unavailable to present-day developing countries as a result of the promotion of free market policies by the developed countries.

531. The sluggishness of the UK to adapt to the structural changes required of an industrial economy in the late 19th century is an object lesson to industrialised countries faced with the competition from the NICs.

Chapter 13: Employment and human resource development

532. A comprehensive set of books, ILO Publications on Multinationals, published in 1989 dealt extensively with the employment effects as well as the training, social, labour and safety practices of MNEs. Since 1979 the ILO has also published a series of working papers under the Multinational Enterprises Programme, which currently contains 99 mostly country- or sector-specific studies on the employment effects of MNEs. See also UNCTAD (1994).

533. See also the introductions by Ferner and Quintanilla to special issues of the European Journal of Industrial Relations (Ferner and Quintanilla, 2002) and the International Journal of Human Resource Management (Quintanilla and Ferner, 2003), both of which are concerned with the tension between global and local practices, and the role of the MNE in affecting, and being affected by, the institutional practices in their home and host countries.

534. As set out in Chapter 4.

535. For a Marxist analysis of how MNEs in the construction industry, which fashioned the physical infrastructure of the second industrial revolution, used their unique ability to combine mobile capital with mobile labour, see Linder (1994).

536. Although the likely impact of MNE activity in one country may be partially estimated by comparing the performance of foreign- and domestically owned firms in another, but similar, country.

537. The methodology of propensity score matching has also been used in studies that have examined the consequences of exporting (Clerides et al., 1998) and foreign acquisitions (Arnold and Smarzynska Javorcik, 2005) on firm productivity. See also Chapter 15.

538. The effective labour force is an estimate of the share of the labour force that forms a part of the global labour market, and it is measured by a country’s labour force weighted by its export to GDP ratio.

539. See Chapter 11 for more details on the growing supply of university graduates.

540. ‘Offshoring’ is an alternative term used in the literature for foreign outsourcing, and particularly the outsourcing of services.

541. These macro-level trends are also visible in the data on 200 leading MNEs analysed by van den Berghe (2003), which show that in 1990–99, their total employment declined, while their total assets and sales increased.

542. The earlier data in this section draw heavily on a number of ILO publications, in particular, those of the ILO (1981) and Kreuey et al. (1988).

543. The recent total employment figures are based on regression estimates produced by UNCTAD (2006:9).

544. For the top 100 MNEs in 2004, the proportion of foreign employment (49.7%) was somewhat lower than the proportion of foreign assets to total MNE assets (55.8%), which again was somewhat lower than MNE sales as a proportion of total sales (55.8%). For the top 50 MNEs from developing countries, the sales ratio was the highest (43.8%), followed by employment (33.0%) and assets (31.4%).

545. Note that these figures represent the actual numbers employed, not the net employment attributable to MNE activity.

546. Foreign-invested enterprises include all ventures with partial or full foreign ownership.

547. See, for example, Dossani and Kenney (2006) for an interesting analysis of the range of IT-enabled services presently provided by Indian firms, and how the spatial reorganisation of such services may take place in the future.

548. The Japanese model has also made use of the flexibility afforded by the existence of a buffer of temporary employees, consisting mostly of women and students (Kumazawa and Yamada, 1990). However, since the mid-1990s, with the recession in Japan, these models have been severely tested.

549. Some examples are given in Section 15.3.3.

550. UNCTAD (2006) offers some examples of how outward FDI by developing country MNEs promotes domestic employment in the white goods and computer industries.

551. Other data suggested that the employment of nonbank foreign affiliates of US MNEs fell by 11.0% between 1977 and 1988, compared with
a drop in the employment of their parent companies of 5.0% (Mataloni, 1990).

552. As documented, for example, by Bergsten et al. (1978), Lipsey and Weiss (1981) and Blomström et al. (1988).

553. Which is itself explained by the fact that majority investments are often a method used by companies to buy a share of a foreign market.

554. This is in the context of the overall trends in the US labour market, which saw considerable employment losses in the manufacturing sector, offset by an increase in employment in the services sector. At the same time, while labour compensation increased, the increases were not sufficient to offset the job losses, leading to a declining labour share in income.

555. This is similar to some results on the role of exporting firms in the domestic economy. Using a plant-level dataset on US manufacturing establishments in the 1973–87 period, Bernard and Jensen (1997) found that the major shifts in the skill composition of labour during this period were due to between- rather than within-plant movements. In general, increases in employment at the exporting plants contributed strongly to the increase in the relative demand for skilled labour. Additionally, exporters accounted for almost all of the increase in the wage gap between high- and low-skilled workers.

556. Unfortunately the data limitations of the study were considerable, since there are no general accounting standards for reporting geographic employment data, and within the Core 200 group, only a quarter of the firms provided any type of geographic breakdown. See also Urmsinsky (2005) on the lack of MNE disclosure of employment information.

557. The limitations of trade data constrain the ability of researchers to quantify the effects of outsourcing or vertical disintegration. For example, Eurostat data indicate whether exports are destined for foreign assembly and reimportation, but the proportion of US imports reported as representing domestic content has declined in response to preferential and free trade agreements, which have removed the duty-free incentive to report the use of US components (Sheblune, 2004).

558. For an original view of the effects of outsourcing, and of MNEs as facilitators of this process, see Levy (2005).

559. By contrast, Slaughter (2000) found little effect on US wages from an increase in foreign production (as an alternative to contractual outsourcing) within US multinationals.

560. Including both services outsourcing and materials outsourcing.

561. Indeed, it should be noted that both the US and the UK have a positive balance on services in balance of payments terms. See Chapter 14 for more details on the US services balance.

562. Exceptions include labour-intensive FDIs from small countries investing in large countries with a plentiful supply of labour.

563. The authors quote a study by the Netherlands Ministry of Economic Affairs from 1976, which estimates that for every job established in a Dutch company by its foreign affiliates, two to three indirect jobs were created.

564. The results for MNEs are similar to those found for exporting firms. For example, Bernard and Jensen (1995) found that US exporters were larger, more productive and more capital intensive, and paid wages that were 14% higher than non-exporting plants in 1976–87. They also found that while better-performing firms become exporters, it is not clear whether exporting itself allowed for higher growth, partly because there was notable entry and exit to and from exporting. See also Chapter 14.

565. See also subsequent published studies by Lipsey and Sjöholm (2004b) employing the same data.

566. The higher productivity of foreign affiliates has been confirmed in studies conducted in, for example, Venezuela (Aitken and Harrison, 1999), Morocco (Haddad and Harrison, 1993) and the UK (Driffield, 2001a; Girma et al., 2001). See also Chapter 15.

567. See, for example, Pauly and Reich (1997) and Dore et al. (1999) for a comparative exposition of the differences among the major trading nations in stock market capitalisation, institutional ownership and the role played by banks.

568. See Amable (2003) for an interesting argument linking the patterns of economic specialisation at the country level to comparative institutional advantage.

569. See also Florida (2002) on the importance of the ‘creative class’ in the labour force of the US.

570. For example, Oxelheim and Randøy (2005) show that the inclusion of Anglo-American members on the boards of Norwegian and Swedish companies increased CEO compensation.


572. These figures compared with 49% on R&D matters, 31% on the setting of financial targets and 82% on dividend policy.

573. For an examination of how Chinese MNEs might both favour and add value to a network approach to FDI, see Yang (2005).

574. By contrast, Reberrioux (2002) presents evidence to suggest that the large share of foreign ownership of French firms is partly explained by Anglo-Saxon investors’ preference for French firms, since the latter enjoy relatively low levels of workplace democracy.
Chapter 14: The balance of payments and the structure of trade

584. For the link between the theories of trade and international production, see Gray (1992), Cantwell (1994) and Dunning (1997a) (Chapter 5). We would also refer the reader to Chapter 4 for a discussion of alternative models seeking to explain the internationalisation decisions of firms. In this connection, see particularly the work of Markusen (1995, 1998, 2002b), and that of Markusen and Venables (1998).

585. Of these perhaps that of Lall and Streeten (1977) is the most interesting as it examines a number of alternative scenarios. These we discuss later in Section 14.3.3.

586. The link between trade and FDI theory is explored in Chapter 4 and in Chapter 10 in connection with the IDP.

587. Although this is not always the case, as when one developing country invests in another, it may import its capital equipment from a third country. For example, this is the case of some contemporary Chinese FDI in African natural resource sectors.

588. The only exception here is for Brazil in 1997.

589. The real exchange rate is defined as the domestic terms of trade, or the prices of traded versus non-traded goods.

590. FDI consists of three kinds of flows: equity capital, intra-company debt and reinvested earnings. See also Chapter 1.

591. The BEA also provides estimates of the US current account using an ownership-based framework, which is fully compatible with the conventional balance of payments. The ownership-based accounts make it easier to isolate the contribution made by the affiliates of US MNEs abroad, and that made by foreign MNEs in the US, to the current account. See Lowe (2007).

592. See Durham (2004) for an effort to compare the effects of FDI and equity portfolio investment on growth, while taking into account both the quality of financial institutions as well as the absorptive capacity of the host economy in a cross-section of countries. For an exchange of views on whether a general paradigm of portfolio investment and direct investment can, or indeed should, be presented, see Dunning and Dilijard (1999) and Wilkins (1999).

593. Since exporting involves fixed costs, the literature on exporting suggests that firms self-select into becoming exporters, that exporters are more productive than non-exporters, and that their higher productivity precedes the decision to export. Whether higher levels of exports induce further productivity increases is still an open question, although some supporting evidence for this can be found. For example, Bernard and Jensen (1999) found that while employment growth and the probability of survival were higher for US exporters, the same was not true of productivity and wage growth, particularly in the long run. The main reason for this was the considerable dynamism in the export market, with more than 10% of manufacturing plants entering or exiting every year. See also Clerides et al. (1998) for evidence of ‘learning by exporting’ from Colombia, Mexico and Morocco.

594. This relationship was first established by Swedenborg (1979, 1985).

595. The overall relationship between trade and FDI might also depend on the prevalence of intra-firm trade. To illustrate this, Hejazi and Safarian (2001) used a modified gravity model...
embracing both trade and FDI stock data between the US and 51 other countries in 1982–94. They found that while both outward and inward FDI caused increases in US exports, the effect for outward FDI was larger. They explained these results by the prevalence of intra-firm trade, since US exports between US parents and their foreign affiliates were twice as large as the US exports between US affiliates and their foreign parents. Conversely, substantially more US imports were accounted for by foreign affiliates than by US parents. Thus where trade involved largely MNE parents (exports), adding outward FDI to the gravity model should improve its ability to explain bilateral trade. Correspondingly, where trade involved largely foreign affiliates (imports), adding inward FDI to the gravity model should have the same effect, which was confirmed by their data.

The results were robust to using investment counts instead of flows of FDI.

Namely, Colombia, India, Iran, Jamaica, Kenya and Malaysia.

The figures were 2.7% for Kenya; –11.7% for India; –25.5% for Jamaica; –35.3% for Colombia; –37.6% for Malaysia; and –55.0% for Iran.

The following paragraphs are derived from the report originally submitted by Lall and Streeten to UNCTAD.

Using a formula \( B = E_{us} - (M_{us} + Y_{us} + R_{us}) \) where \( E_{us} \) represents exports of US subsidiaries, \( M_{us} \) represents imports of US subsidiaries, \( Y_{us} \) is the earnings of US subsidiaries and \( R_{us} \) is the royalties and fees paid by US subsidiaries to parent companies.

For example, examining the evidence related to three financial crises, those in Latin America in 1982, in Mexico in 1994 and in East Asia in 1997, Lipsey (2001b) draws attention to the relative stability of flows of FDI in comparison to portfolio investment, and the strategic response of US multinationals, which typically increased exports from host countries and reduced local sales in response to currency devaluation. A study by Desai et al. (2006) indicated that MNE affiliates in emerging markets were better able than local firms to increase output after a severe currency depreciation.

See Table 14.1 for an illustration of the income and services balances.

Finished goods are those whose physical state does not change when sold to the external purchaser. However, value added may still be created through marketing distribution and after-sales services. Final products are those which are bought directly by the consumer, for example, from a retail shop (see Gray, 1992).

Transfer pricing will be discussed further in Chapter 17.

Kobrin (1991) related a measure of the intra-firm trade of US MNEs to a group of four independent variables: research intensity; advertising intensity (as a proxy for the importance of market responsiveness); the percentage of total industry sales of US firms generated abroad (as a measure of the degree of internationalisation); and minimum optimal or efficient scale of plant (as a measure of the economies of size). In a cross-sectional study of 56 US manufacturing industries for 1982, Kobrin established that, of the four variables considered, the first three were positive determinants of intra-firm trade, while the sign for the advertising variable was negative, which suggested that the lower the advertising intensity, the less the pressure of firms to respond to differences in national demand patterns, and the greater the incentive for integration and intra-firm trade.

A complication related to the Japanese case is that Japanese exports handled by a Japanese trading company might be recorded as domestic sales. However, there is at least some indication that Japanese affiliates report them as their own exports as well, since the total exports by all Japanese parents are greater than the aggregate Japanese exports in the balance of payments (Lipsey et al., 2000).


Census data on intra-MNE trade are drawn from questions on export and import declarations, while the BEA data come from MNE surveys. On the import side, the Census Bureau uses a 6% criterion of ownership, and it does not distinguish between the contribution of US MNEs and foreign MNEs to US trade (Mataloni and Yorgason, 2006).

For example, Bernard et al. (2003) have introduced a formal general equilibrium model of trade that incorporates plant-level heterogeneity in productivity. Based on the results of empirical studies on US data, their model incorporates the higher productivity of exporters versus non-exporters, the small fraction of firms that engage in exports, and the fact that even those firms that export tend to earn most of their revenues domestically.

However, also here there are notable differences between countries. In the case of Canada, for example, several researchers, from Safarian (1966, 1969) onwards, have found no clear or consistent tendency for foreign-owned firms to engage in the more export-intensive sectors, although it is generally agreed that the foreign affiliates do engage in the more import-intensive sectors. Globerman (1985), for example, demonstrated that the correlation coefficient between the share of inward direct investment...
and the revealed comparative advantage (RCA) index for a sample of 38 manufacturing sectors in 1960–61 was 0.18, but for US-owned firms alone it was 0.28. He also established that over the following two decades, while non-US inward investors significantly increased the competitiveness of comparatively advantaged sectors, US investment (which, in 1988, still accounted for nearly four-fifths of the total FDI stake in Canada) tended to favour sectors with below-average RCA values. These results confirm an earlier study by Brash (1966), in which it was found not only that American-owned manufacturing subsidiaries in Australia were concentrated in import-substituting rather than export-generating sectors, but that in these former sectors, they continued to import a higher proportion of their inputs than their Australian counterparts. See also Koo (1985) on the role of government policy in South Korea in the 1980s.

The reader is also referred to useful summaries contained in Kumar (1990) and Gray (1994). Not surprisingly, empirical studies comparing the export behaviour of import-substituting foreign affiliates in developing countries (for example, Lall and Streeten (1977), Subramanian and Pillai (1979), Lall and Mohammad (1983) and Kumar (1990) for India; Jenkins (1979) for Mexico; Kirim (1986) for the Turkish pharmaceutical industry; Fairchild and Sosin (1986) and Newfarmer and Marsh (1981a, 1981b) for Latin American countries) have found that multinational affiliates tend to record either a lower or a similar export/sales ratio than their indigenous competitors. In the export-oriented sectors, Cohen (1975) concluded that, in the late 1960s, foreign firms in South Korea were more likely to export than their domestic counterparts; in Singapore they were less likely to export; while in Taiwan they recorded about the same export propensities as local firms. Riedel (1975), in a more detailed study of Taiwanese exports, found that only in the electronics sector did foreign affiliates outperform their domestic counterparts in export markets. Schive (1978) established that in nine of 12 manufacturing industries in Taiwan, the exports per employee ratio were higher for foreign than for local firms. Jenkins (1979) reported that in only four of 19 industrial sectors in Mexico did foreign affiliates export more than indigenous firms. In Morocco, although Haddad and Harrison (1993) found that foreign affiliates recorded a higher export sales ratio than their domestic counterparts in 16 of 19 manufacturing sectors, much of their superior performance disappeared if size of firm was controlled for.

612. Ceteris paribus, the export/import balance of foreign affiliates is likely to reflect the RCA of the countries in which they operate, which is, itself, dependent on their degree of openness and participation in regional integration schemes. An early study by Safarian (1966) found that there was no consistent tendency for foreign subsidiaries in Canada to export more or less than domestic firms. By contrast, Stubenitsky (1970) concluded that, in almost all sectors in the Netherlands, the export/sales ratios of US firms were higher than those for indigenous firms. A later analysis of FDI in Belgium (Van den Bulte, 1965) pointed to the same result. In Portugal, Simões (1985) found that in 15 of 24 sectors, foreign subsidiaries recorded a higher export performance than domestic-owned firms.

613. In 2004, joint ventures between MNEs and Chinese firms also accounted for 60% of imports (Whalley and Xin, 2006).

614. Evidence of increased exporting by local firms following MNE entry has been found, for example, in India by Banga (2006), in the UK by Greenaway et al. (2004) as well as in Mexico by Aitken at al. (1997). These and other kinds of spillovers will be discussed in Chapter 16.

615. See also Egelhoff et al. (2000) for an exploration of the influence of three contextual factors, namely, differences between global and multidomestic industries, subsidiary size, and parent home country, on the proportion of sales and purchases of foreign affiliates originating in the home country, Ireland, Europe and the rest of the world for a sample of foreign affiliates in Ireland in 1993.

616. For example, the composition and prioritisation of the welfare-enhancing objectives of both developed and developing countries in the early 2000s is quite different from that of 50 years ago. This is explored in Dunning (2006c). To given an example: in the 1950s very little attention was paid to either security or environmental issues. Today they are top of the agenda of many developed and some developing countries.

617. Traditional theory assumes that any rate of exchange advantage (relative price-level advantage under fixed rates) would be automatically eliminated by expansion of the money supply at home relative to abroad, and by induced differences in absorption rates. However, this does not hold when the nation with the ‘under-valued’ currency invests its current surplus abroad in both financial assets and FDI. This practice confirms the going (real) exchange rate and allows the competitiveness-enhancing advantage to be preserved.

618. Figures from the US Department of the Treasury, Treasury International Capital (TIC) System annual surveys.

619. Furthermore, in December 2006 it was revealed by the Chinese leadership that it was setting

620. ‘The Trans-Pacific Imbalance: A Disaster in the Making’, C. Fred Bergsten, speech at the 16th General Meeting of the Pacific Economic Cooperation Council (PECC), Seoul, September 7, 2005.

621. Since China has expressed a desire to diversify its reserve holdings, one interesting proposal introduced in an Op-Ed piece by Bergsten involves the shifting of some part of China’s reserves from dollars to yen. Such a shift would be likely to strengthen the yen against the dollar, and thus help correct one of the misalignments contributing to global imbalances (‘The yen beckons China’s dollar’, Financial Times, March 13, 2007, www.ft.com).

622. This is the ‘savings glut’ hypothesis of the new Chairman of the US Federal Reserve, Ben Bernanke.

623. The subsequent paperback edition incorporates the most recent data, and no longer considers a ‘soft landing’ a realistic option.

624. This, indeed, is the claim made by Kojima (1978, 1983, 1985, 1990) in respect of Japanese FDI in the 1960s and 1970s. Kojima applauds MNE activity whenever and wherever it helps to overcome cross-border market failure and aids the L-specific advantages of both home and host countries.

Chapter 15: Market structure, performance and business practices

625. Lipsey (2002b) and Bellak (2004a) offer extensive literature reviews on performance gaps in productivity, technology, profitability, wages, skills and growth.

626. As shown, for example, by Blomström and Wolff (1994) in respect of the operation of foreign affiliates in Mexico between 1965 and 1985.

627. To normalise for industry size, the difference in each sector was divided through by the UK share of employment.

628. RCA is similar in construction to RTA discussed in Chapter 11. An alternative measure based on exports alone is the share of world exports accounted for by a country of a particular product divided by the share of total world manufacturing exports accounted for by that country.

629. The 12 countries studied by Dunning were the UK, the US, France, West Germany, Japan, Canada, Sweden, Belgium, the Republic of Korea, India, Portugal and Singapore.

630. Although as Chapter 18 will show, there is increasing evidence that such maximisation is being constrained by an acceptance of at least a modicum of CSR.


632. However, the problem of averaging might arise equally well in the case of a large MNE that undertakes different types of activities in different markets.

633. Gross domestic investment is a geographical measure that includes the investment that is undertaken by firms in a particular country, including the affiliates of foreign multinationals resident in the country. Gross national savings includes saving in the form of retained earnings by the affiliates of the home country multinationals abroad.

634. Ideally, in such a model, one would like to be able to separate the response of domestic investment to outbound FDI flows from the response of domestic investment to the retained earnings of the foreign affiliates. It would also be interesting to know whether a dollar increase in the retained earnings of foreign affiliates had the same impact on domestic investment as a dollar increase in domestic savings, but this was not possible due to data limitations.

635. In this study, MNEs are multiplant firms with more than 10% of their assets abroad.

636. The extent to which the firms were financially constrained was assessed using two criteria. First, they were considered unconstrained in period t if they had paid dividends and issued no shares in period t − 1. Second, firms were considered financially constrained in period t if their profits had not covered interest expenses in period t − 1.

637. In this study, particular examples were given of such an impact in the case of Hong Kong, Taiwan, Singapore and Mauritius (UNCTAD, 2006:177).

638. For example, the profitability of a marketing affiliate of an MNE may be quite unimportant compared to the effects which the presence of the affiliate has on the output and performance of the rest of the MNE. Also, the efficiency of a bauxite mine may be of secondary concern to an aluminium processing company that wishes to safeguard its supplies of bauxite to its processing plants.


640. In these studies, productivity is usually defined as gross or net output divided by numbers employed or wage bill. Occasionally (Dunning, 1976, 1985b) a total productivity index is used. Profitability is defined as either the rate of return on sales or profits (before tax) as a percentage of net assets or capital employed.
Although the highest overall level of productivity was actually in the control group of firms that were foreign affiliates, but underwent no ownership change.

This would be the case, for example, if MNEs, which were more productive than the indigenous firms in the host country on average, tended to acquire plants that were more productive than the host country average.

Unlike in the case of the UK, for example, where domestic acquisitions outnumbered foreign ones by a wide margin, domestic acquisitions in Indonesian manufacturing numbered only 19 during the period under study.

For example, in a study of Brazilian industry in the 1971–77 period, Newfarmer and Marsh (1981b) concluded that indigenous firms were more profitable than MNE affiliates, and that foreign-led industries were more profitable than domestic-led industries. A later piece of research by Fairchild and Sosin (1986) found that in other Latin American countries, foreign-owned firms recorded higher levels of labour productivity but not of profitability. Similar conclusions were reached by Lall (1976) in his investigation of the performance of foreign manufacturing affiliates in India and Colombia, by Gershenberg (1976) in his analysis of such firms in Uganda, and by Fairchild (1977) in his examination of foreign affiliates in Mexico. However, a study by Kumar (1990) on the comparative profitability of foreign-owned and domestic firms in India at the beginning of the 1980s showed that the former outperformed the latter by a significant margin.

The classification of firms into strategic groups is based on the extent to which firms are perceived to be mutually interdependent in their competitive strategies. One implication of the segmentation of industry into strategic groups is that entry barriers are specific partly to the industry and partly to the strategic groups. The latter kind of entry barriers help to explain why some firms in a particular industry may earn higher profits than others (Porter, 1979; McGee and Thomas, 1986; Kumar, 1990).


At the same time, they found that US MNEs were significantly more capitalised than uniactional firms, while the average systematic risk of MNEs was significantly lower than that of domestic US firms.

Different measures and indices of multinationality are discussed in Chapter 2.
659. Among the earlier studies, Geringer et al. (1989) employed a Rumelt-type categorical measure of geographical diversification to study the existence of a threshold of internationalisation using data on the 100 largest MNEs from the US and Europe.

660. While this is not problematic in the event of the initial decision to go abroad, it becomes problematic if subsequent geographical expansion is in fact dependent on the existing degree of product diversification.

661. Categorical product diversification measures often draw on the classification by Rumelt (1974), which is based on product diversity and relatedness. In this context, the Herfindahl index measures the extent to which a particular product or foreign market accounts for a large or small share of the total.

662. Sambharya (1995) found no direct effect on performance for either product diversification or international diversification for a sample of US MNEs.

663. In this study a firm is globally diversified if it reports any sales by foreign subsidiaries.

664. Morck and Yeung (1991) found that multinationality itself was not reflected in a higher Tobin’s q, except for those MNEs that spent more on R&D and advertising. Thus multinationality appeared to add value to investors in the presence of substantial intangible assets, but not otherwise.

665. This is in contrast to the more convergent results obtained by Palich et al. (2000), who performed a meta-analysis of the research on product diversification since 1970. Their results indicate that the dominant result is an inverse U-shaped relationship, whereby moderate levels of product diversification are associated with higher levels of performance than either completely unrelated or completely related types of diversification. See also a 2007 special issue of Management International Review on multinationality and performance.

666. An additional problem related to the measurement of financial performance of MNEs is the fact that since affiliate performance needs to be converted to a common currency to produce consolidated results, a bias in the measurement of MNE performance may arise over time, if the degree of multinationality of the MNE is correlated with the exchange rates used (Gray, 2002a).

667. While this is a plausible argument for any MNE over time, it requires panel data rather than a cross-sectional sample to assess empirically, as different MNEs are likely to be at different stages of internationalisation at any one point in time.

668. However, see also a vigorous response by Contractor (2007a, 2007b). While acknowledging many of the methodological shortcomings identified by Hennart, he argues that the S-shaped general theory can both reconcile prior empirical results, and provide a basis for future analyses concentrating on identifying the optimal range of internationalisation in a given country and sector of activity.

669. See also Chapter 4.

670. In a large home country (the US), this would imply low levels of multinationality (as, for example, measured by sales), while in small, open economies (the Netherlands or Switzerland), it would imply higher levels, which is what we observe in reality. The robust performance of US MNEs could, of course, be influenced by their ability to enjoy scale economies in their home markets before investing abroad, but this is conjecture, and in any case it runs counter to the argument that multinationality is positively linked to performance.

671. See Chapters 5 and 9 for a discussion of the MNE as a coordinating entity rather than an ownership-based entity.

672. Lundan and Hagedoorn (2001a) suggest that growth by alliances or acquisitions requires the ability to coax cooperation out of possibly recalcitrant ‘outsiders’. Learning how to efficiently manage such relationships is clearly an advantage, but it is likely to be firm specific rather than common to all MNEs.

673. An attempt to account for the influence of investment motivation on the multinationality–performance relationship is made by Dunning and Lundan (2001).

674. Scherer (1971) is a classic reference.

675. See, for example, Caves (1982 [1996]).

676. The concentration ratio is the share of the production of an industry accounted for by the N largest firms. ‘N’ varies in number but is usually three or four, but it might be as high as eight. The ratio usually refers to the structure of output in a particular country. It is not necessarily a good guide of the extent of competition for the product being produced, as it takes no account of competition from producers based in other countries.

677. The blurring of the boundaries of the firm, by strategic alliances and the like, is making this kind of concentration very difficult to assess.

678. These are in fact the largest firms within a sample of global top-12 firms by industry.

679. Nonetheless, using data on M&As and aggregate FDI flows in 1995 and 2001, Globerman and Shapiro (2005) found that the most important variables influencing cross-border M&As were the same as those prominent in models of aggregate outward and inward FDI flows.

680. To the extent that the MNE is seeking to augment its technological assets, alliances are also a viable alternative. See, for example, Lundan and Hagedoorn (2001a).
681. Although contrary evidence is provided by Morosini et al. (1998) who present evidence that cultural distance might enhance cross-border acquisition performance by enabling the acquiring firms to learn new sets of routines and repertoires that are embedded in national culture.


683. Examples of such studies are: Knickerbocker (1976) for the US; Safarian (1966) and Rosenbluth (1970) for Canada; Stubenitsky (1970) for the Netherlands; Stonehill (1965) for Norway; Dunning (1958, 1976, 1985b) and Steuer et al. (1973) for the UK; Haex et al. (1979) for Belgium; Fishwick (1982) for France; Brash (1966) and Parry (1980) for Australia; Deane (1970) for New Zealand; Newfarmer and Mueller (1975), Newfarmer and Marsh (1994) and Willmore (1986, 1989) for Brazil; Newfarmer and Mueller (1975), Connor (1977) and Blomström (1986, 1989) for Mexico; Lall (1979) for Malaysia; Kidron (1965), Lall and Streeten (1977) and Kumar (1990) for India; Lecraw (1985a) for Singapore; and Haddad and Harrison (1993) for Morocco.

684. This is because, for technological and other reasons, most sectors have become internationalised and an increasing number of countries are, themselves, spawning their own multinationals.

685. In other words, the strategic group to which the multinational affiliate belongs is higher than that of the sector of which it is part.

686. For example, early studies by English (1964) and Safarian (1969) discovered that many US subsidiaries were not only smaller than their Canadian competitors, but that most of them produced at well below optimum (plant) capacity, that is, where average unit costs are at their lowest point.

687. For some interesting case studies of the comparative impact of acquisitions and greenfield FDI on a variety of host country variables including market structure, knowledge diffusion and human resource development, see Estrin and Meyer (2004).

688. Indirectly, these results are also corroborated by those of Driffield and Munday (1998), who found that inward FDI reduced the profitability of domestic firms in the UK in 1990–94.

689. See Jenkins (1990) for a review of the early evidence that reached the same conclusion.

690. The fragmentation of value chains and the growth of outsourcing has also resulted in the emergence of large contract manufacturers such as Solectron of the US and Flextronics of Singapore which coordinate their own global value chains.

691. Indeed, while the research has tended to focus on the costs of entry, the costs of exit are also relevant, particularly in the European context.

692. It is often assumed that various market imperfections, including unpredictable and extensive regulation and limited access to credit in developing countries, might favour larger firms (among them MNEs). However, Tybout (2000) found little evidence to support this contention, as he found that a high turnover of plants and employment in developing countries, and the plant dispersion in productivity, was no greater than in the OECD. Uncertainty about policies, deficiencies in the rule of law and corruption seemed to be more problematic than market structure.

693. See, particularly, Rugman and Verbeke (1990).

694. See Graham (2002) for an application of this approach to the telecommunications sector, where the investing firm might have benefited from subsidies or monopoly rights in its home market, and where entry into a rival market might invite reciprocal entry in the home market.

695. In general, any observed aggregate improvement in productivity is likely to be a combination of within-firm improvement, as well as entry and exit in the industry.

696. This is essentially the reverse of the linkage effect discussed in Chapter 16.

697. A caveat is that much of the investment into US manufacturing in that period was from Japan, which, as we have seen earlier, was prompted by restrictions on trade, and thus does not represent a scenario where firms are free to choose how to enter a market.

698. The study focused on the differences between the two kinds of US supplier firms, and the authors did not test whether the Japanese transplants themselves were in fact more productive than their American counterparts. This would be necessary in order to determine whether any external effects failed to materialise because local firms were unable to appropriate them, or because the MNEs in fact carried no distinct productivity advantage.

699. The conceptual discussion in the paper emphasises the role of positive market externalities from linkages and increased demand for intermediate inputs in encouraging domestic entry, although these could equally well result from non-pecuniary externalities such as knowledge spillovers. In another study, Görg and Strobl (2003b) investigated the impact of knowledge spillovers from MNEs on domestic plant survival in Ireland. They found that for domestic plants, the presence of MNEs had a positive effect on plant survival only for plants in high-tech sectors. In the foreign subsample, the presence of other multinationals was shown to reduce plant survival in low-tech sectors, which typically involve more local sales and more competition between multinationals for market share. It was demonstrated that both foreign-owned and smaller plants had higher hazards of exit, as did foreign plants as compared to indigenous plants.
Chapter 16: Linkages, spillovers and clustering


701. In unconditional comparisons, MNE affiliates are generally less likely to exit than local firms, since they tend to be larger, more productive and more likely to be engaged in exports.

702. See Chapter 5 for a discussion of the content of such incentive structures and practices within the MNE.

703. But, as we have already suggested, these practices may have the reverse effect, that is, FDI might overcome as well as create barriers.

704. Practices deemed unacceptable from a social, cultural and political standpoint are dealt with in Chapters 18 and 19.

705. For an examination of these practices see, inter alia, Penrose (1971) and Vernon (1971) for oil; UNCTAD (1973) and Read (1986) for bananas; Hennart (1986a, 1986b) for tin; and Long (1981) for bark (quinine) and cocoa. The reader is invited to consult a series of studies jointly published by the Economic Commission for Africa (ECA) and UNCTC during the late 1970s and 1980s on the role of MNEs in a variety of industries in different African countries. See, for example, ECA/UNCTC (1984a, 1984b).

706. Such clauses include provisions such as a global ban on exports, exports prohibited (or permitted) to specified countries, restrictions on the use of trademarks in exports, tied purchases and restrictions on production patterns.


708. Some commentators also assert that while there is a great deal of cooperation between the authorities in the US and the EU, there is none less a basic difference in the approach each side takes to the issue of competition. Specifically, the EU competition authorities are more likely to consider complaints by competitors, and to regard IPR in less absolute and restrictive terms than the US anti-trust regulators (‘Europe regulators outpunch US’, Financial Times, November 3, 2006, www.ft.com). See also Chapter 19.

709. Amable (2003) argues that the content and quality of national institutions affects the pattern of comparative resource and capability advantages. It follows then that, in so far as MNEs may transfer O-specific institutional advantages (Oi in Chapter 5), they may indirectly (as well as directly) affect the content and structure of these advantages.

Chapter 16: Linkages, spillovers and clustering

710. Since meeting the competitive challenge posed by a powerful new entrant requires more effort on the part of the incumbent firms, competition effects are not externalities. This point is taken up again in Section 16.3.3.

711. Although high oil prices and the growing concern over climate change might result in increases in the costs of transport, particularly by air and sea.

712. We would reaffirm our earlier distinction between finished and final products. The former represent the physical attributes of an item or service at the completion of its production process. Such finished goods, however, may have value added to them through a variety of services (for example, transport, storage, merchandising and retailing). The final product is that actually purchased and used by the final consumer. Indeed, the use of extensive outsourcing has reduced the possibilities for firms to differentiate their products, and as a consequence, the service component attached to a product has become more important for sustained competitiveness.

713. This may include special inducements to develop small-scale sectors in regions of high unemployment or in lagging areas. In Japan, for example, government policy has been conducive to the creation of clusters of small enterprises to serve large industrial producers.

714. However, McIntyre et al. (1996:461) suggest that while EPZs are unlikely to be important engines of development, given the right institutional environment, they ‘can act as a catalyst if incorporated into a well orchestrated industrial policy’.

715. Although the transfer of technical knowledge is often an important aspect of linkage relationships, we would again emphasise that the MNE can also engage in the transfer of managerial and organisational practices and incentive structures, which may have an even greater impact on the recipient firm. This was found to be the case, for example, by Duanmu and Fai (2004) in a study of 16 supplier relationships between foreign investors and their local Chinese partners in the electronics sector.

716. See also Okada (2004) for an interesting study on skill upgrading in the Indian auto component industry, comparing a Japanese–Indian joint venture and the domestic firm Telco, owned by the Tata Group.

717. Although, as the authors point out, even with low levels of linkage formation, the export-orientated garment industry in Sri Lanka has made a substantial contribution to the local economy by providing employment and entrepreneurial opportunities.

718. However, the extent of local production involving advanced technology also depends on the technology gap between the foreign affiliate and indigenous firms, and the absorptive capacity of the latter. See Section 16.3.
719. Although Daimler Benz held a 14% shareholding in 1977.
720. In all of the six manufacturing sectors considered by McAleese and McDonald, the expenditure on Irish materials by new firms – the great majority of which were foreign owned – rose between 1966 and 1974.
721. By contrast, in a comparison of foreign- and domestically owned firms in the Brazilian electrical industry, Newfarmer and Marsh (1981a) demonstrated that the degree of vertical integration was negatively correlated to the degree of foreign ownership; this was later confirmed by Willmore (1986). See also Halbach (1989) and UNCTC (1992a).
722. As a contrast to the numerous studies on buyer-supplier relationships in the automotive and electronics industries, see Lane and Bachmann (1996) for a comparative sociological view on the formation trust-based relationships in the value chains of the mining machinery and kitchen furniture (fitted kitchens) sectors in Britain and Germany.
723. This was also found by Scott-Kennel (2004) for foreign affiliates in New Zealand.
724. Based on a survey in 1997, Driffield and Mohd Noor (1999) found that US affiliates were more embedded than the Japanese, EU or other South-East Asian affiliates in Malaysia. While there were significant linkages formed between MNEs and local firms, these were mostly of a dependent rather than developmental kind. See also Turok (1993, 1997) and McCann (1997) for a debate on dependent and developmental linkages in the electronics industry in Scotland.
725. In an interesting theoretical contribution, Scott-Kennel and Enderwick (2005) analyse the development of local linkages in New Zealand to explain how O advantages are accumulated by local firms at different stages of the IDP. See also Chapter 10 of this volume.
726. Due to the long duration of the subsidiaries, it is likely that a higher proportion of firms had formed local relationships at some time in the past.
727. Although local content rules still appear in different guises, such as in connection with antidumping actions.
728. See also Hewitt-Dundas et al. (2005) on MNE sourcing patterns in Ireland and Barkley and McNamara (1994) on the linkage patterns of foreign and domestic manufacturers in Georgia and South Carolina.
729. Export-orientated affiliates comprised the majority in the sample. In subsequent analyses, the market orientation of the affiliate was used as one of the firm-specific explanatory variables, along with the age, size and mode of entry of the affiliate, and its role in terms of production, marketing and R&D.
730. See also Barclay (2000) for a careful and detailed study of MNEs investing in Jamaica, Barbados and Trinidad and Tobago.
731. A side-effect of the concentration of buying power in a small number of retailers has been a reduction in the different varieties of fresh produce that are grown, and the unsustainable clearing of land and destruction of habitat to meet the explosive demand for, for example, soybeans (in Brazil) or palm oil (in Indonesia).
734. This, of course, assumes that the output of foreign firms does not replace that of domestic firms. However, even if this is the case, additional value may be created through high productivity of the suppliers to foreign affiliates.
735. There is some evidence (Dunning, 1986b) that Japanese affiliates do provide more technical advice and information to their industrial users and clients in the UK than do their UK competitors. Often these O advantages are short-lived, as they can readily be copied by their competitors.
736. Gachino (2006b) provides an interesting analysis of the effects of FDI in Kenya that combines a macro-level analysis of productivity spillovers with a micro-level investigation of the various types of linkages between MNE affiliates and local firms.
737. The model assumes that MNE activities occur at the expense of other activities that might create linkages. This is appropriate in countries with no surplus labour, but may not necessarily be applicable in a developing country context.
738. Unfortunately in her sample it was not possible to distinguish a greenfield investment from an acquisition.
739. As shown, for example, by their profitability, productivity and market share.
740. See, for example, Blomström and Kokko (1998), Sjöholm (1999), Castellani and Zanfei (2003), and various studies reviewed in Section 16.3.5 on the impact of technology gaps.
741. As Haskel et al. (2002) point out, there is a considerable difference in the welfare implications of genuine spillovers, which are Pareto improving, and competitive effects, which transfer wealth from the harder-working employees to shareholders and customers.
742. See, for example, the recent empirical and theoretical work by Scott-Kennel and Giroud (Giroud and Scott-Kennel, 2006; Scott-Kennel, 2007), which has sought to make a clear distinction between the beneficial effects arising from linkages, and those attributable to spillovers.
However, the authors, in particular Blomström (1986, 1989), acknowledge that since foreign companies tend to cluster in high-technology and marketing-intensive sectors, the causal relationship might operate in the reverse way.

Some evidence in favour of this suggestion is contained in the paper, where the authors cite another study as finding positive spillovers in the Irish economy using a sample of firms obtained from Forfás, which includes some 1,300 indigenous plants which are likely to be larger and more productive than the roughly 3,800 indigenous firms in the original sample.

The study also analysed imports as a channel for spillovers, but found no significant results.

Measured in 1993, the range was 9–20%, depending on model specification.

They also restrict the analysis to affiliates that had not experienced a change in ownership during the period, as well as eliminating the top and bottom five percentiles of firms in terms of value added and wages.

Here, the technology gap is defined as the domestic firm’s TFP relative to the 90th percentile in the industry, skill level refers to the ratio of skilled to unskilled employment, and the level of competition is measured by an import penetration index.

The study employs a two-stage process, whereby the threshold levels of absorptive capacity are estimated, rather than being determined by the researcher, as the latter could lead to an arbitrary division between high- and low-gap firms.

An industry-level analysis conducted by Hubert and Pain (2001) also found positive intra- and inter-industry spillovers from FDI on the labour productivity of domestic firms in a panel of 15 manufacturing sectors from 1983 to 1992.

Productivity gaps can arise because the local plants use different technologies, have different factor intensities, or produce very different kinds of products from foreign firms within the same industry group. See also Chapter 15.

Since FDI spillovers are related to disembodied technology, the degree of foreign presence is not supposed to influence the average capital intensity of local firms.

Using plant-level panel data for 1990–95 in Indonesia, Takii (2005) found positive productivity spillovers, but these were smaller in industries where a high share of MNEs had majority levels of ownership. They were also smaller or even negative in industries where a large technology gap existed between local and foreign firms.

Foreign-owned firms were those with more than 25% equity participation.

Of course, both wages and sales or export growth are likely to be connected to improvements in efficiency.

This is different from studies that treat exports (or imports or FDI) as a channel for the acquisition of knowledge, which may spill over and induce productivity gains in other domestic firms. See, for example, Wei and Liu (2006).

Whether higher levels of exports induce further productivity increases is still an open question, although some supporting evidence for this can be found.

This approach avoids the selectivity bias associated with focusing solely on firms that are already exporters.

The reverse spillovers discussed in Chapter 12 reversed the location, that is, instead of spillovers in the host economy, the focus was on spillovers in the home economy. The reverse spillovers discussed here occur in the host country, but flow from the local firms to the MNE, instead of vice versa. As such, spillovers to foreign affiliates in a host country are likely to precede any spillovers to the home country of the MNE.

The regional concentration coefficient is the coefficient of variation for an industry-level location quotient, and it is similar in construction to the RTA measure discussed in Chapter 11.

See Chapters 9 and 11 on knowledge-seeking investment by MNEs. See also Ivarsson and Jonsson (2003) for an analysis of asset-seeking investment, based on a sample of 287 majority-owned affiliates in Sweden in 2000.

Tacit knowledge cannot easily be codified and transmitted, and therefore requires a local presence.

Jones (2004) indicates that during the first global economy, the ratio of world FDI stock to world output reached its peak of 9% around 1914. This level was not reached again until 1997, well into what Jones has termed the ‘second global economy’, which began to take shape in the late 1970s. A major difference between the first and second global economies is the degree of interconnectedness between dispersed activities, and the possibility that decisions or activities in one part of the world can have significant consequences for economic activity in other parts of the world. A similar distinction between 19/20 and 20/21 globalisation is made by Dunning (2006c).

For example, based on county-level data in the US, Porter (2003) found that the performance of 172 economic areas (as defined by the BEA) across the US was influenced by the strength of local clusters, and particularly by so-called ‘traded clusters’, which supported higher wages and employment.
766. Unlike much of subsequent work, Smith’s analysis took account of both intra- and inter-sectoral trade as well as international trade, as indicated by Ozawa (2000).

767. See, for example, Nachum (2001) for a review article on the geography of MNE operations and Enright (2000c) on regional clustering. Two excellent references on the economics of cities and industrial location are Acs (2002) and McCann (2002), respectively. See also the edited volume on industrial location and competitiveness by Oxley and Yeung (1998).

768. Dunning (1996) and Dunning and Lundan (1998) present survey-based evidence of the global sourcing of productive assets by Fortune 500 firms. However, it should be noted that the process of knowledge integration is far from being automatic. Chapter 8 discussed at some length the difficulties that modern MNEs face in coordinating and integrating the flows of dispersed knowledge within the firm.

769. For example, in the so-called ‘workshop of the world’, bounded by Guangzhou, Hong Kong, Shenzhen and Macao, the density of suppliers in the region has made it possible for most components to be sourced within a one- to two-hour trucking radius. However, the success of the region has also resulted in wages being bid up, and the pollution in the region is beginning to threaten the ability of cities such as Hong Kong to attract and retain managerial talent at the required levels (‘Hong Kong’s air pollution cuts its appeal for expatriates, Financial Times, April 3, 2006, www.ft.com; ‘The world’s workshop on the cusp of another transformation’, Financial Times, October 24, 2006, www.ft.com).

770. For a first attempt to decompose the location factor (at the national level) into agglomeration and demonstration (or signalling) effects using data on the entry of foreign (mostly US) firms into Ireland, see Barry et al. (2003b).

771. In a study of financial and professional services FDI to the US, Nachum (2000) finds that a combination of traditional location attractions and agglomeration economies explains the location choice, but traditional location advantages have more explanatory power than agglomeration economies. See also Nachum and Keeble (2003) on the clustering of media firms in central London.

772. See, for example, Florida (1996) on the role of MNEs in transforming the local economy in the industrial Midwest in the US, Zhou and Xin (2003) on the role of MNEs in the ICT cluster in Zhongguancun (Beijing) in China, Birkinshaw (2000c) on the IT cluster around Stockholm and Enright (2000c) on the interdependent development of MNE subsidiaries and the financial services cluster in Hong Kong, and the concentration of regional MNE headquarters in Singapore. The book by Dicken (2004) also provides numerous examples of how MNE activity is helping to reshape the global economic map.

773. While MNE location choice has mainly been studied at the level of countries, location choice at the level of US states has been studied by, for example, Coughlin et al. (1991) and Wheeler and Mody (1992). See also de Propris et al. (2005) for a study of location of inward FDI across 103 Italian provinces.

774. A possible problem with this comparison is that the Japanese investment is much more recent, and possibly driven by different locational factors from the original clustering of US investment.

775. Driffield and Munday (2000) also found evidence that in the UK, FDI has contributed to the development of the comparative advantage of selected UK industries, which in turn has acted as a stimulus for further FDI.

776. In a related study, Shaver et al. (1997) found that firms benefited from their own experience, as well as the experience of other firms, when entering the US market, as firms with prior investments in the US were more likely to survive than first-time entries. Additionally, investments in industries with high foreign participation were more likely to survive. The latter effect was particularly strong for firms that had made prior investments, but not in the industry concerned, which would suggest that these firms were able to benefit not just from their own experience, but from that of other firms in the target industry.

777. Although it should be noted that this effect might be influenced by the specific conditions in industries such as biotechnology, where firms are notably concentrated, but over the last two decades have mostly recorded poor financial performance.

778. On national innovation systems, see Lundvall (1992) and Nelson (1993). See also the framework of national innovative capacity discussed by Furman et al. (2002) and a critical assessment of the concept of regional innovation systems in the context of the ‘new economy’ by Cooke (2001). The book by Freeman and Soete (1997) is an excellent general reference on the economics of innovation.

779. For a discussion of the problems related to migration and the brain drain, see Özden and Schiff (2006). See also Markusen and Trofimenko (2007) for an interesting effort to model the influence of hiring foreign experts on the cost and speed at which productivity improvements took place in local firms by using a sample of 304 manufacturing plants in Colombia.

780. This is building on the pioneering work of Jaffe et al. (1993), who found that patent citations tended to occur in the same area as the originating patent.
Chapter 17: Distribution of the value added created by MNEs

781. The concentration of innovative (and productive) activity in the same area is problematic for the study of the geography of knowledge transfer using patent citations (see Chapter 11). For example, most US pharmaceutical firms are located in New Jersey. Consequently, all firms cite New Jersey patents, and the possible co-location of the citing firm in New Jersey reveals no additional information (Frost, 2001).

782. European regions are defined by the European Nomenclature of Territorial Units of Statistics (NUTS).

783. In subsequent studies, the authors extend the analysis to regions in the UK, Germany and France, as well as to a cross-national analysis within the EU (Cantwell and Iammarino, 2003). For an examination of technological globalisation, innovatory centres, and the emergence of corporate international networks for the accumulation of geographically diversified technological competence, see also Cantwell and Janne (1999), Cantwell and Piscitello (1999, 2000, 2005) and Cantwell and Noonan (2001).

784. See Young et al. (1994) for a comprehensive analysis of the characteristics and roles of subsidiaries and the policy options available to governments at the regional and national levels.

785. See, for example, Chen and Chen (1998) on the role of external (inter-firm) linkages in influencing the location choice of Taiwanese firms abroad and Yeung (1997) on the network linkages of Hong Kong firms. In their study of the cluster of motor sport companies in Southern England, Tallman and Jenkins (2002) found that alliances to firms outside of the region were critical to the performance of the core firms in the region.

786. Birkinshaw and Hood (2000) present a tentative mapping of the different roles of subsidiaries contingent on the characteristics of the local clusters in which they operate.

787. Mudambi (1998) found that FDI is duration dependent, that is, that investors with longer tenure are more likely to make new investments in the area.

788. Subject, of course, to a variety of non-economic constraints which we shall deal with in Chapter 18. Indeed, strategies of tax minimisation and practices such as transfer pricing can themselves be seen as issues of social responsibility.

789. It should be noted that governments might give incentives in period $t$ to capture a larger tax revenue in time $t+1$. Moreover, some of the gains might be indirect (for example, an upgrading of human capital). See, for example, a report by UNCTAD (2000a) that reviews the different kinds of tax incentives currently in use in a wide range of developing countries. These measures include tax holidays or tax exemptions, reduced tax rates, investment allowances and tax credits, duty exemptions or reductions and R&D allowances or other deductions for qualified expenses.

790. That is, taxes less subsidies and so on, from any given amount of taxable income earned.

791. Locational competition between governments within the EU employing covert rather than overt means is discussed in Ghauri and Oxelheim (2003).

792. For example, Musgrave (1969) and Bergsten et al. (1978) for the US, Reddaway et al. (1968) and Dunning (1971a) for the UK, and Swedenborg (1979) for Sweden. The World Investment Report 2006 (UNCTAD, 2006) addressed this issue from the perspective of MNEs originating from developing countries.

793. The subjects of equity and neutrality in the international taxation of income and capital are extremely complex, as both concepts can be interpreted in various ways. For example, while inter-nation equity is concerned with the allocation of gains and losses from MNE activity between home and host countries, inter-individual equity implies that the home country should levy the same tax on each resident (including resident corporations) irrespective of where the income is earned. Inter-nation neutrality in taxation suggests that the MNE’s choice of the location of its investment should be independent of international tax differences. Inter-nation equity from a national viewpoint requires that the source country set its tax rate so as to maximise its benefits from FDI. However, inter-individual equity from a national viewpoint defines equal treatment of taxation of the income of a company by the home country irrespective of where it is earned. For a more detailed review of these concepts and their implications for MNE activity see, for example, Alworth (1988) and Desai and Hines (2004).

794. Such actions might include limiting the number of designated tax haven countries and/or to limit the extent to which MNEs may accumulate undistributed earnings in closely controlled subsidiaries (Alworth, 1988).

795. Branch plants are subject to US taxes whether or not dividends are paid, and thus without deferral, but these account for less than 5% of all the affiliates of US firms.

796. For example, whereas in the case of a tax credit system without deferral the financial policy of an MNE is likely to be the same as that of a unational company, with deferral, neutrality is unlikely to hold; and, dependent on the
806 proportion of interest payments which are tax deductible, and the tax rates on undistributed earnings in the home and host countries, the MNE might choose to finance its foreign operations either entirely from retained profits or only moderately so. Similarly, in instances of a tax deduction system with deferral, it may be shown that a foreign affiliate will never issue new shares, in preference to financing investment by retentions when the borrowing rate of interest is higher in the home country than it is in the foreign country (Alworth, 1988).

797. The tax base is affected by the entire range of legislation that affects the allowances and deductions that apply to capital expenditures, pension contributions and so on. Since the number of factors influencing the tax base is extremely large, the literature typically focuses on only one aspect, namely the depreciation allowances for capital expenditure.


799. Although rates based on actual tax revenues are also sometimes called effective tax rates to distinguish them from statutory rates.


801. In Chapter 16 we labelled these as ‘endowment effects’ and ‘agglomeration effects’. Endowment effects refer to the immobile resources, either natural or created, that make particular locations attractive for economic activity. Agglomerative economies refer to the additional benefits derived by a firm from locating in the proximity of other firms due to expected spillovers, or other strategic or competitive considerations.

802. Earlier research on the impact of country-specific taxation differences on the level and structure of MNE activity surveyed by Kopits (1976b) confirmed that the respective elasticities were almost universally negative (that is, as tax rates increase, the activities of MNEs decline) and often quite significant.

803. Elasticity is defined as the percentage change in one variable in response to a percentage change in the other variable. A semi-elasticity is a level change in one variable in response to a percentage change in the other variable.

804. The mode of entry might play a role as well. Swenson (2001) found that higher state tax rates in the US attracted fewer new plants and plant expansions, but they did not discourage foreign acquisitions.

805. Another study applying a gravity model that explicitly accounts for credit and exemption countries is by Bénassy-Quéré et al. (2005) on bilateral FDI flows among 11 OECD countries in 1984–2000. After controlling for market size and the provision of public goods, the authors find that taxes do seem to affect FDI, but in an asymmetric fashion, so that while lower tax rates fail to attract investment, higher rates tend to discourage it. Furthermore, credit countries seem to react to tax rate differentials in a non-linear fashion, which might be caused by the underlying proportions of firms with excess credit.


807. Hines (1999) offers a comprehensive review of the literature concerning taxes and MNE behaviour, while Desai et al. (2006c) summarise some recent research results. See also Gresik (2001) and Morisett and Pirnia (2002) for reviews.

808. Desai et al. (2001) apply a Lintner dividend payout model, which is usually applied to dividends to shareholders, as a baseline for intra-firm dividends. They find that firms also have a desired intra-firm dividend level from which they do not want to deviate. An alternative view introduced by Kopits (1972) is that MNEs have a desired level of capital accumulation (financed through reinvestment), which, in turn, determines the level of the intra-firm dividend. For an extension of this approach, see Lundan (2006). The self-financing argument has strong historical support (see, for example, Penrose, 1956 and Chandler, 1990), although the use of reinvested earnings to finance affiliate expansion may have become somewhat less important over time.

809. Deferral of repatriation may also be increasingly undertaken via indirect affiliate ownership (for example, holding companies). Desai et al. (2002) show that indirect ownership of US affiliates has increased from around 15% of all affiliates in 1982 to over 35% in 1997.

810. Dividends are different from royalties and interest, in that the latter can generally be deducted from host country taxable income.

811. See also Kopits (1976a) for an early study of tax-induced distortions in intra-firm royalty payments.

812. Although dealing with the issue of excess credit empirically is very difficult due to the problem of endogeneity.

813. For example, Stremrod (1990) compared the behaviour of foreign affiliates from credit and exemption countries in the US, and found no difference in their behaviour. The type of FDI did matter, however, as higher taxes had a negative effect on (equity) FDI and transfer of funds (intra-firm loans), but not on reinvested earnings.

814. An advantage of this approach is that there is likely to be more variation in tax rates within the same MNE, than between firms in any given country.
815. Of course, the regional level may play an important role as well. Among the benefits of the new legal form of a European company (Societas Europea, SE) is that there is no income tax liability incurred when distributing dividends from one wholly owned EU affiliate to another, and MNEs are able to shift domicile from one member state to another without triggering a tax charge. Allianz, the German insurance firm, is among the small group of MNEs that have made the change to a SE so far.

816. The theory of optimal taxation implies that the more immobile factors of production would be taxed more heavily than the more mobile factors. Assuming that capital is more mobile than labour (or land), this would suggest that taxation should move away from the taxation of capital. Indeed, taxes on capital income have been reduced to levels below those for labour income, and the effective marginal rates for taxation of capital have tended to converge across countries (Barba Navaretti and Venables, 2004).

817. See also Grubert (2005) for a critique of the CON and NON concepts.

818. Some 348 parent companies and 128 affiliates were interviewed in 22 countries.

819. Presumably, Country B would not object as its tax revenue is increased.

820. See, for example, an early contribution, including some empirical analysis, by Lill (1973).

821. Of course, only a proportion of call centres provide such services as part of the MNE, rather than on the basis of a contractual relationship.

822. See Chapters 3 and 5.

823. In any event, for this reason TPM may not be in the long-term interests of the partnership.

824. It should be emphasised that not all governments may be opposed to TPM. Indeed, governments of tax haven countries may positively welcome it!

825. Although from the MNE’s vantage point, the import duties cannot be so high as to wipe out the tax benefit.

826. Among the firm-specific factors are the size of the firm and its strategy towards both product (or process) diversification and the geography of its production and markets.

827. By which we mean the extent to which there is also an external market for the goods and services traded – or similar goods and services – and the frequency with which they are traded.

828. For example, the profits (and losses) declared in one location have to be feasible given the extent of value added in that location.

829. For a comprehensive theoretical discussion and a review of the empirical evidence, the reader is invited to consult Rugman and Eden (1985), Plasschaert (1994) and Eden (1998).

830. The study combined data on Canadian transactions with similar data from the US in order to gain a sufficient number of market and non-market transactions.

831. Tang (2002) offers five recent case studies of transfer pricing in large MNEs. These examine who sets the transfer prices, what kinds of factors are considered when setting the transfer prices, and how firms deal with the potential conflicts between tax objectives and issues related to management control. Unfortunately, few commonalities emerge from the analysis.

832. Both Tang and Arpan prefer to use the words ‘transfer pricing’ rather than ‘transfer price manipulation’. Because of this it is not completely clear from the analysis – particularly that of Tang – to what extent transfer prices actually do differ from arm’s-length prices.

833. This included such variables as compliance with tax and customs regulations, anti-trust and dumping legislation, and financial reporting rules of host countries.

834. Other studies looking at different methods of transfer pricing are reviewed in Borkowski (1996).

835. Such identification and implementation requires appropriate institutional mechanisms for monitoring intra-firm transactions, an audit procedure for reviewing and evaluating transactions not routinely monitored, machinery for collecting the relevant information about market and non-market prices, costs, mark-ups and the like, and to make the necessary adjustments consequent upon transfer price audits (Irish, 1987).

836. See Nicodème (2006) for a discussion of the recent developments in the EU.

837. Kobrin (2001b) provides a thoughtful discussion on the issues of governance on the Internet.

838. This example assumes that the intangibles possessed by the call centre are relatively minor compared to the intangibles of the parent.

839. Tax-sparing policies entitle firms to claim foreign tax credits for income taxes they would have paid to foreign governments in the absence of tax holidays and other inducements offered by developing countries. Tax-sparing policies are not granted by the US, which is claimed to have distorted US investment to developing countries (Hines, 2001a).

Chapter 18: Political, cultural and social responsibility issues

840. See also Suder (2004) on the implications of terrorism for international business.

841. This will vary between countries according inter alia to the significance of the resource(s) to the local economy.

842. See especially Sunkel (1972) and Hirschman (1969). For an overview and critical analysis of this literature, see Jenkins (1987).
843. A ‘Catch 22’ situation is one in which each of the options open to solve a particular problem is equally impractical or unacceptable.

844. For an evaluation of the scepticism with which some East African countries view inward FDI, see Moss et al. (2005). In general, the authors conclude that such scepticism is unwarranted on economic grounds, since a survey conducted by them found that foreign subsidiaries are more productive than indigenous firms, bring management skills, invest more heavily in infrastructure, and in the training and health of their workers, in addition to providing access to global markets.

845. See Chapter 2.
846. See also Chapter 19.
847. The extra-territorial application of the TWEA is explored in Chapter 19.

849. In particular, they cite the case of Ford in Germany, which, during the Second World War, appeared to act as ‘a good but somewhat ineffectual corporate citizen’ (Graham and Krugman, 1989:77). Nonetheless, Ford, along with several other companies, was eventually sued for its use of forced labour during the war (Stephens, 2002).

850. The use of the MNE network to enforce home country, rather than host country, laws and regulations extra-territorially is discussed in Chapter 19.
851. For example, Graham and Krugman (1989) quote the case of MITI ordering Kyocera, a Japanese producer of high-technology ceramic products, not to allow its US affiliate to supply ceramic nose cones to the US Tomahawk missile programme.

852. The edited volume by Harrison and Huntington (2000) includes several interesting essays on the role of culture in economic and social life. See also Redding (2005).
853. See Kirkman et al. (2006) for a comprehensive review of the research employing Hofstede’s cultural dimensions.
854. These included efficiency, diligence, orderliness, punctuality, frugality, honesty, rationality in decisions on actions, readiness to change, alertness to opportunities, energetic enterprise, integrity, cooperativeness and willingness to take the long view.

855. For example, the Japanese are thought to take a longer view of business planning than the US. They are also more cooperative, punctual, orderly and frugal, but Americans probably are more alert to opportunities, more energetic and value efficiency particularly highly. The Swiss and Italians have different values on punctuality, and the British and the Japanese different attitudes towards incentives. The Chinese are both individualistic, yet also strongly family orientated.

856. On matters such as attitudes towards achievement, authority, wealth accumulation, interpersonal relations, security, innovation and so on. Moreover, successful MNEs recognise the adjustments which need to be made are not all one-way. This lesson has been most difficult for US MNEs to learn. So often in the past they have pursued an ethnocentric cultural attitude, as a result of which they have failed to transplant their non-cultural O-specific advantages successfully.

857. For further discussion of psychic (cultural) distance, see O’Grady and Lane (1996). For a discussion of institutional distance, see Xu and Shenkar (2002) and Dunning (2006b).

858. Thus Japanese MNEs have transferred at least some of the cooperative relationships, which they enjoy with their domestic suppliers, to their overseas operations. Such relationships had very different cultural implications to the less filial relationships which US firms were accustomed to having with their suppliers, although in many sectors, such as electronics and the automotive sector, the trend has been for more collaborative linkages to be formed.

859. It is true that such hotels, relative to their domestic counterparts, tend to be concentrated at the luxury end of the market, but if there is a ‘conspicuous consumption’ effect, it is the foreign tourist and, particularly, the wealthier domestic tourist, who must be held to account.


861. See, for example, Blowfield and Frynas (2005) and UNRISD (2003) on the narrowness of the CSR agenda, its focus on issues of relevance to developed countries, and the exclusion of areas of major importance, such as taxation.

862. The scandals in the US led to the introduction of the Public Company Accounting Reform and Investor Protection Act of 2002, known as Sarbanes–Oxley, which requires that corporate officials personally certify that the reported figures fairly represent the financial condition of the firm. Although the Securities and Exchange Commission had a longstanding policy dating back to the 1930s of accommodating cross-border differences in governance, and exempting foreign private issuers from many of its rules, Sarbanes–Oxley represented a break with this tradition, and German MNEs were particularly vocal in their opposition to the act when it was first announced (Hollister, 2005).
863. The downside to ‘strategic’ CSR is that the more issues of social responsibility became entangled with business strategy, the less tractable and transparent they are likely to become to outside observers. Conversely, it is also possible that if full transparency on CSR activities was required, the activities undertaken by firms would only include ‘safe bets’, and the range of possible beneficial effects might be reduced.

864. An exception is a study by Dowell et al. (2000), which investigates the causality between good financial performance and good environmental performance in a rigorous manner.

865. Among studies that do not focus on financial performance, see, for example, Klassen and Whybark (1999) and Christmann (2000) on the relationship between environmental performance and manufacturing performance.

866. Positive screens look for best-in-class performance from the selected firms, while negative screens exclude firms based on particular sectors of activity, such as tobacco. As pointed out by Vogel (2005), the positive screens that are used to select ‘ethical’ stocks are based on the idea that social responsibility pays off in terms of the stock market performance of firms. This assumes that a great deal of private information about the firm’s social performance is known to the market. More crucially, it also excludes the possibility that an ethical firm that dares to go beyond the accepted norms, could actually have somewhat lower financial performance than its competitors.

867. However, at least the Global Reporting Initiative, which works in collaboration with the UNEP and the Dow Jones Sustainability Index, is working to promote common standards of measurement in CSR reporting.

868. A recent study by KPMG and the University of Amsterdam (KPMG, 2005) has shown that in 2005, 52% of the top 250 companies in the Fortune Global 500 issued separate CSR reports, and the proportion is even higher if one includes companies that reported on CSR as part of their annual report. See also Kolk (2005b).

869. It should be noted, however, that many of these standards are quite general in nature, and like ISO 14000, only confirm that a management process has been put in place. On the other hand, at a minimum, the implementation of an environmental management system allows firms to highlight problem areas and better integrate their policies (Morrow and Rondinelli, 2002).

870. The role of NGOs in relation to the institutions of the multilateral system that govern MNE activity is discussed in Chapter 20.

871. However, enforcement of these and other guidelines is a major issue, also in developed countries. For example, a recent report by an OECD (2006) working group questioned the small number of trials and convictions for corrupt practices in the Netherlands. See also Chapter 19 on the impact of corruption on the flows of FDI.

872. However, relatively few US firms have joined the Global Compact due to concerns about legal liability (Williams, 2004). The UN Norms on the Responsibilities of Transnational Corporations introduced in 2003 are more specific than the Global Compact, but their impact is as yet unknown. See also Chapter 19.

873. Other sector-specific initiatives include the Equator Principles, which are based on the International Finance Corporation’s guidelines for project financing in developing countries, and endorsed by the majority of the large financial institutions that provide financing in developing countries. The Kimberley Process Certification Scheme ensures that conflict diamonds do not enter the mainstream rough diamond market.

874. See Graham (2000) on the conflict between anti-globalisation activists and MNEs (“the wrong enemy”).

875. See Chapter 10 for a review of the empirical evidence concerning the link between FDI and environmental standards.

876. See Chapter 20 on the implications of the Kyoto protocol and the clean development mechanism.

877. Although like many labelling schemes, the effectiveness of the FSC also suffers from the proliferation of competing schemes.

878. See also van Tulder and Kolk (van Tulder and Kolk, 2001; Kolk, 2005a) on codes of conduct in the sporting goods and the coffee sectors.

879. The pyramid refers to the global distribution of income, where consumers in the developed economies form the tip of the pyramid, while consumers in developing countries form the wide base of the pyramid. See also Jain and Vachani (2006).

880. According to Godley (1996), the Jewish soft loan societies active in the garment industry in the late 19th and early 20th centuries achieved extremely low rates of default, but in contrast to commercial micro-lenders, they charged no interest.

881. See also Jenkins (2005) for a sober assessment on the impact of CSR on poverty.

882. See Vachani and Smith (2004) for an analysis of socially responsible pricing in the pharmaceutical industry.

883. See, for example, Abbott and Snidal (2000) on the choice between hard and soft law, where hard law is legally binding, precise, and backed up by institutions for legal interpretation and implementation, while soft law lacks one or more of these elements. See also Utting
PART IV  IMPLICATIONS FOR POLICY

Chapter 19: Governments and MNE activity: the unilateral response

890. The World Investment Report has been published annually since 1991. See Chapter 1 for more details.

891. That is, assuming that it has the will and the appropriate administrative competence and institutional machinery to do this!

892. Their expectations from particular foreign affiliates might vary depending upon the motives for the investment and the extent to which these affiliates are part of a globally integrated network of activities.

893. On the changing role of government, see, for example, the chapters by Dunning and Lipsey in Dunning (2000b), and Chapters 3 and 5 in Dunning and Narula (2004).

894. See also the earlier contributions by Fagre and Wells (1982) and Boddewyn (1988) on the relationship between the MNE and the state.

895. But see, however, our analysis of taxation issues in Chapter 17.

896. The nature of the inward investment can also have an impact on domestic bargaining outcomes. For example, by studying the colour television and semiconductor industries in the US, Goodman et al. (1996) demonstrate that import-substituting foreign investment is likely to increase the demand for protection, since the MNEs would have an incentive to join local firms in trying to exclude new (foreign) entrants from the market. Conversely, foreign investment that increases imports is likely to reduce the demand for protection, as the foreign investors would lobby in favour of free trade.

897. Although not specifically dealing with MNEs, Bonardi et al. (2005) offer a model incorporating both the supply- and demand-side factors that determine when a firm would choose to become active in the 'market' for public policy.

898. See Chapter 18 for some examples.

899. See Chapters 10, 14 and 17.

900. See also the framework put forward by Rugman and Verbeke (1998b) which extends the analysis of Caves by incorporating the fact that most countries act simultaneously as home and host to MNEs, and by incorporating the strategic options of MNEs in terms of global integration and local responsiveness into the analysis.

901. The following paragraphs draw substantially on Chapter 1 of Dunning (1988b).

902. During the years from 1980 to 1985, almost two-thirds of the expropriation acts against foreign firms occurred in the 1970–76 period. In 1975 there was a peak of 83 expropriation acts in 28 countries.

903. See Chapter 20.

904. This has also led some countries to question the extent to which they wish to be locked into the kind of international economic division of labour fashioned by MNEs. The dilemma is that the more unique the contributions of MNEs are to economic development, the less amenable they are to control by national governments.

905. Or rather, both the left wing and the right wing have tended to drift towards the middle, with both sides advocating free market policies.
906. China is perhaps the most obvious case where IPAs try to encourage (the right kind of) inward and outward FDI.

907. For an economic geographer's viewpoint on the global–local tension and the relationship between firms and states, see Dicken (1994, 2004).

908. See the edited volume of Hood and Young (2000) for a discussion of how different affiliate roles affect the strategies of firms and of host regions.

909. This is also true from the perspective of the MNE, and may account for the regional, rather than global, focus of many large MNEs (Doremus et al., 1999; Rugman, 2001; Rugman and Verbeke, 2004b).

910. Brewer and Young (1997) discuss the relationship between the different types of incentives and performance requirements and the WTO rules, particularly with respect to the agreement on subsidies and countervailing measures (SCMs), and the TRIMs agreement.

911. See also Phelps and Raines (2003) and Enright (2000a) for a regional perspective on investment attraction.

912. These include UNCTAD, UNIDO, the OECD, FIAS (Foreign Investment Advisory Service) and MIGA (Multilateral Investment Guarantee Agency). The role of the last two agencies will be discussed in Chapter 20.

913. Although local content requirements were disallowed following the TRIMs agreement, they continue to exist in different guises, such as in the EU antidumping provisions (Belderbos et al., 2002).

914. An example would be for the parent company to buy component parts for its affiliate(s) at discount prices, but not pass on the savings to the affiliate(s).

915. Thus, where TRIMs encourage the learning process of local firms in the cost-efficient way, they may be acceptable; where, however, they protect inefficient indigenous producers, they may do more harm than good.

916. For example, a recent survey of foreign investors in North Carolina again confirmed that the intended recipients seem to place a great deal more value on the quality of the labour force, the quality of life, the availability of a good transportation infrastructure and a conducive business climate than the fiscal incentives provided by the state (Rondinelli and Burritt, 2000).

917. Some of these are reviewed in Lim (1983), Guisinger (1985) and O'Sullivan (1985). New evidence on incentive competition (monetary and non-monetary) within the EU is provided by Ghauri and Oxelheim (2003), while Chapter 17 discussed at some length the research on fiscal incentives and FDI location.

918. The possible creation of a 'market for lemons' in terms of investor quality is explored by Lundan (2003b) in connection with investment in environmentally sensitive sectors to Central and Eastern Europe. In this case the incentive is a negative one, namely, the lack of effective enforcement of regulations.

919. The Group of 8 was known as the Group of 7 before the entry of Russia in 2006.

920. For example, of the 2,156 cases of countries changing their regulatory schemes with respect to FDI in 1991–2004, in only 150 cases were the changes less favourable to FDI (UNCTAD, 2005c:26).

921. Lall (2002) distinguished between 'strategic FDI-dependent' policies, such as those of Singapore, from 'passive FDI-dependent' policies of countries such as Malaysia, where MNEs, rather than the government, provide the impetus for upgrading.

922. For example, in his survey of UK FDI in the US in the second half of the 1950s, no less than 70% of the 74 respondent firms explicitly identified some technical feedback which they attributed to their presence in the US (Dunning, 2002c).

923. Governments, like firms, may behave as strategic oligopolists in the construction of their macro-organisational policies, which may affect the long-run competitiveness of their firms. Thus, if the Japanese government should interfere with market forces to advance the competitiveness of (say) their auto industry which adversely affects that of the US auto industry, the US government may wish to take 'strategic' action to counteract this action. It is, however, worth observing that the macro-organisational strategies of governments may enhance, as well as distort, the efficiency of the market mechanism. For a critical analysis of strategic trade policy, see Stegemann (1989).

924. National security issues are addressed in Chapter 18.

925. Another dispute where the US government was willing to intervene on behalf of individual business interests was on behalf of Chiquita in the dispute over banana imports to the EU, where preference was given to the former European colonies under the Lomé (Cotonou) convention.

926. In a somewhat strange development, the Helms–Gonzales Amendment of 1994 applied a range of sanctions to countries guilty of taking properties from US citizens of Latin American origin, although they may not have been US citizens at the time when the expropriation took place. This was the case primarily with Cubans and Nicaraguans (Wells, 2005:442).
927. See Stephens (2002) for a history of the various transgressions committed by MNEs in host countries, including complicity during times of war.
928. Indeed, Vernon (1998) himself acknowledged as much, and suggested that governments and firms will find ways to resolve their conflicts, although at least sporadic turmoil is likely to surround MNEs’ activities in a global economy.
929. See also Held and McGrew (2002) for contrasting analyses of the political economy in a globalised world.
930. Indeed, as we noted in Chapter 6, this degree of interconnectedness distinguishes the current global economy from the global economy of the late 19th and early 20th centuries.
931. The involvement of governments in the emergence of the digital economy is ubiquitous. It ranges from the creation of the internet (based on the US government’s ARPANET), and the development of the foundations of the World Wide Web at the nuclear research centre (CERN) in Geneva, Switzerland, to the groundwork of deregulation and the introduction of competition to the telecommunications sector.
932. This is exemplified on the one hand by the introduction of the US Digital Millennium Copyright Act, which is aimed to combat peer-to-peer sharing of digital information, including copyrighted material such as music, and on the other, by the legal challenges in various European countries to the use of digital rights management technologies, which are used by content providers to restrict the copying and transfer of legally bought material.
933. An example illustrating the potential for conflict in the realm of values and principles involves the US search engine company Google, which came under considerable criticism in 2006 for agreeing to restrict the internet searches available to its users in China.
934. See also Lenway and Murtha (1994) for a model of the political and institutional attributes of states.
935. In an interesting contribution, Ostry (2001) recalls the ideas of Daniel Bell from the 1970s, who highlighted the promotion of hedonism as the fundamental problem of capitalism. He predicted that unless hedonism was held in check by some sort of ‘transcendental tie’, it would result in environmental degradation, the rise of religious fundamentalism, opposition to economic growth as a solution to problems, and the yearning for a simpler and less technocratic society, much of which rings true today.
936. For further details, see Chapter 18.
937. In response to such concerns, in June 2006, Greenpeace, Amnesty International and Oxfam agreed on a shared code of conduct. For an evaluation of the role of NGOs as part of ‘responsible’ global capitalism and purveyors of normative democracy, see Held et al. (1999), Broad (2002) and Falk (2003).
938. For a fascinating discussion of the different kinds of cross-border politico-market failures and the kind of international governance structures which might be set up to deal with them, see Eden and Hampson (1990).
939. Further sanctions against those who deal in property confiscated by the Cuban government were imposed by the Helms–Burton Act of 1996.
941. As set down, for example, in the Sherman Act of 1890 and the Clayton Act of 1914.
942. As measured by the percentage of the output of a domestic industry accounted for by the ‘X’ largest firms. Such a measure takes no account either of imports or of the foreign production of a domestically based firm.
943. However, while the European Commission has promoted intra-EU M&As as a tool for economic restructuring, national governments have continued to intervene in the process through privileged ownership shares and other means. Recent examples include the case of the proposed takeover of Endesa of Spain by E.On of Germany, several attempted takeovers of Italian banks, and a bid by the Swiss Novartis for the French Aventis, which resulted in a merger with a smaller French firm instead. A similar domestic merger to prevent foreign takeovers was orchestrated between Suez and Gaz de France.
944. See, for example, Suder (2004) on the implications of terrorism for international business. Expanding on the rule of commerce as contributing to global security, Brooks (2005) argues that the interdependencies created by MNE activity are also contributing to increased security, but that this applies only to the Triad and some advanced developing countries, while the global economy as a whole may have become less secure due to the extreme differences in prosperity.
945. See, for example, Utton (2006).
946. Although scholarly opinions differ on the original intent of the act, one of its original purposes was to combat piracy (Dhooge, 2003).
947. UN Sub-Commission on the Promotion and Protection of Human Rights adopted in 2003 the United Nations Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights (E/CN.4/Sub.2/2003/12/Rev.2). These norms are more specific than those contained in the UN Global Compact, which states that ‘Businesses should support and respect the protection of internationally proclaimed human
rights within their sphere of influence; and make sure they are not complicit in human rights abuses’.

948. It may even have involved direct complicity by allowing their airfield to be used by government troops.

949. See Choudhury (2005) for discussion on possible alternatives to the ATCA, including the possibility of extending the jurisdiction of the International Criminal Court to corporations. See also Muchlinski (2001).

950. See, for example, the Human Development Report 2006 entitled Beyond Scarcity: Power, Poverty and the Global Water Crisis (UNDP, 2006). Beyond the affected countries, a severe water shortage would imply major changes in world trade and production, due to the amount of ‘virtual water’ embodied in agricultural products and livestock feed.

Chapter 20: Governments and MNE activity: the multilateral response

951. Thus, one country may be prepared to sacrifice some economic rent to gain a larger amount of foreign investment. Harmonisation may mean that it gains a higher economic rent from each investment, but the total volume of investment falls.

952. Of course, this can also happen due to the economic fundamentals alone, and thus without any policy intervention.

953. For example, the theme for 2007 was the role of MNEs in the primary sector, for 2006 it was the emergence of MNEs from developing countries, while the theme for 2005 was the internationalisation of corporate R&D.

954. A history of the work of the UN and its related agencies on matters related to MNEs has recently been published by Sagafi-Nejad (2007).

955. Such a ‘naming and shaming’ procedure, and its likely adverse effects on the offending firms, is in effect the only enforcement instrument attached to the guidelines.

956. Transnational corporation (TNC) is the preferred nomenclature used by the UN.

957. One such enforcement method, namely the use of the US Alien Tort Claims Act, was discussed in Chapter 19.

958. As discussed in Chapter 10, the World Bank and the IMF have been criticised for the doctrinaire promotion of the ‘Washington Consensus’ package of free market policies.

959. A perennial problem with this type of insurance is that insurers are generally only willing to insure projects against well-known political risks such as expropriation, war or currency inconvertibility, while the investors would like more comprehensive coverage, including breach of contract or regulatory risk (which could be seen as part of commercial risk). See Moran and West (2005) for an insider’s view of the risk insurance industry.


961. In parenthesis, it might be noted that specialisation was predicated on the basis of existing talents and resource capabilities, not potential talents or resource capabilities.

962. For an excellent review of how these policies affected both economic development and the institutions underpinning such development, see Chang (2002).

963. These were labelled the ‘nationhood costs of integration’ by Gray and Lundan (1994).

964. Notably Chapters 11, 15 and 16.

965. Also known as the European Common Market in the UK.

966. That is, over what they would otherwise be.

967. See also Dunning (1997b, 1997c) for an assessment of the Single Market Programme (SMP) on the level and structure of FDI in Europe. This study concluded that the SMP helped increase the flow of FDI to Europe, and led to a decentralisation of other than the most technology-intensive sectors to the less prosperous Southern European countries.

968. Venezuela and Bolivia are notably absent from such agreements due to the re-emergence of populist left-wing governments in these countries.

969. The direction of causality can also be the reverse, where reduced interest by governments in multilateralism reduces the possibilities for firms to pursue global strategies.

970. See also Ethier (2004) on the political economy considerations underlying multilateral agreements.

971. On the reasons that favour the scenario of ‘trading up’ rather than ‘trading down’ in the global economy, see Vogel (1995). For recent empirical evidence on the push and pull impacts of NAFTA on environmental performance in Mexican industry, see Wisner and Epstein (2005).

972. See Rugman and Kirton (1998) and HubBauer and Schott (2005) on the details of the dispute cases under Chapter 11 of NAFTA.

973. See Brewer and Young (2000) for a history of the multilateral system from the inception of the GATT and the Bretton Woods institutions, and an analysis of their impact on MNE activity.

974. By offering foreign investors dispute settlement outside of the host country, BITs could be argued to go beyond national treatment.

975. This count includes cases since 1987, when the first investor–state dispute concerning BITs was recorded.
976. In addition to the ICSID, disputes arising from IIAs can be subjected to arbitration in various other fora, including the UN Commission on International Trade Law (UNCITRAL), and the International Chamber of Commerce Court of Arbitration in Paris. Since the proceedings and the awards are not made public, very patchy information is currently available to guide investors and policy makers (UNCTAD, 2005c:31).

977. Although recent nationalisations in the oil sector in Venezuela and Bolivia, and increases in the taxes and royalty rates applied by several governments in the hard minerals sector point towards a return to earlier times.

978. The WTO currently has 151 members, and 31 observer members, with Russia being the most sizeable economy outside of the agreement, and China being the most notable country to have joined the organisation in recent years.

979. In a letter to the editor in the Financial Times on September 26, 2005, Bhagwati suggested that trade liberalisation is unlikely to achieve the desired results in developing countries unless it is coupled with substantial levels of aid to facilitate the adjustment, similar to the Marshall plan put in place in Europe after the Second World War.

980. For the same reason, discussions on multilateral environmental and labour standards have mainly centred around incorporating such provisions to the WTO agreements, rather than trying to work through established single-issue agencies such as UNEP or the ILO.

981. On the complex issues related to pharmaceutical patenting in the global economy, see, for example, Lanjouw (2002) and Cullet (2003). The ethical issues of pharmaceutical patenting aside, the spread of open innovation models involving groups of small biotechnology firms has also raised questions concerning the effectiveness of the existing patent regime on the industry’s innovative performance (Lundan and Roijakkers, 2006; Weber, 2006). On differential pricing as a solution to improving the global availability of drugs, see Vachani and Smith (2004).

982. See, for example, Kobrin (1998) and Robertson (2000) on the emergence and composition of the global civil society, and Graham (2000) on the aftermath of the collapse of the negotiations for the MAI.

983. And indeed over the past five years have continued to do so at an accelerated rate (UNCTAD, 2006).

984. While no single weather event can be linked to climate change in a statistical sense, the growing incidence of extreme weather events around the world is considered to be one of the manifestations of climate change.

985. Annex B countries are the same group of developed or transition countries as the Annex I countries of the 1992 Rio Convention, with the exception of Belarus and Turkey.

986. Another way to meet the Kyoto targets is through carbon sequestration, for example, by planting forests.

987. In the US, regional- and state-level schemes are in place, but at the federal level the policy has been one of voluntary reductions. For more on the development of the carbon market, see Brewer and Lundan (2006). In spite of the lack of federal legislation, many US MNEs have engaged in voluntary emission reductions in anticipation of future regulation (Hoffman, 2005).

988. The EU-15 have their own established targets and a burden-sharing agreement under the Kyoto protocol, so the excess credit of the new accession countries is not automatically counted against this target.

989. JI projects involve investment into other Annex B countries, but there have been few such projects initiated to date, possibly due to uncertainties related to the approval process.

990. However, only a third of this amount is due to the currently ongoing 184 projects, while the rest are from projects in the ‘pipeline’.

991. The market for carbon credits presents an interesting case study of the difficulties attached to the creation of new supranational institutions. A recent investigation by the Financial Times found substantial irregularities, including the selling of credits that had not yielded any emissions reductions, and credits being issued for activities that are not ‘additional’ in the sense intended, due to a lack of robust systems of verification in the market (‘Carbon trading schemes often not so green’, Financial Times, April 26, 2007, www.ft.com).

992. It is also unclear whether emission credits are goods or services (or neither) under the rules of the WTO. Furthermore, many developing countries still have high nominal rates of tariff protection for environmental goods and services (Brewer, 2004). These tariffs are, however, due to be lowered in the Doha round.

993. Note that there is a parallel to considering the MNE as a system in organising cross-border value-added activities and that of viewing the international economy as a global system of organising the interaction of national economic markets.

994. The movement away from a confrontational to a cooperative stance between MNEs and nation states is discussed in Dunning (1997d).

PART V  LOOKING AHEAD

Chapter 21: The future of MNEs in a global economy

995. See, for example, Jones (2000) and Jones and Khanna (2006).
996. Although, since the anti-trust legislation was mainly concerned with collusionary behaviour, and not market structure as such, the focus on inter-firm relationships in fact led to consolidation and a merger wave in the 1890s (Chandler, 1990).

997. Examples include Keynes (1924), Iversen (1935) and the Royal Institute of International Affairs (1937).

998. See, for example, the writings of Southard (1931), Marshall et al. (1936) and Lewis (1938).

999. Ownership advantages arising from the privileged possession of specific income-generating assets (see Chapter 4).

1000. As explained in Chapter 13.

1001. By macro-organisational strategies, we mean the actions pursued by governments to organise the creation and structural deployment of resources, capabilities and markets rather than their influence and control. By micro-organisational strategies, we mean actions taken by governments to affect a particular determinant of macro-organisational strategy (for example, competition, environmental or innovation policy).

1002. These include entrepreneurial international ventures and so-called ‘born globals’. See, for example, Oviatt and McDougall (1994) and Knight and Cavusgil (2004).

1003. For example, as regularly published by the World Bank in its World Development Report and by the UNDP in its Human Development Report (World Bank, 2005; UNDP, 2006).

1004. See, for example, Sauvant (2005) on outward FDI from Brazil, Russia, India and China. For an examination of the changing composition of the world’s largest firms in the 2000s, see Franko (2004) and Ghemawat and Ghadar (2006).

1005. See Chapter 2.

1006. Although the recent nationalisations in the extractive sectors in Venezuela and Bolivia are contrary to this general trend (UNCTAD, 2007).

1007. See, for example, Petersen and Welch (2003) for an assessment of the impact of e-business, post-bubble.

1008. These are also the technologies that have pitted the open source movement against the proponents of conventional IPR protection (Weber, 2006).

1009. See Chapter 11.

1010. In Chapter 16, we make a clear distinction between spillovers, that accrue to firms unrelated to the MNE affiliate, and linkages, which involve some element of deliberate knowledge transfer by the MNE, whether this is in an equity-based or a contractual relationship with the local firm.

1011. Thus, for example, the US has a revealed advantage in supplying Latin American countries with capital, goods and services; Japan has an advantage in its dealings with South-East Asia; while the UK’s hinterland extends to much of the Middle East and sub-Saharan (non-Francophone) Africa.

1012. See Friedman (2006).

1013. Also, the World Association of Investment Promotion Agencies, which had zero members at its founding in 1995 had grown to 200 members from 150 countries by July 2006 (Sauvant, 2006). See also Chapter 20.

1014. Although as we have discussed in Chapter 13, this is not essentially different from what happened to manufacturing jobs some decades earlier, except that the groups of people affected by services outsourcing tend to be better educated, and hence possess more political clout.

1015. Of course, as soon as one allows for exceptions from economic openness, whether it is for the developed countries to cope with the demands of the social commitments they have made to their citizens, or for developing countries to pursue the kind of industrial policies they believe will best promote their long-term growth, there is always a danger that such a system will slide towards protectionism. (Dani Rodrik, ‘The cheerleaders’ threat to global trade, Financial Times, March 27, 2007, www.ft.com.)


1017. For example, considerable research has been done on the contrasting effects of interlocking corporate boards on informational efficiency and collusion. See, for example, Haunschild and Beckman (1998).

1018. A recent book by Lindsey (2007) suggests that the post-war prosperity in the US, which enabled significant advances in various forms of civil rights and individual liberties, also resulted in the current polarisation between the left and the right. Those on the political right embraced the market for the material well-being it had delivered, while sounding caution about the growth of individual liberties. Those on the political left embraced the expansion of individual liberties and civil rights, while remaining wary of the market as the handmaiden that helped to deliver such social changes.

1019. Although the strategies pursued, and the results achieved, by governments such as Singapore and Ireland also deserve a mention.

1020. The likely spread of avian influenza at some point is also likely to require extensive global coordination, but it is to our knowledge unrelated to the other issues.

1021. The eight Millennium Development Goals of the United Nations with a target date of 2015 are: eradicate extreme poverty and hunger,
achieve universal primary education, promote gender equality and empower women, reduce child mortality, improve maternal health, combat HIV-AIDS malaria and other diseases, ensure environmental sustainability, and develop a global partnership for development.

1022. Definitions of poverty, its causes and remedies continue to be a subject of much disagreement (not to mention confusion and ambivalence) among economists. For an excellent review of the received wisdom (?) on this subject, see Harrison (2007).

1023. See Boddewyn (2003) for discussion of the meaning of the extra-market (nonmarket) institutions in various social science disciplines.

1024. Of course, this is a question of both willingness and ability, since there is no fundamental reason why a contractual relationship could not incorporate social provisions as well.


1026. See, for example, Toyne and Nigh (1997), Boddewyn and Iyer (1999), Buckley (2002) and Sullivan and Daniels (2005).

1027. For instance, in addition to using academic literature drawn from several fields of study, we have used numerous publications from international organisations such as the UN, the ILO and the World Bank, and consulting firms such as McKinsey and KPMG, all of which offer valuable insights into the changing business environment.

1028. Indeed, as pointed out by Shaver (2006) in a recent editorial piece in the Journal of International Business Studies, the leading journal in the IB field, the interpretation of significant findings in empirical studies is often not done even in the terms of the model that is being used, let alone by exploring the meaning of the work in a broader context.

1029. By the non-ergodic nature of the contemporary world we mean that uncertainty is extremely difficult to measure or deal with, let alone overcome, by reference to past events, information and intentions. Consequently, non-ergodic uncertainty makes scientific modelling of cause and effect difficult, if not impossible.

1030. See also Cohen (2007) for an effort to embrace this complexity.

1031. The concept of the social market economy is one which, while acknowledging the virtues of the market system, recognises the external (that is, social) effects of any particular transaction or group of transactions, and also the failure of some markets to properly embrace either supply or demand uncertainties.
References


Arnold, J. and Smarzynska Javorcik, B. (2005), ‘Gifted kids or pushy parents? Foreign acqui-


References


Boddewyn, J.J. (1983), ‘Foreign and domestic divestment and investment decisions: like or
References


Braunerhjelm, P. and Oxelheim, L. (2000), ‘Does foreign direct investment replace home country investment? The effect of European integration on the location of Swedish invest-
References

825


References


Cantwell, J.A. and Mudambi, R. (2005), ‘MNE competence-creating subsidiary man-


Chandler, A.D. and Daems, H. (1974), ‘The rise of managerial capitalism and its impact on investment strategy in the western world and


Chung, W., Mitchell, W. and Yeung, B. (2003), ‘Foreign direct investment and host country


References


References


Dunning, J.H. (1977), United Kingdom Transnational Manufacturing and Resource Based Industries and Trade Flows in Developing Countries, Geneva: UNCTAD.


ECA/UNCTC (1984b), Transnational Corporations in the Cotton Industry in Tanzania, Addis Ababa: Joint ECA/UNCTC Unit, E/eca/UNCTC.
References


Enright, M.J. (2000b), ‘Globalization, regionalization, and the knowledge-based economy in...
Ernst & Young (2005), Global Transfer Pricing Trends, Practices and Analysis, Ernst & Young, International Tax Services.
Fajnzylber, F. and Martinez, T. (1976), Las Empresas Transnacionales su Expansion a Nivel Mundial y su Proyeccion en la Industria Mexicana (version preliminar), Mexico City: Fondo de cultura economica.
References

FAO (2003), *Trade Reforms and Food Security: Conceptualizing the Linkages*, Rome: Food and Agriculture Organization.


Freeman, C. and Soete, L. (1997), The Economics of Industrial Innovation, 3rd edn, London: Pinter.


References


Ghoshal, S. and Nohria, N. (1989), ‘Internal differentiation within multinational corpora-


References


Guiso, L. and Parigi, G. (1999), ‘Investment and
Guisinger, S.E. (1985), Investment Incentives and
Guillén, M.F. (2000b), ‘Organized labor’s
Guillén, M.F. (2000a), ‘Business groups in
Grubert, H., Goodspeed, T. and Swenson, D.
Grubert, H. (2005), ‘Comment on Desai and
Grubert, H. (2003), ‘Intangible income, inter-
Grubert, H. (1998), ‘Taxes and the division of
Grubert, H. (1998), ‘Taxes and the division of
Grubert, H., Goodsip, T. and Swenson, D.
Hagedoorn, J. and Duysters, G. (2002a), ‘External sources of innovative capabilities: the preference for strategic alliances or
References


Hennart, J.-F. (1992b), 'International


Hennart, J.-F. (2001), 'Theories of the multina-

Hennart, J.-F. (2000), 'Transaction costs theory

Hennart, J.-F. (1991b), 'The transaction costs

Hennart, J.-F. (1991a), 'The transaction cost

Hennart, J.-F. (1986b), 'The tin industry', in

Henisz, W. J. (2003), 'The power of the Buckley

Henisz, W. J. (2002), 'The institutional environ-

Hennart, J.-F. (1986a), 'Internalization in

Hennart, J.-F. (1989), 'Can the new forms of

Hennart, J.-F. (1988), 'A transaction costs

Hennart, J.-F. (1982), A Theory of the

Hennart, J.-F. (1981), 'Theoretical bases of

Hennart, J.-F. (1979), 'Theoretical bases of

Hill, C. W. L., Hwang, P. C. and Kim, W. C. (1990),

Hewitt-Dundas, N., Andréosso-O’Callaghan,

Hertner, P. and Jones, G. (eds) (1986), Multina-

Hertner, P. (1986), 'German multinational

Hertner and Jones (eds), pp. 113–34.

Hertner, P. and Jones, G. (eds) (1986), Multina-


Hewitt-Dundas, N., Andréosso-O’Callaghan,

B., Crone, M., Murray, J. and Roper, S. (2005), ‘Selling
global, buying local? What determines the sourcing patterns of
multinational plants in Ireland?’, Regional Studies,

Hill, C. W. L., Hwang, P. C. and Kim, W. C. (1990),

An eclectic theory of the choice of interna-
tional entry mode’, Strategic Management

References

849
References


Himmel, E. (1922), Industrielle Kapitalangla-


Hodgson, G.M. (2004), ‘Opportunism is not the only reason why firms exist: why an explanatory emphasis on opportunism may mislead’, Industrial and Corporate Change, 13(2), 401–18.


ILO (1972), Employment, Incomes and Inequality, Geneva: ILO.


ILO (1984), Technology Choice and Employment Generation by Multinational Enterprises in Developing Countries, Geneva: ILO.


ILO (2003), Working out of Poverty, Geneva: ILO.


ILO (2006), The End of Child Labour: Within Reach, Geneva: ILO.


References


Kobrin, S.J. (1991), ‘Sovereignty @ bay: globalization, multinational enterprise, and the international political system’, in Rugman and Brewer (eds), pp. 181–205.

Kobrin, S.J. (2001a), ‘Sovereignty @ bay: globalization, multinational enterprise, and the international political system’, in Rugman and Brewer (eds), pp. 181–205.

References


Kumar, M.S. (1984), Growth, Acquisition and Investment, Cambridge: Cambridge University Press.


References

Lall, S. (1980a), ‘Monopolistic advantages and
Lall, S. (1980b), ‘Vertical interfirm linkages:
Lall, S. (ed.) (1983), The New Multinationals: The Spread of Third World Enterprises,
Chichester: Wiley.
Lall, S. (1987), ‘Multinationals and technology
development in host LDCs’, in J.H. Dunning
Lall, S. (2000), ‘The technological structure and performance of developing country manufac-
Lall, S. (2002), ‘Linking FDI and technology


References


Munro, D.G. (1934), *United States and the Caribbean Area*, Boston, MA: World Peace Foundation.


Mytelka, L.K. (2000b), ‘“We the people”: the transformation of state–TNC relations at the turn of the millennium’, *Journal of International Management*, 6, 313–25.


Nippon Electric Company (1984), The First 80 Years, Tokyo: NEC.
OECD (1999), Foreign Direct Investment and the Environment, Paris: OECD.
OECD (2002b), International Mobility of the Highly Skilled, Paris: OECD.
References


Oman, C. (1989), New Forms of Investment in Developing Countries: Mining, Petrochemicals, Automobiles, Textiles, Food, Paris: Development Center of OECD.


three decades of research’, Strategic Management Journal, 21, 155–74.
Pearce, R.D. (1990b), Overseas production and exporting performance: some further investigations’, Reading, UK: University of Reading Discussion Papers in International Investment and Business Studies 135.
References


References


References


References


Rippy, F.J. (1959), British Investment in Latin America, Hamden, CT: Archon.


Royal Institute of International Affairs (1937), The Problem of International Investment, London: Oxford University Press.


and Washington: Canadian-American Committee.


References


References


Tanzi, V. (1998), ‘Corruption around the world’, International Monetary Fund Staff Papers, 45(4), 559–94.


Tihanyi, L., Griffith, D.A. and Russell, C.J. (2005), ‘The effect of cultural distance on entry mode choice, international diversification, and


US Tariff Commission (1973), Implications of Multinational Firms for World Trade and...
References


Success, Cambridge: Cambridge University Press.


Wells, L.T. (1983), Third World Multinationals: The Rise of Foreign Investments from...
References

Developing Countries, Cambridge, MA: MIT Press.
References

887


References


Zhou, Y. and Xin, T. (2003), ‘An innovative region in China: interaction between multi-


Index

Note: The following abbreviations have been used in the index: FDI – foreign direct investment; MNE – multinational enterprise; R&D – research and development.

Aaronson, S.A. 810
Abbott, K.W. 809
absorptive capacity 318, 553, 745
Acemoglu, D. 138, 785
Acer 217, 230, 247
acquisitions 229, 286–7
see also mergers and acquisitions (M&As)
Acs, Z.I. 602, 804
Adler, M. 404
Adler, N. 467
affiliates
employment 421–3
export intensity 493–6
importance in host economies 424
intra-firm trade 484–9
natural resource-seeking 565–7
R&D 368–74
motivations 369–70
organisation of 372–4
types 370–72
roles 253–4
autonomy 254–6
innovation 257–8
knowledge transfer 256–8
Africa
FDI 175
free trade agreements (FTAs) 720
intra-regional investment 28
inward FDI 30, 32
outward FDI 26
see also South Africa
Agarwal, S. 263
tagglomeration
and knowledge spillovers 599–600
and location choice 594–7
measurement 597–9
Agmon, T. 89
Agrawal, A. 229
agricultural sectors 38, 168–9, 175–6
linkages 566–7, 571
Aharoni, Y. 88
Ahold 567, 568
Aitken, B.J. 441, 522, 590, 591
Akamatsu, K. 510
Al-Ervani, M. 628
Alcatel 645
Ali-Yrkkö, J. 377
Aliber, R.Z. 84, 90, 170
Alien Tort Claims Act (ATCA) 654, 702, 757
Allen, G.C. 157
alliance capitalism 276
alliances 281–6
unconventional 290
allocative efficiency 506, 516–17
effects on home country 513–16
inter-sectoral efficiency 507–11
intra-sectoral efficiency 511–13
Almeida, P. 229, 257, 600
Almor, T. 221
Alvstam, C.G. 559
Amable, B. 129, 367, 745, 801
Ami, M. 434, 435
Anderson, E. 263
Anderson, H. 535
Anderson, T.W. 360, 421
Antaloczy, K. 539
anti-trust legislation 736
anti-trust policy 188, 700–701
Antweiler, W. 314
Archer, H.J. 157, 159, 181, 183, 775
Archibugi, D. 454, 788
Argentina
backward linkages 567
inward FDI 32, 46–7
labour–management relations 453–4
outward FDI 26, 53
productivity gaps 522
R&D expenditure 346
science and engineering graduates 353
Arnold, J. 524
Arora, A. 351, 366, 410, 600, 788
Arpan, J. 628
Arquit Niederberger, A. 730
Arrow, K. 780
Artisien, P. 438
artisien-maksimenko, p. 536
asset-acquiring investment 113
asset-augmenting investment 112, 113, 191–2, 227, 679, 747
effects of 405–8
host country determinants 325–6
asset-augmenting M&As 749
asset-exploiting investment 191, 401–5
asset-seeking investment 72–4, 227, 228, 325–6, 385–6
ATCA see Alien Tort Claims Act (ATCA)
audretsch, d.b. 500, 601
australia
employment in MNEs 422
FDI 169–70, 174
foreign affiliates’ importance 424
inward FDI 31, 44–5
outward FDI 24, 40–41, 50
R&D expenditure 346
science and engineering graduates 353
spillovers 584
training 447
Austria 346, 352, 476, 516
autio, e. 779
auto industry 178–9, 226, 531, 559, 561–2, 570, 692
Aw, M.S.B. 535
Bachmann, R. 802
backward integration 118, 165, 167, 169, 403
backward linkages 554–69
export-orientated manufacturing affiliates 563–5
‘import or procure locally’ decision 557–60
local sourcing, extent 560–69
‘make or buy’ decision 555–7
market-seeking manufacturing affiliates 560–63
natural resource-seeking affiliates 565–7
services sector 567–9
Baden-Fuller, C.W.F. 285
Bailey, P.J. 430, 439
Bain, J.S. 81, 84
balance of payments 463–4
global financial system 498–500
intra-firm trade
determinants 482–3
extent, empirical evidence 484–9
implications 489–90
macroeconomic policies 496–8
methodological issues
assessing opportunity cost of external transactions 466–9
measuring effects of MNE activity 464–6
MNE transactions
home countries, empirical results 474–8
host countries, empirical results 478–82
identifying and evaluating, analytical issues 469–74
Balasubramanyam, A. 88, 316, 557
Balasubramanyam, V.N. 88, 441, 557, 718
Baldwin, R. 719, 721
Ball, G.W. 726
banana industry 118, 166, 290, 811
Bang, R. 494
banking houses 147, 153–4
banking sector 170–71, 184
Barba Navaretti, G. 433, 443, 503, 520, 521, 807
Barclay, L.A. 566, 672
Barkema, H. 287, 530, 779
Barnes, J. 561
Barrell, R. 383, 476
Barrios, S. 541, 586
Barro, R.J. 304, 317, 785
Barry, F. 336, 443, 450, 482, 511, 564, 634
Bartelsman, E.J. 634
Bartik, T.J. 313
Bartlett, C.A. 213, 229, 245, 248, 253, 372
Barua, A. 570
Basu, K. 458
Beamish, P.W. 528, 529, 781
Beetsma, R.M.W.J. 634
behavioural theory, Uppsala school 91–3
Behrman, J.N. 67, 103, 109, 469–70, 766
Belderbos, R.A. 277, 373, 478, 514, 562
Belgium
crowding-out effects 541
employment in MNEs 422
FDI 174, 796
inter-sectoral efficiency 509
intra-firm trade 484
inward FDI 31
MNE activity employment effects 430
outward FDI 24, 25
productivity gaps 521
R&D expenditure 346
science and engineering graduates 352
Bell, M. 522
Bellak, C. 13, 19, 336, 341, 391, 616, 687
Bello, J.A. 440, 447
Bénassy-Quéré, A. 806
Bengoa, M. 787
Benito, G.R.G. 227
Bennett, J. 254
Benvignati, A. 626
Bergsten, C.F. 404, 466, 475, 499, 508, 527, 691, 797
Index

Bernard, A.B. 488, 515, 626, 793, 794
Bernard, J. 626
Berns, S. 311
Berry, M.A. 651
Berthoff, R.T. 159
Bevan, A. 602
Bhagwati, J. 721, 814
Bharti Enterprises 231
bilateral free trade agreements 719, 720, 721
bilateral investment treaties (BITs) 71, 719, 723, 770
bilateral tax treaties 611, 612
Birch, F.D. 170
Birkinshaw, J.M. 74, 214, 225, 229, 239, 242, 246, 253, 254, 256, 258, 602, 603
Bjarnar, O. 367, 647
Blainey, R. 161
Blomström, M. 391, 432, 468, 471, 475, 523, 584, 589, 688
Blonigen, B.A. 443, 450, 478, 513
Bodewyn, J.J. 759, 760
Boisot, M. 249
Bolivia 704
Bonardi, J.-P. 810
Borensztein, E. 316
Borga, M. 356
Borkowski, S.C. 629
‘born global’ firms 77, 220–21, 246, 749, 779
Bosson, R. 571
Bostock, F. 162, 187
Bottazzi, L. 789
Bowling Alone (Putnam) 305
Boyd, G. 214
BP 28, 55, 183, 193, 654
Braconier, H. 432
Bradley, J. 482, 564
Brainard, S.L. 432, 476
Branstetter, L. 140, 387, 408
Brash, D.T. 187, 360, 484, 508, 575, 796
Braunerhjelm, P. 486, 515
Brazil
employment in MNEs 421
FDI and balance of payments 470
inward FDI 32, 46–7, 494
outward FDI 26, 42–3, 52
productivity gaps 522
profitability gaps 798
R&D expenditure 346
science and engineering graduates 353
training 447
transfer price manipulation (TPM) 625
wages 440, 441, 442
Brehm, J. 138, 304, 307
Breschi, S. 599
Brewer, T.L. 728, 811, 814
Brimble, P. 447
Britain see United Kingdom
British East India Company 148
Brooks, S.G. 639, 812
Brouthers, K.D. 142, 263, 264, 782
Brouthers, L.E. 263
Brown, G. 441
Brown, M. 566
Brown, R. 171, 564
Brown, W.B. 158
Bruner, R.F. 229
Buckley, P.J. 94, 222, 263, 271, 280, 336, 438, 527, 629
Bureau of Economic Analysis (BEA) 11
Bureau of Industry Economics 170
Burpitt, W.J. 687, 811
Burt, R.S. 283
business culture, influence of MNEs 647–9
business practices of MNEs 542–8
business strategy 202–5
Busse, M. 456
buyer-driven networks 559–60
Bye, M. 83
call centres 118, 222, 425, 568–9, 635
Camarero, M. 476
Cameron, R. 151
Campa, J.M. 91
Campbell, D. 794
Campos, E. 311
Campos, N.F. 317
Canada
affiliates’ autonomy 254
allocative efficiency 515
economic autonomy 641
employment in MNEs 421, 422
FDI 174, 175
foreign affiliates, exports 796
inter-sectoral efficiency 509
inward FDI 31, 44–5
MNE activity employment effects 439
MNEs, human rights violations 702–3
outward FDI 24, 25, 37, 40–41, 50
productivity gaps 519, 520
R&D expenditure 346
science and engineering graduates 352
security 645
spillovers 584
transfer price manipulation (TPM) 628, 629
Canada–US Free Trade Agreement 718
Cantwell, J.A. 13, 18, 19, 112, 121, 180, 214, 351, 369, 375, 601, 789, 790
Index

Capar, N. 529
capital-export neutrality 611, 620
capital-import neutrality 611
capital ownership neutrality (CON) 620
carbon markets 729–30, 757, 814
Caribbean, US investments 166, 167
Carlos, A.M. 774
Carrefour 567, 568
cartels 178, 181, 186, 287–9, 545, 547
Cassiman, B. 384
Casson, M.C. 94, 130–31, 172, 222, 280, 773
Castellani, D. 382, 433, 520, 521
Castro, F. 336
Caves, R.E. 114, 327, 518, 535, 537, 538, 539, 543, 584
CDM (clean development mechanism) projects 728, 729–30
Central and Eastern Europe
  balance of payments and FDI 481–2
  business culture, influence of MNEs 648
crowding out 542
environmental issues 729
FDI determinants 791
foreign affiliates, exports 496
institutions 302, 308
inward FDI 34
  and balance of payments 481–2
linkages 565
market failure 713
market structure 536
MNE activity employment effects 431
outward FDI 26
  participation on global economy 497
centres of excellence 230, 255–6
CFIUS (Committee on Foreign Investment in the United States) 644, 645
Chakrarvthy, B.S. 252
Chan, C.M. 142
Chandler, A.D. 149, 156, 161, 162, 172, 181, 233, 647, 775, 780
Chang, S.J. 91, 142, 224, 256, 264
Chapman, S.D. 152
Charlton, A. 679, 684
Chatterjee, R.A. 535
Chédor, S. 486
Chen, E. 440
Chen, S. 755
Chen, S.-F.S. 119
Chen, T.-J. 139–40, 562
Chesbrough, H.W. 285, 554, 779
Chevallier, T. 495
Child, J. 249
child labour 454–5, 458–9, 462, 657, 756
Chile 26, 32, 542, 566, 567
China
  business culture, influence of MNEs 648
    early colonies 147
  employment in MNEs 421
    FDI 175, 747, 754–5
  FDI and exports relationship 476
  FDI and trade 481
  foreign affiliates, exports 496
  future development 748
  and global economy 498–9
  intra-firm trade 485
  inward FDI 31, 33, 46–7
  linkages 559, 576, 577
  manufacturing 348
  outward FDI 29, 42–3, 52
  R&D expenditure 346, 347
  resource-seeking investments 28
  science and engineering graduates 349, 350, 351, 353
  spillovers 590
  training/employment conditions 446
China National Offshore Oil Corporation (CNOOC) 499, 644, 645
Chiquita 290, 811
Cho, K.R. 483
Christensen, C.M. 657, 658
Christmann, P. 136, 367, 451, 652, 653
Christopherson, S. 449, 450
Chuang, Y.-C. 590
Chung, W. 451, 540, 587
civil society 298, 304–8, 654, 697
Clausing, K.A. 476, 626
clean development mechanism (CDM) projects 728, 729–30
climatic change 728–9, 748, 814
Cline, W.R. 499
Cloodt, M. 192
Clough, S.B. 153
clustering 48–9, 553, 593–4
  agglomeration measurement 597–9
  knowledge spillovers and agglomeration 599–600
  location choice and agglomeration 594–7
  policy 602–3
  regions and innovation 600–602
Co, C.Y. 313
Coase, R.H. 81, 94
Coco, A. 788
codes of conduct 46, 710–11
Coe, D.T. 407
Cohen, B.I. 564, 796
Cohen, S.D. 708
Cohen, W.M. 121, 251, 440, 789
Coleman, J.S. 283
collaborative arrangements 213
collaborative R&D 394–5, 791
collusion 287–9
colonising ventures 147–8
Commenda 146
Committee on Foreign Investment in the
United States (CFIUS) 644, 645
communication, advances in 743–4
Competitive Advantages of Nations (Porter) 324
competitive effects 539–42
competitive risks 236
CON (capital ownership neutrality) 620
consolidating MNEs 247
construction projects 217, 218
Contractor, F.J. 192, 262, 263, 264, 273, 277, 279, 529, 799
contractual agreements 217, 218
contractual alliances 261
controlled investment policy 690
Conyon, M.J. 523
Cooke, W.N. 454
cooperative agreements 261–4, 264–9
methodical issues 267–9
transaction costs and resource attributes 264–7
see also franchising agreements; joint equity
ventures; licensing agreements;
management contracts; turnkey
agreements
cooperative alliances 8, 191, 230
Cooperative Strategies and Alliances
(Contractor and Lorange) 282
Cooperative Strategies in International Business
(Contractor and Lorange) 282
cooperative ventures 193–4, 289
coordinated economies 65
Copithorne, L.W. 632
Coram, T.C. 148, 165, 168, 170
Corley, T.A.B. 150, 151, 153, 159, 173
corporate R&D 374–8
diversification 374–6
internationalisation 376–8
technological profiles 374–6
corporate social responsibility (CSR) 132-3, 329, 649–60, 756–8, 809, 810
business case for 650–53
limits 658–60
MNE contribution, evidence 655–8
OECD Guidelines for MNEs 655
regulation 659–60
standards 653–5
strategic corporate social responsibility 652, 809
UN Global Compact 654, 656, 711, 809, 812–13
corporate taxation 703
in global economy 619–20
MNE foreign income 611–12
MNE response 614–19
recent trends 612–14
tax rates 613–14
corruption 308, 310–12, 654, 680
Costa Rica 448, 457, 559
country-specific characteristics 320, 326–7
credit principle of taxation 611–12
Criscuolo, P. 408
cross-border alliances 737, 748
cross-border collaborative R&D 394–5, 791
cross-border M&As 20–22, 329, 534–5
cross-licensing agreements 213
crowding out 541–2
CSR see corporate social responsibility (CSR)
Cuervo-Cazurra, A. 311
Culem, C. 91
cultural differences 249, 281, 648
cultural distance 274
cultural influences 274–5, 647–9
cultural and institutional influence of MNEs 647–9
Cunningham, W. 146
Curhan, J.P. 162, 177, 185, 186, 187, 288
currency crises 16, 767
currency fluctuations 27, 35, 738
Cushman, D.O. 91
Cusumano, M.A. 451
Cyert, R.D. 65, 92
Czech Republic
balance of payments and FDI 482
employment in MNEs 422
foreign affiliates’ importance 424
linkages 559, 565
MNEs, impact of 542
national incentive scheme 688
offshoring 568
R&D expenditure 346
science and engineering graduates 352
Damodaran, A. 66
Dasgupta, S. 786
Davenport-Hines, R.P.T. 152, 154
Davidson, W.H. 192, 263
Davies, R.B. 162, 569
Davies, S.W. 519
Davis, P.S. 142, 264
De Backer, K. 521, 541
de Man, A.-P. 285
de Mello, L.R. 316, 787
de Mooji, R.A. 615
De Soysa, I. 458
Dean, J.M. 313
Index

Deane, R.S. 484
Debaere, P. 433
decision-making locus 249–50
economic approach 250–52
strategic approach 252–3
defensive investment 170, 177–8
Del Monte 567
Delapiere, M. 791
Delios, A. 141, 142, 213, 275, 528
democracy 302–3, 785
Democracy in America (de Tocqueville) 305
Denis, D.J. 528
Denmark 219, 346, 352, 447
Desai, M.A. 431, 476, 514, 611, 616, 618, 619, 620, 795, 806
developed economies
FDI 174, 175
inward FDI 31, 44–5
outward FDI 24, 25, 40–41, 50–51
R&D expenditure 346
science and engineering graduates 350, 352–3
training 447
developing economies
FDI 174, 175
income levels 747
intra-firm trade 485
inward FDI 29–30, 31–2, 36, 46–7, 494–5, 711, 738
linkages 558, 571
manufacturing 348–9
outward FDI 23, 24, 25, 26–7, 28, 42–3, 52–3
R&D expenditure 345, 346–7
science and engineering graduates 350, 353
technological capabilities 397–400
training 447
Development as Freedom (Sen) 300
Devereux, M.P. 613, 614, 616
Dhanaraj, C. 781
diamond competitive advantage 109, 323, 324
digital economy 695–6, 812
Dilthey, J.R. 471, 498, 755
DiMaggio, P.J. 127, 275
Dimelis, S.P. 586
divestment 190, 227, 686
Doh, J.P. 456, 653
Dollar, D. 748
Donahue, J.D. 295
Donnithorne, A.G. 157
Dossani, R. 576
double taxation treaties (DTTs) 723
Doz, Y.L. 229, 230, 242, 245, 246, 247, 253, 284, 285, 287, 323, 592, 740, 783
dragon multinationals 230–31, 246, 247, 427
Dresser Corporation 698
Dries, L. 559
Driffield, N. 442, 443, 513, 520, 536, 540, 541, 579, 592, 800, 802, 804
Duanmu, J.L. 801
Dubai Ports World 76, 644–5
Duerksen, C.J. 312
Dunning, J.H.
balance of payments 480
clustering 594
cultural differences 367
eclectic paradigm see eclectic paradigm of international production
employment 440, 441, 451, 452
entry mode 263, 266
extent of MNE activity 18
FDI theory 81, 98
FDI and trade 500, 501
foreign affiliates’ export intensity 495
foreign production, motives 65
foreign production, types 70, 71
globalisation 720
history of MNEs 152, 153, 156, 159, 170, 181, 185, 187
IDP 113, 330, 335
institutional transfer 137
institutions 302, 308, 680
inter-sectorial efficiency 508
intra-firm trade 484
knowledge transfer 214, 229
linkages 570, 575
market structure 532
national security 644
organisational structures 249
ownership patterns 276
R&D 376
regional activity 5
technical efficiency 519, 520, 526, 527
value added 207, 609
Duran, J.J. 336
Durham, J.B. 794
Dutch East India Company 148
Duysters, G. 285, 379, 381
Dyer, J.H. 278
eclectic paradigm of international production 94–6, 114, 666
economics of 96–9
incorporating institutions
institutional transfer and change 142–3
institutions defined 129–31
internalisation factors 140–42
locational factors 137–40
Oa- and Oi-specific advantages 132–3
Oi advantages 134–7
ownership-specific advantages 131–7
internalisation (I) advantages 99, 103, 104–7, 319, 327–9
international production, determining factors 104–5
location-specific (L) advantages 96, 99, 101–3, 104–6, 319, 323–7
main tenets 99–103, 99–103
and other MNE activity explanations 103–9
structural variables 106–7
economic centralisation 399–400, 791
economic growth
and inbound FDI 314–18
effects of FDI on growth 315–16
empirical evidence 316–17
and institutions 300–308
bad governance 310–14
civil society 305–6
corruption 310–12
formal institutions 301–4
good governance 309–10
informal institutions 304–8
pollution havens 312–14
social capital 304–8
trust 306–8

Economists Advisory Group Ltd 395
Eden, L. 136, 367, 613, 621, 631, 632, 634, 635, 673
Ederveen, S. 615
efficiency-seeking investment 72, 191, 209, 227, 323, 335, 404
European Union 34
host country determinants 325
location choice 194–5, 617
Egelhoff, W.G. 796
Egger, P. 718, 719
Eggertsson, T. 130
Egypt 32, 448, 559
Ekholm, K. 432
El-Shinnawy, A. 448, 559
electronics sector 559, 562, 565, 692
linkages 566
Elliott, K.A. 455, 456
Ellis, P. 219
Ellison, G. 597
emissions trading system (ETS) 729, 757
employment conditions 444–54
ILO core labour standards 454–9
child labour 458–9
sweatshops and EPZs 456–8
labour–management relations 452–4
training practices 444–50
working practices and standards 450–52
Encarnation, D. 225
Enderwick, P. 429, 447
endowment effects 595, 596, 806
Enright, M.J. 207, 557, 804
entry barriers 538–9
entry conditions 681–4
entry mode 263–4, 268–9, 275, 311, 534, 781, 782
environment/systems/policy (ESP) paradigm 323–4, 334
environmental issues 651, 659, 728–30, 756, 786, 809
environmental standards 312, 313, 657, 661
Epstein, B. 547
EPZs see export processing zones (EPZs)
Equator Principles 713–14, 809
Erden, D. 448
Ergas, H. 385
Ernst & Young 621
Erramilli, M.K. 264, 274
escape investments 74
Eskeland, G.S. 312
ethical investment 652–3
ethnocentric firm 252
ETS (emissions trading system) 729, 757
European Commission 378, 709
restrictive business practices 547–8
European Economic Community 718
European Free Trade Association (EFTA) 738
European Research Coordinating Agency (EUREKA) 395
European Strategic Project on Information Technology (ESPRIT) 394
European Union (EU) 194, 721, 746
emissions trading system (ETS) 729
employment in MNEs 422
foreign affiliates’ importance 424
internal market 709
inward FDI 31
MNE location and taxation 615–16
outward FDI 24
R&D expenditure 346
science and engineering graduates 350, 352
Evans, P.B. 360
evolutionary approach to explaining MNE activity 111–13
‘exchange of threats’ strategy 88, 226
exchange rate theory of FDI 90–91
exemption taxation system 611, 612
exit barriers 538–9
exit conditions 686
Exon-Florio Amendment 644–5
Index

export embargoes 698–700
export intensity of foreign affiliates 493–6, 796
export processing zones (EPZs) 69, 456–8, 492, 558
export spillovers 591
external networks

buyer/seller agreements 277–81
cartels and collusion 287–9
choice between 286–7
cosoperative agreements

methodical issues 267–9
resource attributes 264–7
transactions costs 264–7
cross-border cooperation modes 261
franchising agreements 261, 279
joint equity ventures 261, 275–7
cultural and institutional influences 274–5
reasons for 269–72
success factors 272–4
licensing agreements 261–2, 263, 278–9
management contracts 261, 279–80
non-equity agreements 277–86
organisational modes spectrum 260–64
strategic alliances 281–6
characteristics 282–4
learning from 284–6
motives for 283
subcontracting 281
turnkey agreements 261, 280, 281
external shocks 302–3
extra-territoriality 697–704
anti-trust policy 700–701
export embargoes 698–700
human rights violations 702–3
other areas of conflict 703–4
extractive sectors 654, 747
‘fade-out’ agreements 261
Fagerberg, J, 340
Fai, F. 801
A Fair Globalisation: Creating Opportunities for All (ILO) 462
Fair Trade 290
Fairchild, L, 522, 525, 798
Fajnzylber, F. 440
family ownership 172, 181, 776
FDI 7, 17, 67–77
accumulated stock (1914–1960)

by country of origin 174
by recipient country 175
asset augmenting 112, 113, 191–2, 227, 679, 747
effects of 405–8
host country determinants 325–6
asset-seeking investment 72–4, 227, 228, 325–6, 385–6
beginning of 21st century 17–19
efficiency seeking 72, 74
escape investments 74
general trends 19–23
geographical distribution, country-specific differences

inward 49, 54
outward 48–9, 50–53
host country determinants 325–6
institutions ability to attract
bad governance 310–14
corruption 310–12
good governance 309–10
pollution havens 312–14
investment development path (IDP) 113, 330–37
institutions and the IDP 336–7
leading inward investors 29–33
significance for host countries 33–4
leading outward investors 23–7
significance to home countries 27–9
market seeking 69–71, 156, 209, 226, 406
European Union 34
host country determinants 325
inter-war years 179–83, 736
location choice 617
pre First World War 157–63
natural resource seeking 68–9
outward and inward

balance between 34–5
orders of economic activity 35–8
sectoral composition 38–48
passive 75–7
resource seeking 68–9, 209, 226, 406
host country determinants 325
location choice 224, 617
pre First World War 156, 163–70
strategic asset seeking 72–4
support investments 74–5
world’s leading MNEs 54–62
state-owned enterprises 61–2
transnationality index 61
Feenstra, R.C. 434, 441
Feinberg, S.E. 361, 780
Feldenkirchen, W. 193
Feldman, M.P. 601
Feldstein, M. 514
Feliciano, Z. 442
Ferner, A. 368, 451
Figini, P. 443
Figlio, D.N. 450
Filatotchev, 289
financial crises 755, 795
financial diversification 529
financial investment incentives 683, 684

*Financial Times* 28, 757, 814

Fink, C. 410

Finland 786
 allocative efficiency 516
 employment in MNEs 422
 foreign affiliates' importance 424
 intra-firm trade 485
 R&D expenditure 346, 347
 science and engineering graduates 352
 firm-specific advantages (FSAs) 253–4
 fiscal investment incentives 682–3, 684, 686, 688
 Fletcher, S.R. 163, 171, 187
 Flowers, E.B. 88
 Flyer, F. 598
 flying-geese paradigm 33, 510
 Foley, F. 560
 ‘follow the leader’ investment 71, 226
 Foita, T.B. 204
 Fontagné, L. 476
 food processing sector 567
 Ford 55, 208, 226, 531
 Foreign Investment Advisory Service (FIAS) 712

foreign production
 motives for 63–7
 types of 67–77
 efficiency seekers 72, 74
 escape investments 74
 market seekers 69–71
 natural resource seekers 68–9
 passive investments 75–7
 strategic asset seekers 72–4
 support investments 74–5
 Foreman-Peck, J. 179
 formal institutions 129–30, 135, 139, 752
 influence on economic growth 301–4, 310, 337, 670
 Fors, G. 377
 Forsgren, M. 93, 213
 Forsyth, D.J.C. 484
 forward linkages 569–73
 effects on local suppliers' productivity 573–9
 linkage externalities, evidence 577–9
 processing activities 570–73
 Fosfuri, A. 351
 Foss, N.J. 122, 123, 781
 France
 employment in MNEs 421, 422
 FDI 174
 FDI and exports relationship 476

foreign affiliates, import/export intensity 495
 foreign affiliates' importance 424
 intra-firm trade 485, 486
 inward FDI 31, 44–5
 MNE activity employment effects 433
 outward FDI 23, 24, 25, 37, 40–41, 50
 R&D expenditure 346, 347
 science and engineering graduates 352
 franchising agreements 217, 218, 222, 261, 278, 279
 Frankel, J.A. 301
 Franko, L.G. 156, 158, 159, 160, 162, 163, 169, 178, 180, 183, 238, 288, 533
 free-standing firms 151, 774–5, 776
 free trade agreements (FTAs) 719–20, 723
 free trade zones 69, 738
 Freeman, C. 375, 381
 front-end/back-end organisation 241, 245, 246, 248, 259
 Froot, K.A. 91
 Frost, T.S. 256
 Fu, P.P. 143
 Fukao, K. 524
 Fukuyama, F. 307, 791
 Fuller, C. 603

*Future of the Multinational Enterprise* (Buckley and Casson) 114

Gachino, G. 495, 576, 802
 GAI/GAIC (General Agreement on International Investment/International Corporations) 726–7
 Galambos, L. 192
 Gálvez-Muñoz, L. 23, 526
 Gambardella, A. 410, 600, 788
 Garrod, N. 527
 Gaspari, K. 527
 Gaston, N. 454
 Gates, Bill 662
 Gates, G. 306
 Gatignon, H. 263
 GATT 738
 Gazprom 28, 645
 General Motors 6, 55, 208, 226, 531
 Gereffi, G. 349, 492, 559
 Geringer, J.M. 273, 527, 528
 Germany
 clustering 601
 employment in MNEs 421, 422
 FDI 174, 176–7
 intra-firm trade 484, 487
 inward FDI 31, 44–5
 labour–management relations 453
 MNE activity employment effects 430, 439
 outward FDI 23, 24, 25, 37, 40–41, 50

Germany
 clustering 601
 employment in MNEs 421, 422
 FDI 174, 176–7
 intra-firm trade 484, 487
 inward FDI 31, 44–5
 labour–management relations 453
 MNE activity employment effects 430, 439
 outward FDI 23, 24, 25, 37, 40–41, 50

GATT 738
 Gazprom 28, 645
 General Motors 6, 55, 208, 226, 531
 Gereffi, G. 349, 492, 559
 Geringer, J.M. 273, 527, 528
 Germany
 clustering 601
 employment in MNEs 421, 422
 FDI 174, 176–7
 intra-firm trade 484, 487
 inward FDI 31, 44–5
 labour–management relations 453
 MNE activity employment effects 430, 439
 outward FDI 23, 24, 25, 37, 40–41, 50

GATT 738
 Gazprom 28, 645
 General Motors 6, 55, 208, 226, 531
 Gereffi, G. 349, 492, 559
 Geringer, J.M. 273, 527, 528
 Germany
 clustering 601
 employment in MNEs 421, 422
 FDI 174, 176–7
 intra-firm trade 484, 487
 inward FDI 31, 44–5
 labour–management relations 453
 MNE activity employment effects 430, 439
 outward FDI 23, 24, 25, 37, 40–41, 50

GATT 738
 Gazprom 28, 645
 General Motors 6, 55, 208, 226, 531
 Gereffi, G. 349, 492, 559
 Geringer, J.M. 273, 527, 528
 Germany
 clustering 601
 employment in MNEs 421, 422
 FDI 174, 176–7
 intra-firm trade 484, 487
 inward FDI 31, 44–5
 labour–management relations 453
 MNE activity employment effects 430, 439
 outward FDI 23, 24, 25, 37, 40–41, 50

GATT 738
 Gazprom 28, 645
 General Motors 6, 55, 208, 226, 531
 Gereffi, G. 349, 492, 559
 Geringer, J.M. 273, 527, 528
 Germany
 clustering 601
 employment in MNEs 421, 422
 FDI 174, 176–7
 intra-firm trade 484, 487
 inward FDI 31, 44–5
 labour–management relations 453
 MNE activity employment effects 430, 439
 outward FDI 23, 24, 25, 37, 40–41, 50
profitability gaps 529
R&D expenditure 345, 346, 347
science and engineering graduates 349, 350, 352
training 449
transfer price manipulation (TPM) 629
Gershenberg, I. 440, 447, 798
Ghadar, F. 533
Ghauri, P. 679, 708
Ghemawat, P. 284, 533
Ghoshal, S. 123, 213, 229, 236, 245, 246, 248, 253, 372, 651, 760
Giddens, A. 787
Gilmore, J.H. 570
Gilpin, R. 699
Girma, S. 442, 587, 588
Giroud, A. 565, 593
Gladwin, T.N. 313, 700
Glickman, N. 439
Global Compact 654, 656, 711, 809, 812–13
global economy 497, 498, 746
economic development 745–8
evolution
stage 1: to 1914 (First World War) 735–6
stage 2: inter-war years 736–7
stage 3: 1945 to late 1960s 737–8
stage 4: end of 1960s to mid-1980s 738
stage 5: mid-1980s to date 739–40
government role 750–58
institutions 751–3
strategic oligopolists 753–5
institutions of governance 696–7
national tax strategy 619–20
new organisational forms 748–50
political role of MNE 694–7
supranational problems 755–8
technological advances 742–5
US dollar 498–500
global enterprises 191
global financial system 498–500
global firms, organisational structure 243–7
global imbalances 797
global problems 755–8
global retailers 567
global taxation principle 612
globalisation 299–300
and economic sovereignty 642
effects on entry and exit 538
and inter-sectoral efficiency 510
and market concentration 532–3
Globerman, S. 309, 407, 584, 795
Godin, B. 373, 376
Godley, A. 161, 163, 171, 187, 809
Goerzen, A. 529
Goldberg, P.M. 726
Gomes-Casseres, B. 276, 285
Gomes, L. 529
Gonçalves, R. 447, 575
Goodman, J.B. 810
Google.org 810
Goosens, M. 157, 171
Görg, H. 91, 443, 448, 578, 585, 800
Gorter, J. 615
governance 309–14, 680
government–MNE interaction, multilateral response
collective investment supporting schemes 712–14
host countries, bargaining power 708–12
codes and guidelines 710–11
collective action 708–9
domestic policies 709–10
international governance structure 712
market-facilitating schemes 712–14
multilateral institutions
Kyoto Protocol 728–30, 758, 814
multilateral agreement on investment 726–8
WTO 722–6
regional integration 714–22
economic activity, allocation determinants 715–16
MNE influence 717–19
recent schemes 719–21
regional agreements and multilateralism 721–2
government–MNE interaction, unilateral response
extra-territoriality 697–8
anti-trust policy 700–701
export embargoes 698–700
human rights violations 702–3
other areas of conflict 703–4
global economy 694–6
home governments 691–4
host governments
21st century investment climate 679–81
changes over past 40 years 674–81
confrontation 675–7
cost-effective FDI 686–8
entry conditions 681–4
exit conditions 686
honeymoon phase 675
performance requirements 684–5
policies, general 686–90
policies towards FDI 681–8
reconciliation 677–9
state–firm–civil society relationship 696–7
theoretical issues
bargaining model 670–73
eclectic paradigm 666–8
schematic framework 668–70
government policy
transfer price manipulation (TPM)
future challenges 635
indirect economic effects of TPM 634
supranational action 633–4
unilateral policies 629–33
value added by MNEs
corporate taxation 612–14
host country 608–10
MNE location decisions, impact on 615–17
national tax strategy in global economy 619–20
taxation differentials, MNE response 614–19
government role in international production 750–58
institutions, importance of 751–3
as strategic oligopolists 753–5
government role in technological capacity
home countries 400–411
asset-augmenting investment, effects of 405–8
asset-exploiting investment, effects of 401–5
domestic technological restructuring by FDI 409–11
reverse technology spillovers 406–8
host countries 383–400
developing countries and technological capabilities 397–400
and indigenous technological capacity 384–7
strategies 388–97
Govindarajan, V. 257
Graham, E.M. 87, 88, 401, 440, 441, 460, 466, 519, 539, 643, 644, 645, 646
Grameen 658
Granstrand, O. 375, 377, 790
Grant, R.M. 285, 528
Gray, H.P. 111, 189, 316, 471, 482, 498, 499, 500, 755
Greece 352, 438–9, 440, 586–7
Greenaway, D. 591
greenfield investment 15, 186, 221, 222, 227, 286–7, 469, 534, 690
greenhouse gas emissions 657, 728, 729
Gresik, T.A. 631
Griffith, R. 520, 614, 616
Griliches, Z. 789
Grindley, P.C. 279
Gropp, R. 613
Grosse, R. 103, 109, 547, 673
Grubert, H. 618, 620, 627, 628
Guay, T.R. 653
Gugler, P. 701
Guillén, M.F. 142, 275, 368, 453, 647
Guisinger, S.E. 684
Gulati, R. 268, 284, 285
Guler, I. 128, 136, 275, 367, 451
Gupta, A.K. 257
Guzman, A. 701
Habib, M. 311
Haddad, M. 522, 584, 590, 796
Haex, F. 518
Hagedoorn, J. 276, 285, 287, 378, 379, 380, 381, 405, 782, 799
Hagen, A. 159, 775
Håkanson, L. 790
Hallbach, A.J. 575
Halsberghe, E. 430
Hamel, G. 270, 278, 285
Hammond, A. 592, 657, 778
Handoussa, H. 448, 559
Hanseatic League 146–7
Hanson, G.H. 434, 441, 688
hard technology 343
Harris, R.D. 520, 523, 627
Harrison, A.E. 312, 431, 435, 522, 584, 590, 796
Harrison, K. 653
Hart, S.L. 657, 658
Harvey, C. 168, 776
Harzing, A.W. 264, 267, 287
Hashai, N. 221
Haskel, J.E. 587, 802
Hatch, N.W. 278
Havana Charter for International Trade (1948) 543
Hawrylyshyn, B. 147
Haynes, R.H. 428
Head, K. 477, 598
Heath, C. 410
Heaton, H. 147
Hedlund, G. 229, 244, 245
Heinz 448, 559
Hejazi, W. 515, 794
Held, D. 695
Helleiner, G.K. 483, 484, 489
Hellman, J.S. 136
Helpman, E. 407, 520
Hemisz, W.J. 142, 213, 275, 780
Hennart, J.-F. 117, 118, 264, 269, 272, 274, 286, 381, 529, 772, 776, 782
Herrigel, G. 647
Hertner, P. 157, 159, 160
Hettige, H. 314
Hill, C.W.L. 263
Himmel, E. 157
Hindustan Lever 657, 778
Hines, J.R. 612, 615, 616, 620, 807
Hirschman, A.O. 262, 577

history of international production 145–6
colonising and merchant capitalism 146–8
early 19th century 149–54
embryonic MNEs 152–4
finance capitalists 151–2
individual entrepreneurs 150
1870 onwards 172–6
market-seeking investment 157–63
other investment 170–72
resource-seeking investment 163–70
technical and organisational advances 154–7
1918–39, inter-war years 176–9, 184–5
market-seeking investment 179–83
other investments 183–4
resource-based investment 183
1945–60, early post-war period 185–6
locational determinants 188–9
organisational changes 186–8
1960–2000, towards globalisation 189–90
locational changes 194–6
organisational changes 191–4

HIV/AIDS 658, 725
Hocevar, M. 522
Hodgson, G.M. 123
Hoffman, A.J. 814
Hofstede, G. 92, 274, 648
Holland, D. 602
Hollister, H.T. 136, 808
Holm, U. 225, 255

home country
employment effects 430–33, 793
government policy on value added by MNEs 610–12
human resource development 425–36
earlier evidence 428–30
outsourcing, effects of 433–5
recent evidence 430–33
technology capacity, role of government 400–411
asset-augmenting investment 405–8
asset-exploiting investment 401–5
domestic technological restructuring by FDI 409–11
reverse technology spillovers 406–8
transaction costs 469–74
empirical results 474–8
firm/product-level evidence 477–8
foreign production and exports complementarity 475–7

Hong Kong
FDI and balance of payments 470
inter-sectoral efficiency 510
inward FDI 31, 46–7
outward FDI 26
round-tripping investment 27

Hood, N. 214
horizontal relationships 277, 281–6, 749
horizontal spillovers 315
Hornell, E. 92
Horst, T. 527

host country
bargaining power, multinational action 708–12
codes and guidelines 710–11
collective action 708–9
domestic policy re-evaluation 709–10
international governance structure 712
FDI determinants 325–6
government–MNE interaction 21st century investment climate 679–81
changes over past 40 years 674–81
confrontation 675–7
honeymoon phase 675
policies, general 688–90
policies toward inward FDI 681–8
cost-effective FDI 686–8
entry conditions 681–4
exit conditions 686
investment incentives 682–3
operating requirements 684–5
reconciliation 677–9
human resource development 436–44
earlier evidence, employment and wages 438–41
recent evidence, wages, productivity and skills 441–3
productivity gaps 519–23
productivity spillovers 585–91
technological capacity, role of government developing countries 397–400
indigenous technological capacity 384–7
strategies 388–97
discourage restrictive clauses 391–2
‘do nothing’ policy 388–9
encourage cross-border collaborative R&D 394–5
encourage indigenous R&D 393–4
influence terms and conditions 392–3
limit inward investment 389
limit sectors to domestic ownership 389
obtain knowledge by other means 395–7
performance requirements 390–91
transaction costs 469–74, 478–82
host government policy impact on value added by MNEs 608–10
Houston, T. 152, 156, 170, 181
Hsu, J.-Y. 600
Hubert, F. 803
Hudson’s Bay Company 148
Huber, G.C. 404, 467, 619, 722
Hughes, D. 540, 541
Hughes, J.F. 629
human capital 304, 317, 318, 744, 745
human resource development 414–16
employment conditions 444–54
child labour 458–9
ILO core labour standards 454–9
labour–management relations 452–4
sweatshops and EPZs 465–8
training practices 444–50
working practices and standards 450–52
employment in MNEs 420–25
home country 425–36
earlier evidence 428–30
outsourcing, effects of 433–5
recent evidence 430–33
host country, effects of MNE activity 436–44
earlier evidence, employment and wages 438–41
recent evidence, wages, productivity and skills 441–3
policy implications 459–62
theoretical underpinnings
methodology 419–20
MNEs 416–19
human rights violations 654, 702–3, 812–13
Hungary
balance of payments and FDI 482
employment in MNEs 421, 422
foreign affiliates, exports 496
foreign affiliates’ importance 424
intra-firm trade 485
linkages 559
offshoring 568
R&D expenditure 346
science and engineering graduates 352
Hymer, S.H. 81, 83–5, 251, 517, 543
I-related advantages 99, 102, 103, 104–7, 319, 327–9
Iammarino, S. 601
IBM 56, 371, 499, 644, 645, 739–40
Ietto-Gillies, G. 454
ILO 420, 451, 452, 455, 657
core labour standards 454–9
child labour 458–9
sweatshops and EPZs 465–8
import barriers 715–16
‘import or procure locally’ decision 557–60
incentive policies 670, 682–3, 686, 687–8
income shifting 627–8
India
call centres 568–9
exports and foreign ownership relationship 493
government–MNE bargaining relationship 673
inter-sectoral efficiency 509
intra-firm trade 485
inward FDI 32
linkages 561
national security 645
outward FDI 26, 42–3, 52
productivity gaps 522
profitability gaps 526, 798
R&D expenditure 346
resource-seeking investments 28
science and engineering graduates 349, 351, 353
spillovers 590
training 448
wages 440, 441
indigenous technological development 391–2, 393–4
Indonesia
FDI 26, 32
foreign affiliates, imports/exports 495
productivity, impact of acquisitions 524
spillovers 589, 591, 803
wages 442
industrial capitalism 149–50, 153–4
industrial organisation theory 100
industrial pollution 456, 661
industrial R&D 345, 347–9, 788
industrial relations 419, 452–4
industry technology cycle 87
informal institutions 130, 135, 139, 304–8, 670, 752
Ingham, K.P.D. 495, 519
Inkpen, A.C. 285
innovation-driven growth 334
innovatory advances 742–5
innovatory capacity 384–6
institutions 129–31
ability to attract FDI 308–14
bad governance 310–14
corruption 310–12
good governance 309–10
pollution havens 312–14
and economic growth 300–308
civil society 305–6
formal institutions 301–4, 310, 337, 670
informal institutions 304–8
social capital 304–8
trust 306–8
formal 129–30, 135, 139, 301–4, 310, 337, 670, 752
importance of 751–3
influence in joint ventures 274–5
informal 130, 135, 139, 304–8, 670, 752
Intel 498, 548
intellectual property rights (IPR) 101, 161–2, 279, 310, 387, 410–11, 724–5
inter-sectoral efficiency 511–13, 516
Intergovernmental Panel on Climate Change (IPCC) 729
internal network
affiliate roles 253–4
autonomy 254–6
innovation 257–8
knowledge transfer 256–8
locus of decision making 249–50
economic approach 250–52
strategic approach 252–3
organisational structure 234–6, 238–9, 248–9
global firms 243–7
governance, domestic firms 239–41
governance, internationalisation impact 241–3
strategic responses
risk 236–7
technology creation and acquisition 237–8
internalisation (I) advantages 99, 102, 103, 104–7, 319, 327–9
internalisation theory 81, 93–5, 117, 119, 164–5
international division organisation 240, 241–2
International Finance Corporation (IFC) 712
international investment agreements (IIAs) 685
international price indices (IPIs) 634
international production 196–7
determinants
economic development 741, 745–8
government role 750–58
importance of institutions 751–3
as strategic oligopolists 753–5
supranational problems 755–8
governments, role of 741
organisational forms 741–2, 748–50
technological advances 740–41, 742–5
history 145–6
colonising and merchant capitalism 146–8
eyear 19th century 149–54
embryonic MNEs 152–4
finance capitalists 151–2
individual entrepreneurs 150
1870 onwards 172–6
market-seeking investment 157–63
other investment 170–72
resource-seeking investment 163–70
technical and organisational advances 154–7
1918–39, inter-war years 176–9, 184–5
market-seeking investment 179–83
other investments 183–4
resource-based investment 183
1945–60, early post-war period 185–6
locational determinants 188–9
organisational changes 186–8
1960–2000, towards globalisation 189–90
locational changes 194–6
organisational changes 191–4
theories
behavioural theory 91–3
eclectic paradigm see eclectic paradigm
of international production
Hymer’s contribution 83–5
macro-financial and exchange rate
theories 90–91
prior to 1960s 82–3
product cycle 85–6
risk diversification hypothesis 89–90
evolutionary approach 111–13
internationalisation theory 93–5
macroeconomic approach 109–11
internationalisation process 212–31
experiential learning by firms 212–13
network approach to MNE 213–14
intra-firm trade 190, 794–5
determinants 482–3
extent, empirical evidence 484–9
implications 489–90
intra-sectoral efficiency 516
investment development path (IDP) 113, 330–37
institutions and the IDP 336–7
investment incentives 682–3, 686, 687–8
investment promotion agencies (IPAs) 29, 684, 687, 815
inward FDI
policies towards 681–8
cost-effective FDI 686–8
entry conditions 681–4
exit conditions 686
investment incentives 682–3
operating requirements 684–5
IPAs see investment promotion agencies (IPAs)
IPCC 729
IPR see intellectual property rights (IPR)
Ireland
balance of payments and FDI 482
employment in MNEs 421, 422
foreign affiliate R&D 790
foreign affiliates, exports 495
foreign affiliates’ importance 424
intra-firm trade 485
investment development path (IDP) 336
inward FDI 31
linkages 559, 564–5, 578–9
policies towards FDI 690
R&D expenditure 346
science and engineering graduates 352
spillovers 585–6, 803
training 450
transfer price manipulation (TPM) 634
wages 443
Irish, C. 630
Israel 346, 353
Itaki, M. 771
Italy
clustering 601–2
employment in MNEs 421, 422
FDI 174
foreign affiliates’ importance 424
inward FDI 31, 44–5
MNE activity employment effects 433
outward FDI 24, 25, 40–41, 51
productivity gaps 520, 521
productivity, impact of acquisitions 524
R&D expenditure 345, 346, 347
science and engineering graduates 349, 350, 353
sogo shosha 75, 219, 567, 754, 770
structural adjustment employment policies 426–7
training 446, 447, 449
transfer price manipulation (TPM) 628, 629
work practices 451–2, 647
Jarillo, J.C. 255
Jenkins, M. 805
Jenkins, R.O. 74, 331, 423, 440, 448, 457, 512, 513, 535, 565, 566, 794, 796
Jenks, L.H. 153, 166
Jensen, J.B. 515
Jensen, N.M. 309
Jensen, R. 368, 451, 793
JETRO 441, 575
Jianhai, B. 645
Jo, S.-H. 440, 561
Johanson, J. 91, 92
joint equity ventures (JVs) 261, 275–7, 289
cultural and institutional influences 274–5
reasons for entering 269–72
success factors 272–4
Jones, G.
British banks 170, 184
British trading companies 171–2
history 149, 152, 153, 154, 159, 160, 162, 167, 173, 181, 187, 189, 803
‘migrating’ MNEs 152
reinvested earnings 23
Unilever 194, 778
US 526
Jonsson, T. 803
Jordan, G.L. 430
Japan
affiliates 225, 225–6
affiliates, R&D 373–4
employment in MNEs 421, 422
exports and FDI 477–8
foreign affiliates, exports 495
foreign affiliates’ importance 424
foreign production and exports relationship 476
free trade agreements (FTAs) 719–20
globalisation strategies 692
government strategy 753–4
income shifting 627
inter-sectoral efficiency 509, 510
intra-firm trade 484, 485, 486, 487
investment in US 430, 540
inward FDI 30, 51, 44–5, 180
labour–management relations 453
location choice 598
market-seeking investments 158
outward FDI 23, 24, 25, 37, 40–41, 50, 691–2, 754, 761
post-war development strategy 640–41
productivity, impact of acquisitions 524
profitability gaps 528, 529
R&D 345, 346, 347, 348, 788
science and engineering graduates 349, 350, 353
sogo shosha 75, 219, 567, 754, 770
structural adjustment employment policies 426–7
training 446, 447, 449
transfer price manipulation (TPM) 628, 629
work practices 451–2, 647
Kamperman Sanders, A. 410
Kaplinsky, R. 561
Kapur, S. 493
Karnani, A. 756
Kasper, W. 590
Katruk, H. 493
Katseli, L. 501
Kawabe, N. 177
Kay, N.M. 269, 390
Kearney, C. 511
Kearns, A. 790
Keefer, P. 143, 303, 306
Kelegama, S. 560
Keller, W. 313, 587
Kenney, M. 139, 225, 373, 374, 451, 576
Kenya
  foreign affiliates, imports/exports 495
  linkages 576
  productivity gaps 522
  science and engineering graduates 353
  training 447
  wages 440
Keohane, R.O. 698
Khanna, T. 367, 451, 577
Kim, W.C. 255, 527
Kim, W.S. 89
Kindleberger, C.P. 726, 771
King, A. 653
King, D.R. 229
Kinoshita, Y. 317, 361
Kipping, M. 367, 647
Kirchner, W. 159, 162
Klein, M.W. 91
Kline, J.M. 702
Knott, H. 701
Knack, S. 143, 306
Knickerbocker, F.T. 87, 187, 549
know-how technology 343
know-why technology 343–4
knowledge-based theory of the firm 122–3
knowledge-intensive affiliates 257–8
knowledge networks 600
knowledge-seeking investment 229
knowledge sourcing 228–9, 378
knowledge spillovers 551, 599–600
knowledge transfer 256–8, 387
  host government strategies 388–97
Kobrin, S.J. 276, 694, 695, 699, 702, 757, 795
Kogut, B.
  clustering 600
  cultural differences 249, 274, 366, 367, 647
  entry modes 263
  evolutionary approach 111
  global firms 244, 245
  institutions 140
  knowledge-based theory 122
O-specific advantages 181, 518
Oi advantages 136
real options framework 66, 91, 204
risk 236
sequential investment 256
value added 206, 224
Kojima, K. 80, 110, 111, 516
Kokko, A. 391, 474, 513, 523, 589, 688
Kolk, A. 651, 653
Koncz, J. 342, 356
Konings, J. 431
Koo, B.-Y. 522
Koopmans, K. 323
Kopits, G.F. 770, 806
Korea
  intra-firm trade 487
  MNE activity employment effects 433
  productivity gaps 522
  see also Republic of Korea; South Korea
Koshiro, K. 430
Kosová, R. 542
Kostial, K. 613
Kostova, T. 127, 275, 368
Kotabe, M. 225, 529, 530, 575
Kravis, I.B. 263, 429
Krugman, P. 389, 440, 441, 460, 466, 519, 594, 645, 646
Kucera, D. 455
Kuemmerle, W. 229, 369, 370
Kuhn, T. 78
Kujawa, D. 429
Kulatlukla, N. 66, 111
Kumar, N. 377, 440, 441, 483, 522, 525, 526, 561, 798
Kundu, S.K. 264, 279
Kuwahara, Y. 177, 441
Kwok, C.C. 311–12
Kyoto Protocol 728–30, 758, 814
La Porta, R. 65, 784
labelling schemes 794
labour–management relations 452–4
labour productivity 518
labour-seeking investment 69
labour standards 651, 657, 661, 756–7, 810
labour unions 418–19, 453–4
Lall, S.
  affiliates and exports 493
developing countries, outward FDI 28
employment effects 794
FDI and balance of payments 478–80
FDI-dependent policies 811
intra-firm trade 483
linkages 575
productivity gaps 798
profitability gaps 527
sourcing strategies 561
technological capability 343, 397, 398, 399
technological development 344
trade structure 492
Lan, P. 789
Landi, J. 561
Lane, C. 454, 802
Langdon, S.W. 440
Lantouris, J. 336
Larimo, J. 274
Latin America 738
balance of payments 481
economic sovereignty 641
FDI 175
intra-sectoral efficiency 513
inward FDI 32, 33
outward FDI 26
productivity gaps 522
R&D expenditure 346
restrictive business practices 545, 547
science and engineering graduates 353
wages 440
Lauridsen, L.S. 564
Lavergne, R. 483
Lazonick, W. 449
Leecraw, D.J. 28, 484, 522, 525, 526, 624, 625, 628, 669
Lee, J.-W. 317
Lee, J.-Y. 387
Leibrecht, M. 616
Lenova 499, 644
Lenox, M. 653
Leonard, J.H. 312, 313
Lessard, D.R. 89
Leung, A. 217, 278
Leung, K. 773
Levinson, A. 313
Levinthal, D.A. 121, 789
Lewis, C. 148, 153, 154, 156, 160, 164, 165, 166, 168, 170, 179
Li, J. 264, 528
Li, Q. 140, 309
Li, X. 317, 679
Libby 567
licence fees 342, 354, 356, 357
licensing agreements 217, 222, 223, 261–2, 263, 278–9, 281, 772
Lichtenberg, F. 407
Lieberthal, K. 657
Lim, L.Y.C. 563, 564
Lin, C.-M. 590
Lindsey, B. 815
linkages 551, 552
backward linkages 554–69
export-orientated manufacturing affiliates 563–5
‘import or procure locally’ decision 557–60
local sourcing, extent 560–69
‘make or buy’ decision 555–7
market-seeking manufacturing affiliates 560–63
natural resource-seeking affiliates 565–7
services sector 567–9
benefits, types 574–5
forward linkages 569–70
effects on local suppliers’ productivity 573–9
linkage externalities, evidence 577–9
processing activities 570–73
Lipsey, R.E. 263, 429, 430, 432, 433, 441, 442, 475, 476, 495, 591, 767, 795
Lissoni, F. 599
List, J.A. 313
Little, J.S. 439
Liu, X. 476, 481, 588, 590, 592, 679
location choice 594–9, 615–17, 737
location-specific (L) advantages 96, 99, 101–3, 104–6, 319, 323–7
Lodge, G. 755
London, T. 653, 657
Long, F. 545
Lorange, P. 262, 273, 277
Louri, H. 586
Love, J.H. 592
Lu, J.W. 142, 264, 275
Lui, X. 317
Lund, A. 83
Lundan, S.M.
alliances 378, 379, 380, 799
asset-augmenting investment 405
asset-seeking investment 229
CSR 651, 653, 658, 659
financial imbalances 498
institutions 773
intra-firm trade 482
market-seeking investment 181
national security 644
R&D 376, 378, 379
reinvested earnings 13, 20, 617, 681
spillovers 599
standards 136, 367
technology transfer 366
Lundstrom, R. 156, 162
Lundvall, B.-Å. 384, 454
Lyn, E.O. 89
Lyons, B.R. 519
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>M&amp;As see mergers and acquisitions</td>
<td>29, 226, 329, 534–5, 783</td>
</tr>
<tr>
<td>MacMillan, I.C.</td>
<td>570</td>
</tr>
<tr>
<td>macro-financial theory of FDI</td>
<td>90–91</td>
</tr>
<tr>
<td>macroeconomic risks</td>
<td>236</td>
</tr>
<tr>
<td>macroeconomic theory of FDI</td>
<td>110–11</td>
</tr>
<tr>
<td>Madagascar</td>
<td>680</td>
</tr>
<tr>
<td>Madhok, A.</td>
<td>121, 264, 267</td>
</tr>
<tr>
<td>Madsen, T.K.</td>
<td>77, 220, 246</td>
</tr>
<tr>
<td>Magee, G.B.</td>
<td>777</td>
</tr>
<tr>
<td>Magee, S.P.</td>
<td>87</td>
</tr>
<tr>
<td>Mahmood, I.P.</td>
<td>399, 791</td>
</tr>
<tr>
<td>MAI (Multilateral Agreement on Investment)</td>
<td>461, 727–8</td>
</tr>
<tr>
<td>Majumdar, S.K.</td>
<td>361</td>
</tr>
<tr>
<td>‘make or buy’ decision</td>
<td>555–7</td>
</tr>
<tr>
<td>Makino, S.</td>
<td>142, 227, 264, 274, 782</td>
</tr>
<tr>
<td>Malaysia</td>
<td></td>
</tr>
<tr>
<td>clustering</td>
<td>600</td>
</tr>
<tr>
<td>FDI and balance of payments</td>
<td>470</td>
</tr>
<tr>
<td>foreign affiliates, imports/exports</td>
<td>495</td>
</tr>
<tr>
<td>inter-sectoral efficiency</td>
<td>510–11</td>
</tr>
<tr>
<td>inward FDI</td>
<td>32</td>
</tr>
<tr>
<td>linkages</td>
<td>559, 565</td>
</tr>
<tr>
<td>outward FDI</td>
<td>26, 52</td>
</tr>
<tr>
<td>productivity gaps</td>
<td>522</td>
</tr>
<tr>
<td>training</td>
<td>447, 448</td>
</tr>
<tr>
<td>wages</td>
<td>440</td>
</tr>
<tr>
<td>Malerba, F.</td>
<td>192</td>
</tr>
<tr>
<td>Mallya, T.J.S.</td>
<td>688</td>
</tr>
<tr>
<td>Mamalakis, M.</td>
<td>566</td>
</tr>
<tr>
<td>management contracts</td>
<td>261, 278, 279–80, 281</td>
</tr>
<tr>
<td>Mankiw, G.N.</td>
<td>435</td>
</tr>
<tr>
<td>Mann, M.</td>
<td>356</td>
</tr>
<tr>
<td>Mansfield, E.</td>
<td>387</td>
</tr>
<tr>
<td>March, J.G.</td>
<td>65, 92</td>
</tr>
<tr>
<td>Marchick, D.M.</td>
<td>643, 644, 645, 646</td>
</tr>
<tr>
<td>Marcotullio, T.B.</td>
<td>701</td>
</tr>
<tr>
<td>Marcus, S.J.</td>
<td>698, 699</td>
</tr>
<tr>
<td>marginalisation</td>
<td>680</td>
</tr>
<tr>
<td>Margolis, J.D.</td>
<td>652</td>
</tr>
<tr>
<td>Marin, A.</td>
<td>522</td>
</tr>
<tr>
<td>Mariotti, S.</td>
<td>433</td>
</tr>
<tr>
<td>market concentration</td>
<td>531–7</td>
</tr>
<tr>
<td>market failure</td>
<td>96–9, 335, 712–14</td>
</tr>
<tr>
<td>market imperfections</td>
<td>95, 203</td>
</tr>
<tr>
<td>market-seeking investment</td>
<td>69–71, 156, 209, 226, 406</td>
</tr>
<tr>
<td>European Union</td>
<td>34</td>
</tr>
<tr>
<td>host country determinants</td>
<td>325</td>
</tr>
<tr>
<td>inter-war years</td>
<td>179–83, 736</td>
</tr>
<tr>
<td>location choice</td>
<td>617</td>
</tr>
<tr>
<td>pre First World War</td>
<td>157–63</td>
</tr>
<tr>
<td>market structure</td>
<td></td>
</tr>
<tr>
<td>allocative efficiency</td>
<td>506, 516–17</td>
</tr>
<tr>
<td>home country, effects on</td>
<td>513–16</td>
</tr>
<tr>
<td>inter-sectoral efficiency</td>
<td>507–11</td>
</tr>
<tr>
<td>intra-sectoral efficiency</td>
<td>511–13</td>
</tr>
<tr>
<td>business practices</td>
<td>542–8</td>
</tr>
<tr>
<td>conceptual framework</td>
<td>504–6</td>
</tr>
<tr>
<td>MNE activity, impact</td>
<td>530–31</td>
</tr>
<tr>
<td>competitive effects</td>
<td>539–42</td>
</tr>
<tr>
<td>crowding out</td>
<td>541–2</td>
</tr>
<tr>
<td>entry and exit barriers</td>
<td>538–9</td>
</tr>
<tr>
<td>market concentration</td>
<td>531–7</td>
</tr>
<tr>
<td>product differentiation barriers</td>
<td>537–8</td>
</tr>
<tr>
<td>technical efficiency</td>
<td>517–18</td>
</tr>
<tr>
<td>productivity gaps</td>
<td>518–23</td>
</tr>
<tr>
<td>productivity, impact of acquisitions</td>
<td>523–4</td>
</tr>
<tr>
<td>profitability gaps</td>
<td>524–30</td>
</tr>
<tr>
<td>Markusen, A.</td>
<td>595</td>
</tr>
<tr>
<td>Markusen, J.R.</td>
<td>80, 97, 98, 490, 578</td>
</tr>
<tr>
<td>Marsh, L.C.</td>
<td>494, 545, 798, 802</td>
</tr>
<tr>
<td>Marshall, A.</td>
<td>594</td>
</tr>
<tr>
<td>Marshall, H.</td>
<td>159, 182</td>
</tr>
<tr>
<td>Martin, W.</td>
<td>456, 459</td>
</tr>
<tr>
<td>Martin, X.</td>
<td>781</td>
</tr>
<tr>
<td>Martinez, J.I.</td>
<td>255</td>
</tr>
<tr>
<td>Martinez, T.</td>
<td>440</td>
</tr>
<tr>
<td>Maskus, K.E.</td>
<td>410, 456, 459, 725</td>
</tr>
<tr>
<td>Mason, F.R.</td>
<td>159</td>
</tr>
<tr>
<td>Mason, M.</td>
<td>158, 180, 184, 225, 440</td>
</tr>
<tr>
<td>Mata, J.</td>
<td>227, 264</td>
</tr>
<tr>
<td>Mataloni, R.J.</td>
<td>23, 421, 431, 474, 487</td>
</tr>
<tr>
<td>Mathews, J.A.</td>
<td>141, 194, 230, 246, 247, 427</td>
</tr>
<tr>
<td>matrix organisation</td>
<td>241, 244–5, 248</td>
</tr>
<tr>
<td>Mauborgne, R.A.</td>
<td>255</td>
</tr>
<tr>
<td>Mauritius</td>
<td>680</td>
</tr>
<tr>
<td>McAleese, D.</td>
<td>561</td>
</tr>
<tr>
<td>McCann, P.</td>
<td>802, 804</td>
</tr>
<tr>
<td>McDonald, D.</td>
<td>561</td>
</tr>
<tr>
<td>McDonald's</td>
<td>217, 218, 567</td>
</tr>
<tr>
<td>McDougall, P.P.</td>
<td>220</td>
</tr>
<tr>
<td>McFetridge, D.G.</td>
<td>123, 192, 263</td>
</tr>
<tr>
<td>McGee, J.</td>
<td>526</td>
</tr>
<tr>
<td>McGrew, A.G.</td>
<td>594</td>
</tr>
<tr>
<td>McIntyre, J.R.</td>
<td>801</td>
</tr>
<tr>
<td>McKaig-Berliner, A.</td>
<td>229</td>
</tr>
<tr>
<td>McKay, J.P.</td>
<td>150, 169, 173</td>
</tr>
<tr>
<td>McKern, B.</td>
<td>566, 573</td>
</tr>
<tr>
<td>McMillan, M.S.</td>
<td>431</td>
</tr>
<tr>
<td>Menzies, G.</td>
<td>147</td>
</tr>
<tr>
<td>Merchant Adventurers</td>
<td>147</td>
</tr>
<tr>
<td>merchant capitalism</td>
<td>146–8</td>
</tr>
<tr>
<td>merchant groups</td>
<td>171–2, 736</td>
</tr>
<tr>
<td>Mercosur agreement</td>
<td>54</td>
</tr>
<tr>
<td>mergers and acquisitions (M&amp;As)</td>
<td>29, 226, 329, 534–5, 783</td>
</tr>
<tr>
<td>asset-augmenting</td>
<td>679, 749</td>
</tr>
<tr>
<td>choice of</td>
<td>286–7, 690</td>
</tr>
</tbody>
</table>
knowledge-seeking 229
sales and purchases by industry 20–22
service sector 70
strategic asset-seeking 228
Metanational firms 230, 246–7, 740, 749
Mexico
FDI and balance of payments 470
inter-sectoral efficiency 510
inward FDI 32, 33, 46–7
linkages 559, 565
manufacturing 348
MNEs and productivity 519
outward FDI 26, 53
R&D expenditure 346
science and engineering graduates 353
skilled labour 441–2
spillovers 584, 589, 591
wages 440, 441
Meyer, K.E. 139, 142, 264, 275
Michalet, C.-A. 495
Michel, A. 89, 527
micro-financing programmes 658
Microsoft 547–8, 662
Mikesell, R.F. 565
Millennium Development Goals 784, 786, 815–16
Miller, K.D. 204
mineral sector 168, 177, 704, 747
linkages 566, 571
mining sector 169, 566, 572
Mirza, H. 565
Miskell, P. 194
MNE
definition 3–5
distinctive features 5–7
foreign involvement, forms of 7–9
political role 694–7
MNE activity 67–8
evolution
locus of decision making 249–50
economic approach 250–52
strategic approach 252–3
measurement
data sources and types 9–12
direct effects 464–6
FDI flows 15–16
statistical data deficiencies 12–15
organisational modes 260–69
theories see international production
types
efficiency seekers 72, 74
escape investments 74
market seekers 69–71
natural resource seekers 68–9
passive investments 75–7
strategic asset seekers 72–4
support investments 74–5
MNE affiliates’ roles 253–8
autonomy 254–6
importance in host economies 424
innovation 257–8
knowledge transfer 256–8
MNE–government interaction, multilateral
response
collective investment supporting schemes
712–14
host countries, bargaining power 708–12
codes and guidelines 710–11
collective action 708–9
domestic policies 709–10
international governance structure 712
market-facilitating schemes 712–14
multilateral institutions
Kyoto Protocol 728–30, 758, 814
multilateral agreement on investment
726–8
WTO 722–6
regional integration 714–22
economic activity, allocation determinants
715–16
MNE influence 717–19
recent schemes 719–21
regional agreements and multilateralism
721–2
MNE–government interaction, unilateral
response
extra-territoriality 697–8
anti-trust policy 700–701
export embargoes 698–700
human rights violations 702–3
other areas of conflict 703–4
global economy 694–6
home governments 691–4
host governments
21st century investment climate 679–81
changes over past 40 years 674–81
confrontation 675–7
cost-effective FDI 686–8
entry conditions 681–4
exit conditions 686
honeymoon phase 675
performance requirements 684–5
policies, general 686–90
policies towards FDI 681–8
reconciliation 677–9
state–firm–civil society relationship 696–7
theoretical issues
bargaining model 670–73
ecclectic paradigm 666–8
schematic framework 668–70
mode of entry 263–4, 268–9, 275, 311, 534, 781, 782
Modén, K.-M. 137
Mody, A. 318, 680
Mohammad, S. 493
Mohd Noor, A.H. 802
Monge, J. 576
Montias, J.M. 323
Moran, P. 123, 456, 457, 492, 593, 651, 657, 680, 685
Morck, R. 90, 799
Morgan, G. 225, 440
Morocco 522, 561, 584, 590
Morosini, P. 783, 800
Morrison, A.J. 669
Morrow, D. 809
Mowery, D.C. 284, 285
Muchlinski, P.T. 650
Mudambi, R. 225, 256, 258, 369, 680, 789
multidivisional global product organisation 240, 242
Multilateral Agreement on Investment (MAI) 461, 727–8
Multilateral Investment Guarantee Agency (MIGA) 713
multilateral investment insurance 713
*Multinational Enterprises and Economic Analysis* (Caves) 114
multinational institutions
Kyoto Protocol 728–30, 758, 814
multilateral agreement on investment 726–8
WTO, investment-related measures 722–6
Munday, M. 800, 804
Murphy, A.P. 431
Murray, R. 489
Mutti, J. 620
Myrdal, G. 648
Mytelka, L.K. 566, 614, 672, 684, 695, 791
Nachum, L. 598, 804
NAFTA (North American Free Trade Area) 54, 194, 225, 709, 721, 722, 746
Narula, R. 335, 380, 385, 395, 500, 680
national diamonds of competitive advantage 737
national innovation system (NIS) 384, 599
national ownership neutrality (NON) 620
national security 643–6, 693
Natke, P. 625
natural resource-seeking affiliates 565–7
natural resource-seeking investment 68–9, 617
Navarra, P. 258
Nayyar, D. 29
negative incentives 224
Nelson, R.R. 65, 112, 121, 130, 132, 384, 773
Nestlé 55, 158, 298, 559, 576, 654
Netherlands
employment in MNEs 422
exports 796
foreign affiliates’ importance 424
intra-firm trade 485
inward FDI 31, 44–5
outward FDI 23, 24, 25, 37, 40–41, 50
R&D expenditure 346
science and engineering graduates 352
network capitalism 249
networks
external
franchising agreements 217, 218, 222, 261, 278, 279
joint equity ventures (JVs) 261, 269–77, 289
licensing agreements 217, 222, 223, 261–2, 263, 278–9, 281, 772
management contracts 261, 278, 279–80, 281
subcontracting 278, 281
turnkey agreements 217, 218, 261, 278, 280, 281
historical
banking houses 147, 153–4
colonising ventures 147–8
Commenda 146
embryonic MNEs 152–4
finance capitalists 151–2
Hanseatic League 146–7
industrial capitalists 149–50
Merchant Adventurers 147
merchant capitalists 146–8
trading companies 148
internal
affiliate roles 253–4
autonomy 254–6
innovation 257–8
knowledge transfer 256–8
domestic firms 239–41
front-end/back-end organisation 241, 246
global firms 243–7
international division organisation 240, 241–2
locus of decision making 249–53
matrix organisation 241, 244–5
multidivisional global product organisation 240, 242
organisational structure 238–9, 240–43, 248–9
Neumayer, E. 458
Neupert, K.E. 264, 274
New Zealand 174, 346, 562–3
Newfarmer, R.S. 494, 517, 536, 545, 547, 798, 802
Newman, K.L. 695
NGOs (non-governmental organisations) 290, 653, 697, 727–8
Nguyen, H.V. 142
Nicholas, S. 70, 157, 181, 182, 774, 775, 777
Nigeria
balance of payments and FDI 481
human rights violations 654
inward FDI 32
training 447
wages 440
Nike 653
Niosi, J. 373, 376
Nissan 226, 531
No Logo (Klein) 364
Nohria, N. 245, 246, 372
Nokia 230, 247, 371, 537, 617, 645, 780, 789
Noland, M. 785
NON (national ownership neutrality) 620
non-equity cooperative agreements 190, 277–8, 289, 329
buyer/seller agreements 277–81
strategic alliances 226, 230, 281–6, 749
characteristics of networks 282–4
learning from 284–6
motivations for 283
non-governmental organisations (NGOs) 290, 653, 697, 727–8
non-pecuniary externalities 551, 552, 553
North American Free Trade Area (NAFTA) 54, 194, 225, 709, 721, 722, 746
North, D.C. 128, 129, 130, 146, 149, 275, 301, 327, 337, 344, 680, 696, 758
Norway
employment in MNEs 422
firms, study of divestment 227
foreign affiliates’ importance 424
outward FDI 24
science and engineering graduates 352
Novak, M. 299
Nunnenkamp, P. 310, 387, 787
O’Brien, T.F. 166
OECD 358, 633
Anti-Bribery Convention 654
Guidelines for Multinational Enterprises 654, 655, 710–11
Multilateral Agreement on Investment (MAI) 727–8
offshoring 425, 568, 778–9, 792
Ohmae, K. 244
oil industry 28, 28–9, 166, 169, 183, 193, 513, 704, 747, 776
linkages 56, 570–71
Okada, A. 448, 801
Oksanen, O.-P. 516
OLI paradigm see eclectic paradigm of international production
Oliver, N. 137
Oman, C. 572, 576
Omura, G.S. 575
operating requirements 684–5
organisational forms 260–64, 741–2, 748–50
organisational function
organisational needs, strategic responses 236–8
organisational structure 234–6
risk and MNE strategy 236–7
technology creation and acquisition 237–8
organisational structure 238–9, 240–41, 248–9
affiliate roles 253–4
autonomy 254–6
innovation 257–8
knowledge transfer 256–8
domestic firms 239–41
front-end/back-end organisation 241, 246
global firms 243–7
international division organisation 240, 241–2
internationalisation, impact on governance 241–3
locus of decision making 249–50
economic approach 250–52
strategic approach 252–3
matrix organisation 241, 244–5
multidivisional global product organisation 240, 242
Orlitzky, M. 652
Orsenigo, L. 192
Ostry, S. 697, 812
O’Sullivan, M. 449
Oulton, N. 520
outsourcing 196, 215, 217, 231, 261, 425, 570, 779, 793
effects of 433–5
of services 222, 635, 747–8
Oviatt, B.M. 220
Oxelheim, L. 137, 515, 679, 708
Oxley, J.E. 269, 286
Ozawa, T.
affiliates and exports 495
cultural differences 54, 367, 647
employment conditions 427
Index

flying-geese pattern 33, 510
global marketplace 338
intra-firm trade 484
Japan's restructuring 501, 510, 668, 752, 753, 754, 787, 791
network ties 139
US MNEs in Japan 136

P&O 76, 644
Pain, N. 383, 476, 803
Pajot, M. 476
Palepu, K.G. 367, 451, 577
Palich, L.E. 799
Palmer, C. 377
Pang, E.F. 563, 564
Papanastassiou, M. 255, 258, 373
Papandreou, V. 440
Parikh, A. 615
Park, S.O. 557
Park, Y.-R. 264, 286
Parkinson, D. 647
passive investments 75–7
Passow, S. 684
Patel, P. 374, 375, 788
patenting 351, 354, 355–6, 782, 788–9
patents 159–60
Patibandla, M. 577
Pauly, P. 515
Pavitt, K. 374, 375, 788
Pearce, R.D. 255, 258, 263, 371, 373, 376, 512, 526, 527, 532, 653
pecuniary externalities 518–19, 551, 552
Pedersen, T. 219, 225, 255
Peng, M.W. 120, 139, 140, 141
Penner-Hahn, J. 790
Penrose, E.T. 92, 94, 120, 748
Peoples, J. 368, 454, 647
Perez, C. 375
performance requirements 390–91, 684–5
Peri, G. 789
Perlmuter, H.V. 252
Peru 561
Peters, L. 791
Petersen, B. 577
Petit, M.L. 789
Pfaffermayr, M. 476, 516, 520, 718, 719
pharmaceutical sector 410, 535, 545, 701, 725, 814
Phelps, N.A. 603
philanthropy 662
Philippines 440, 510–11, 545
Pine, B.J. 570
pipeline MNEs 247
Piscitello, L. 375, 524
Pitelis, C. 81, 98
Plasschaert, S. 632, 633
Plummer, A. 83
Poland
balance of payments and FDI 482
employment in MNEs 422
foreign affiliates' importance 424
linkages 559, 565
offshoring 568
outward FDI 42–3
R&D expenditure 346
policy risks 236
political centralisation 399–400, 791
pollution 456, 651, 661, 756
pollution havens 312–14, 657
polycentric MNE 252
Popovici, I. 408
Popp, A. 289
Port Sunlight 649–50
Porter, M.E. 109, 190, 206, 207, 323, 324, 385, 396, 436, 500, 554, 594, 651, 671, 737
portfolio investment 75, 76–7, 170, 178
Portugal
employment in MNEs 422
exports 796
foreign affiliates' importance 424
intra-firm trade 484
investment development path (IDP) 336
MNE activity employment effects 438–9
productivity gaps 521–2
science and engineering graduates 352
Portugal, P. 227, 264
Pöschl, J. 481, 482
positive incentive structures 224
Possas, M.L. 440
Pothukuchi, V. 274
Potterie, B.V.P.D.L. 407
poverty 657, 755–6, 816
Powell, W.W. 117, 127, 254, 275, 600
Poynter, T.A. 254
Prahalad, C.K. 242, 245, 253, 270, 278, 287, 592, 657, 778
predatory pricing 543, 548
preferential trade agreements 738
Priest, T. 193
primary sector 69, 545, 565–7, 570–73
private equity groups 747, 749
producer-driven networks 559
product cycle 85–6
product differentiation 537–8
production costs 555, 751
production-sharing agreement 278
productivity advantages 518–19
productivity gaps 518–23, 803
developed host countries 519–21
developing host countries 521–3
productivity spillovers 803
profit repatriation 471, 617–18, 768
profitability gaps 524–30
between foreign-owned and local firms 525–6
methodical and theoretical issues 528–30
between multinational and uninalnational firms 526–8
property rights protection 101, 161–2, 279, 301, 310, 387, 410–11, 724–5
protectionism 181–2
psychic distance 92, 771
Publish What You Pay 654
Pugel, T.A. 495
Putnam, R.D. 305

R&D 345–9, 374–8, 749
affiliates, strategic role of 372–3
centralisation 372
collaborative 394–5, 791
decentralisation 372
diversification 374–6
expenditures, by sector 347–9
expenditures, of foreign affiliates 358–60
foreign affiliates’ intensity 360–61
industrial sector 345, 347–9, 788
internationalisation 376–8
technological profiles 374–6
Rabbiosi, L. 524
Rahn, W. 138, 304, 307
Raines, P. 566
Rainforest Alliance 290
Ramamurti, R. 725, 810
Ramaswami, S.N. 263
Ramaswamy, K. 529
Ramsey, H. 395
Randøy, T. 137
Rangan, S. 91, 489
Rao, G. 520
Rasiah, R. 448, 471, 494, 495, 522, 576, 600
Ravallion, M. 755
Ray, M. 439
Read, R. 167
Readon, T. 568
Reberioux, A. 454, 793
Reddaway, N.B. 183, 691
Reddy, P. 360
Reddy, S. 264, 782
Rees, W. 527
regiocentric MNE 252–3
regional integration 714–22, 738
determinants 715–16
role of MNEs 717–19
regional agreements and multilateral system 721–2
regionalisation, recent efforts 719–21
regional integration agreements 54, 71, 72, 718
Reich, R.B. 6
Reinhardt, F.L. 651
reinvested earnings 12–13, 15, 225, 681
Republic of Korea
inward FDI 32, 46–7
outward FDI 26, 42–3, 52
R&D expenditure 346
science and engineering graduates 350, 353
residence based taxation system 611–12
Resnick, A. 140, 309
resource-based theory of firm 120–22
resource risks 236
resource-seeking investment 68–9, 178, 183, 209, 226, 406
host country determinants 325
location choice 224, 617
pre First World War 156, 163–70
restrictive business practices 544–8
Reuber, G.L. 563, 575
revealed technological advantage (RTA) 374, 790
reverse classical substitution model 467, 468
reverse investment 568–9
reverse outsourcing 231
reverse spillovers 406–8, 592, 803
reverse technology transfer 136, 406–8, 647–8
Reynolds, L.G. 297
Ricart, J.E. 594
Richardson, G.B. 266, 273
Riedel, J. 796
Ries, J. 477, 598
Riker, D.A. 432
Rippy, F.J. 151
Rise of the Creative Class (Florida) 305
risk diversification hypothesis 89–90
risk service contract 278
Ritzen, J. 784
Rival States, Rival Firms (Stopford and Strange) 696
Robertson, D. 749
Robinson, C. 520, 523
Robinson, J. 731, 757, 785
Rodriguez-Clare, A. 577
Rodriguez, P. 634
Rodrik, D. 137, 139, 301, 302, 303, 338, 455, 456, 748, 752, 762
Rojec, D. 511, 522, 536
Romer, D. 301
Romer, P.M. 788
Rondinelli, D.A. 128, 337, 393, 651, 653, 687, 809, 811
Rose-Ackerman, S. 308
Rosenberg, N. 411
Rosenbluth, G. 549
Rosengren, E. 91
Rosenzweig, P.M. 142, 264
Roth, K. 127, 275, 368
round-tripping investment 12, 27, 33, 74, 767
Rover 271, 782
Royal Dutch Shell 28, 169
Royal Institute of International Affairs 182
royalties 342, 354, 356, 357, 618–19
Ruane, F. 495, 496, 585, 790
Rufin, C. 399, 791
Rugman, A.M. 4–5, 89, 98, 120, 229, 244, 253, 254, 396, 409, 526, 621, 720, 731
Runnbeck, M. 684
Russia
  inward FDI 32, 46–7
  outward FDI 26, 42–3
  R&D expenditure 345
  science and engineering graduates 351, 353
Ruttenberg, S. 428
Ryan, T.C.I. 440
Sachs, J.D. 300, 301
Sadownik, B. 287, 381
Safarian, A.E. 187, 360, 484, 508, 575, 794, 796
Saks, R.E. 785
Salomon, R. 781
Sampson, R.C. 269, 286
Sanchez-Robles, B. 787
Saner, R. 730
Santangelo, G.D. 601
Sarbanes-Oxley Act 136, 774, 808
Sass, M. 539
Sauvant, K.P. 28, 29, 61, 77, 418, 747
Saxenian, A. 600
Schakenraad, J. 380
Schive, C. 796
Schjelderup, G. 620
Schmid, S. 257
Schott, J.J. 722
Schröter, H. 176, 775
science and engineering training 349–51, 788
SCOPE project 4, 5
Scott-Kenel, J. 562, 563, 593
Scott, W.R. 127
Selden, L. 570
selective investment policy 690
Sen, A. 300, 337, 661, 756
sequential investment 224–5, 227
Servais, P. 77, 220, 246
service sectors 39, 170–72, 222, 347
  backward linkages 567–9
  cross-border M&As 70
  FDI 423, 425
  inter-war investment 183–4
  inward FDI 36, 438
  R&D expenditures 347–8
  restrictive business practices 547
Shaked, I. 89, 527
Shan, W. 229
Shane, S. 264
Shapiro, D. 309, 519
Shaver, J.M. 268, 598, 790, 804
Shelanski, H.A. 629
Shelburne, R.C. 433, 434, 458, 793
Shell 28, 183, 193, 653, 654
Shenkar, O. 720
Shepherd, D. 429
Shin, H.-H. 780
Shiseido 230, 247
Shleifer, A. 310, 311
Sibunruang, A. 447
Siddharthan, N.S. 483, 527
Siemens 55, 158, 160, 177, 193, 645
Silicon Valley 600
Simões, V.C. 484, 521, 796
Simon, H.A. 65
Simonin, B.L. 783
Singapore
  FDI and balance of payments 470
  FDI, policies towards 690
  foreign affiliates, exports 496
  inter-sectoral efficiency 510
  inward FDI 31, 46–7
  linkages 559, 564
  outward FDI 26, 42–3, 52
  participation on global economy 497
  productivity gaps 522
  R&D expenditure 346
  training 447
  wages 440
Singh, H. 274, 284, 285
Singh, S. 371, 376
Sjöholm, F. 442, 523, 589, 591
Slaughter, M.J. 443, 513, 793
Slemrod, J. 806
Sleuwaegen, L. 263, 478, 521, 541
Slovakia 346, 482
Slovenia 346, 482, 522, 542
Smarzynska Javorcik, B.K. 140, 310, 313, 519, 524, 578
Smith, A. 594, 715
Snidal, D. 809
Sobel, J. 305
social capital 138, 304–8, 752
soft loan societies 658, 809
software industry 410, 600, 788
sogo shosha 75, 219, 567, 754, 770
Solomon, R.G. 495, 519
Sölvell, Ö. 602
Song, J. 225, 229, 256
Sorenson, O. 600
Sosin, K. 522, 798
sourcing decisions 554–60
Sourrouille, J.V. 440
South Africa
foreign affiliates, imports/exports 495
inward FDI 32, 46–7
linkages 561–2, 566, 572
manufacturing 348
market structure 536
outward FDI 26, 52
productivity gaps 522
R&D expenditure 346
training 447
South Korea
economic autonomy 641–2
FDI and balance of payments 470
inter-sectorial efficiency 510
labour-management relations 453–4
manufacturing 349
market structure 536
outward FDI 49
R&D expenditure 347
technological development 398
wages 440
see also Republic of Korea
Southard, F.A. 182
sovereignty 694–6
economic autonomy 639–40
economic welfare 638–9
independence 640–42
Sovereignty at Bay (Vernon) 694
Spain
employment in MNEs 422
foreign affiliates’ importance 424
inward FDI 31
labour–management relations 453–4
MNE activity employment effects 438–9
outward FDI 24, 25
R&D expenditure 346
science and engineering graduates 352
spillovers 586
Spatz, J. 310, 387, 787
Spender, J.C. 123, 214
spillovers 315, 406–8, 551, 552, 579–80
cross-cultural differences 648
effect on indigenous firms 580–82
export spillovers 591
measurement 582–3, 802
policy considerations 592–3
productivity spillovers
developed host countries 585–8
developing host countries 588–91
earlier evidence 584–5
recent evidence 585–92
reverse spillovers 592
unconventional 366
Starbucks 217, 218, 290
state-owned enterprises (SOEs) 28–9, 77
Stegemann, K. 389
Stein, J.C. 91
Stephens, B. 808
Stern, N. 729
Steuer, M.D. 480–1, 536
Stevens, G.V. 114
Stewart, T.A. 341
Stiglitz, J.E. 300, 302
Stilwel, F. 65
Stobaugh, R.B. 428
Stonehill, A. 187
Stopford, J.M. 151, 158, 161, 165, 169, 181,
182, 429, 696
Strange, R. 453, 695
strategic alliances 229, 277, 281–6, 405–6
characteristics 282–4
learning from 284–6
motivations for 283
strategic asset-seeking investment 72–4, 121,
227, 228, 323, 335, 617
strategic market-seeking investment 71
Streeten, P. 298, 478–80
Strobl, E. 443, 578, 585, 586, 800
structural adjustment and upgrading policy 690
structural market failure 95, 98
structure of trade, impact of MNEs 490–91
export intensity, foreign affiliates and
indigenous firms 493–6
sectoral distribution of MNE activity 491–3
Stuart, T. 600
Stubenitsky, F. 796
Stulz, R.M. 780
Sturchio, J.L. 192
subcontracting 278, 281
subsidiary-specific advantages (SSAs) 253
sugar production 166, 169–70
Sugden, R. 368, 454, 647
Sun, H. 481
support investments 74–5
supranational response to MNE activity
collective investment support scheme 712–13
host country bargaining powers 708–12
codes and guidelines 710–11
collective action 708–9
domestic policy re-evaluation 709–10
international governance structure 712
market-facilitating schemes 712–14
regulatory institutions 726–7
supranational problems 755–8
Survey of Implementation of Methodological Standards for Direct Investment (SIMSDI) 14
Svedberg, P. 77
Svensson, R. 474
Swagel, P. 435
sweatshops 454–5, 456–8
Sweden
allocative efficiency 515
employment effects 432–3
employment in MNEs 421, 422
foreign affiliates’ importance 424
foreign production and exports relationship 476
intra-firm trade 484, 485
outward FDI 24, 25, 513, 691
R&D expenditure 346
science and engineering graduates 352
training 447
Swedeborg, B. 495
Swenson, D.L. 477, 806
Swinnen, J.F.M. 559
Switzerland
employment in MNEs 422
intra-firm trade 487
inward FDI 31, 44–5
outward FDI 24, 25, 40–41, 51
R&D expenditure 346
science and engineering graduates 349, 352
taxation on affiliates 612
Szulanski, G. 368, 451
Tadesse, S. 311–12
Taggart, J.H. 255
Taiwan
clustering 600
economic autonomy 641–2
exports 796
FDI and balance of payments 470
inter-sectoral efficiency 510–11
inward FDI 32
linkages 562
manufacturing 349
market structure 536
outward FDI 26, 42–3, 49, 52
R&D expenditure 346
science and engineering graduates 353
technological development 398
training 447
Takeishi, A. 451
Takii, S. 803
Talisman Energy 702–3
Tallman, S. 207, 528, 805
Tamaki, N. 171
Tamarin, C. 476
Tang, J. 520
Tang, R.Y. 628, 807
Tanzi, V. 310
tariffs 159, 181–2
Tata Steel 28, 73
Tavares, A.T. 255, 686, 728
tax havens 12, 33, 611
tax neutrality 611, 805
tax-sparing policies 807
taxation 703
differentials, MNEs response 614–19
foreign income of MNEs 611–12
global economy 619–20
rates, types 613–14, 616
Taylor, G. 136, 367, 451, 513, 653
Taylor, K. 442, 443
Taylor, P. 168, 776
technical efficiency 517–18
acquisitions, impact on productivity 523–4
productivity gaps 518–23
developed host countries 519–21
developing host countries 521–3
profitability gaps 524–30
between foreign-owned and local firms 525–6
methodical and theoretical issues 528–30
between multinational and unational firms 526–8
technological advances 740–41, 742–5
technological capacity 342, 343
affiliate R&D 368–74
motivations for 369–70
organisation of 372–4
type 370–72
distribution 345–56
patenting 351, 354, 355–6
R&D expenditures 345–9
R&D sectoral distribution 347–9
royalties and licence fees 354, 356, 357
training 349–51
home government, role 400–411
asset-augmenting investment 405–8
asset-exploiting investment 401–5
domestic technological restructuring by FDI 409–11
reverse technology spillovers 406–8
host country government, role
developing countries 397–400
indigenous technological capacity 384–7
strategies 388–97
Index

host country, impact of MNEs 356–61
foreign affiliates’ R&D expenditure 358–60
foreign affiliates’ R&D intensity 360–61
spillovers to local firms 361
technology transfer and adaptation 362–8
factor availability and price differentials 364–6
institutional and cultural differences 366–8
market size and characteristics 363–4
technological innovations 716
technological performance requirements 390–91
technology alliances 360
technology, definitions and taxonomy 343–5
technology sourcing 378–82
alliance activity trends 379–81
alliances and acquisitions, choice 381
cross-border alliances 380–81
R&D alliances, motivations for 378–9
technology transfer 344, 362–8, 383–4, 450, 540, 789, 790
asset-exploiting investment, effects of 401–5
factor availability and price differentials 364–6
host government strategies 388–97
institutional and cultural differences 366–8
market size and characteristics 363–4
Teece, D.J. 203, 279, 401, 779
Teegen, H. 653
Teichova, A. 176
Templeton Global Performance Index 4
territorial taxation system 611, 612
Tesco 567
Thailand
balance of payments and FDI 481
inter-sectoral efficiency 510–11
inward FDI 32
linkages 559, 564, 565
training 447
Thomas, H. 526
Thompson, A.S. 777
Thursby, J. 372, 378
Thursby, M. 372, 378
Tignor, R. 182
Tihanyi, L. 267
TNT Logistics 568
Tolentino, P.E. 330
Tomlinson, B.R. 152, 775
Tomlinson, J.W.L. 273
Toms, S. 289
Torres, R. 462
total factor productivity (TFP) 518
Total Global Strategy (Yip) 720
Toyota 6, 55, 226, 498, 531, 559
TPM see transfer price manipulation (TPM)
trade credit guarantee schemes 713
Trade Related Investment Measures (TRIMS) 724
trade sanctions 456, 459
trade structure, impact of MNEs 490–96
trading companies 171–2, 184, 779
Trading with the Enemy Act 698, 699
training in science and engineering 349–51
transfer price manipulation (TPM) 620–21, 703, 807
constraints on 624–5
evidence for 625–9
income shifting 627–8
methods used by MNEs 628–9, 630
government policies towards
future challenges 635
indirect economic effects of TPM 634
supranational action 633–4
unilateral policies 629–33
motivation for 621–3
opportunities for 623
transition economies
asset-exploiting investment 401
crowding out 542
employment 423
environmental issues 313, 728, 729
FDI effect on growth 317, 745
human capital 317
institutions 139, 275, 302–4, 308
inward FDI 46–7
and balance of payments 481–2
industrial distribution 46–7
linkages 558–60
market failure 98, 713
outward FDI 23, 26–7, 35, 42–3
industrial distribution 42–3
market-seeking investment 71
R&D 346–7, 348–9
spillovers 582
working practices and standards 452
Transnationality Index (TNI) 4, 33–4
TRIMs agreement 685
TRIPS (trade-related aspects of intellectual property rights) 410, 724–5
Truelove, A.M. 654
Tungodden, B. 712
Turkey
employment in MNEs 422
foreign affiliates’ importance 424
inward FDI 32
manufacturing 348
outward FDI 26
R&D expenditure 346
| science and engineering graduates | 353 |
| training | 447 |
| Turner, L. | 182 |
| turnkey agreements | 217, 218, 261, 278, 280, 281 |
| Turok, I. | 802 |
| Tybout, J.R. | 800 |
| Tzannatos, Z. | 458 |
| Ubeda, F. | 336 |
| Uganda | 440, 522 |
| Uğur, A. | 496, 585 |
| Uhlenbruck, K. | 311 |
| UN Global Compact | 654, 656, 711, 812–13 |
| UN Millennium Development Goals | 784, 786, 815–16 |
| UN Norms on the Responsibilities of Transnational Corporations | 702 |
| Unilever | 56, 194, 243, 371, 559, 567, 778 |
| United Fruit | 166–7, 169, 567, 693 |
| United Kingdom | |
| balance of payments and FDI | 480–81 |
| clustering | 601 |
| clusters | 805 |
| competitive market structure | 541 |
| employment in MNEs | 421, 422 |
| export intensity of foreign affiliates | 495 |
| family ownership | 181 |
| FDI | 174–5, 811 |
| and balance of payments | 467 |
| inward | 31, 44–5 |
| outward | 23, 24, 25, 37, 40–41, 50, 186 |
| foreign affiliates’ importance | 424 |
| industrial relations | 419, 453 |
| inter-sectoral efficiency | 509, 510 |
| intra-firm trade | 484 |
| labour–management relations | 452 |
| linkages | 559, 565 |
| location choice | 598–9 |
| market-seeking investments | 157–8, 181 |
| MNE employment effects | 429 |
| productivity gaps | 519, 520 |
| productivity, impact of acquisitions | 523 |
| profitability gaps | 527, 528 |
| R&D | 346, 347, 373 |
| resource-seeking investments | 167–9 |
| science and engineering graduates | 350, 352 |
| security | 645 |
| skills and wages | 442–3 |
| spillovers | 587–8, 591, 592 |
| taxation on affiliates | 611–12 |
| training | 447 |
| transfer price manipulation (TPM) | 628, 629 |
| United States | |
| Alien Tort Claims Act (ATCA) | 654, 702, 757 |
| allocative efficiency | 514–15 |
| anti-trust policy | 700, 701 |
| balance of payments | 471–4 |
| clustering | 600 |
| corporate governance | 449 |
| economy | 498–9 |
| employment | 421, 422 |
| employment conditions | 445–6 |
| energy sector | 643 |
| Exxon-Florio Amendment | 644–5 |
| export embargoes | 698–9 |
| extra-territorial measures | 698–700, 701 |
| FDI | 110, 174, 175 |
| and balance of payments | 466, 467 |
| inward | 30, 31, 44–5, 450, 644, 761 |
| outward | 23, 24, 25, 37, 40–1, 50 |
| and production relationship | 477 |
| firms, forward linkages | 570 |
| foreign affiliates, import/export intensity | 495 |
| foreign production and exports relationship | 475–6 |
| free trade agreements (FTAs) | 719 |
| and global economy | 498–9 |
| government intervention for MNEs | 693–4 |
| income shifting | 627–8 |
| inter-sectoral efficiency | 508, 509 |
| intra-firm trade | 483, 484, 485, 486–8, 489, 795 |
| labour–management relations | 453 |
| labour market | 450, 793 |
| location choice | 597–9, 616 |
| market-seeking investments | 158, 179–80 |
| MNE activity employment effects | 428–30, 430–31, 432–3, 439 |
| MNEs in Japan | 647–8 |
| national security | 643–5, 699 |
| outsourcing | 434–5 |
| owned companies, labour–management relations | 452 |
| productivity gaps | 519 |
| profit repatriation | 768 |
| profitability gaps | 527, 528 |
| R&D | 345, 346, 347, 348, 788 |
| resource-seeking investments | 165–7 |
| sanctions | 699 |
| science and engineering graduates | 351, 352 |
| subsidiaries in UK, social practices | 451 |
| taxation on affiliates | 611–12 |
| Trading with the Enemy Act | 698, 699 |
| training | 445–6, 447, 449, 450 |
| transfer price manipulation (TPM) | 625, 626, 629 |
| wages | 440–41, 442, 443 |
Index

Unocal 499, 644, 654
Uppsala school behavioural theory 91–3
Uruguay, spillovers 589
US dollar in global economy 498–500

Vachani, S. 529, 673
Vahlne, J.-E. 91, 92, 430
value added by MNEs 606–8
government policy, impact of
corporate taxation trends 612–14
home government 610–12
host government 608–10
MNE location choice 615–17
national taxation in global economy 619–20
taxation differentials, MNE response 614–19
transfer pricing see transfer price manipulation (TPM)
value-added chain 205–6
value-added networks 206–12
van den Bergh, D. 431, 444
Van den Bulcke, D. 430, 468, 484, 796
van der Linde, C. 651
Van der Wee, H. 157, 171
van Hoesel, R. 227
van Tulder, R. 4, 431, 444, 651, 653
Vanhaverbeke, W. 287
Varon, B. 571
Vaupel, J.W. 162, 177, 185, 186, 187, 288
Venables, A.J. 503, 578, 807
Venezuela 441, 522, 590, 704
venture capital 776
Verbeke, A. 4–5, 120, 229, 244, 253, 396, 409, 720, 731
Vermeulen, F. 287, 530, 779
Vernon, R. 85, 86, 126, 481, 643, 672, 697, 760, 766
Verspagen, B. 340
vertical agreements 277–81
vertical direct investment 425
vertical integration 167, 168, 513, 556, 802
vertical linkages 551
Vertova, G. 790
Veugelers, 384
Vietnam 32, 559
Vishny, R.W. 310, 311
Vogel, D. 658, 659, 660, 809
voluntary export restraints (VERs) 478
von Hippel, E. 132
von Krogh, G. 132

Wadhwa, V. 349
Wakelin, K. 91, 476
Wal-Mart 56, 247, 519, 567, 568, 653
Wale, J. 171
Wallace, D. 726
Walsh, J.P. 652
Walter, I. 700
Wanner, H. 246
warehousing 220
wartime, foreign investment 646
Washington Consensus 300, 784
Wavre, P.A. 148, 159
Weber, M. 130
Weber, S. 132
Wei, S.-J. 311, 313, 434, 435
Wei, Y. 476, 590
Weichenrieder, A.J. 620
Weiner, R.J. 626
Weiss, M.Y. 475
Weitzel, U. 311
Welch, L.S. 220
Welles, J.G. 313
Wells, L.T. 693, 811
Westney, D.E. 136, 229, 238, 245, 246, 374, 647
Wheeler, D. 680
White, R.E. 254
Wilkins, M.
1914 global FDI stock 173
free-standing firms 151, 170
globalisation 191
history 148, 150, 153, 157, 225, 698, 775
inter-war years 177, 178, 179, 183, 184
location choice 160, 161
US banking 171
US market-seeking investment 158, 159, 162
US resource-seeking investment 165, 166, 168, 169
Wilkinson, B. 137
Williams, J.H. 83, 146, 147
Williams, O.F. 809
Williamson, O.E. 129, 203
Willman, P. 653
Willmore, L.N. 441, 522
Wills, J. 454
Wilson, C. 755
Wilson, J.F. 289
Wint, A.G. 672, 673, 724
Winter, S.G. 65, 121
Woodcock, C.P. 264
Woodward, D. 439
World Bank 712, 713
World Economic Forum 447
World Intellectual Property Organisation (WIPO) 725
World Investment Directory (UNCTAD) 9–10, 17
World Investment Report (UNCTAD) 9, 10, 11, 17, 709, 766
World Values Surveys 785–6
worldwide taxation principle 612
Wright, G. 155
WTO 722–6, 814
Wymbs, C. 598

Xin, T. 577
Xu, B. 361
Xu, D. 720

Yeaple, S.R. 587
Yeung, B. 90, 799
Yip, G. 217, 278
Yiu, D. 142, 264, 782
Yonekawa, S. 171
Yong, Y.S. 440, 447
Yorgason, D.R. 377, 474, 788

Young, S. 452, 680, 686, 728, 789, 811
Yue, C.S. 557

Zaheer, S. 127, 238
Zajc Kejžar, K. 522, 542
Zander, I. 247, 256, 789
Zander, U. 122
Zanfei, A. 382, 520
Zeile, W.J. 360, 421, 486, 487
Zeitlin, J. 647
Zeng, M. 274, 381
Zhang, J. 468
Zhao, J.H. 311, 443, 781
Zhou, Y. 577
Zucker, L.G. 450, 600
Zurawicki, L. 311
Zweig, D. 645
Zysman, J. 695