

# Multinationals, Technology and Competitiveness

**John H. Dunning**

London  
UNWIN HYMAN  
Boston Sydney Wellington

# Contents

Acknowledgements	xiii
List of Figures	xv
List of Tables	xvii
1 <i>Introduction</i>	1
Some Themes of This Monograph	1
The Plan of the Book	5
2 <i>International Business in a Changing World Environment</i>	9
Introduction	9
Antecedents of the MNE	9
Multinational Enterprises and Host Country Interaction:	
The Last Thirty Years	16
Towards a New Understanding Between MNEs	
and Governments	21
Some Observations on the Future of MNEs:	
Government Relationships	25
Conclusions	27
3 <i>Market Power of the Firm and International Transfer of Technology</i>	29
Introduction	29
Phase 1: The Industrial Revolution – To Around 1870	31
Phase 2: 1870–1914	33
Phase 3: 1919–1939	35
Phase 4: 1945–1965	37
Phase 5: 1965–1985	40
4 <i>Multinational Enterprises, Technology Transfer and National Competitiveness</i>	47
Introduction	47
Some Theoretical Issues	47
Technology Traded Through the Market	50
Technology Transfers Within the MNE	54
The Influence of MNEs on National Competitiveness	57
Measuring and Interpreting National Competitiveness	59
Some Evidence Concerning the Impact of the Transfer of	
Technology Through MNEs on European Competitiveness	61
Summary and Conclusions	63

5	<i>Inward Direct Investment from the USA and Europe's Technological Competitiveness</i>	69
	Introduction	69
	The Changing Competitive Position of European Industry	74
	The Growth of the Leading US and European Firms	78
	The Contribution of US Manufacturing Subsidiaries to European Exports	80
	The Changing Pattern of the US/European Direct Investment in Manufacturing	90
	The Technological Balance of Payments: The USA Compared with Europe	91
	Conclusions	95
	Appendix	102
6	<i>The Changing Role of MNEs in the Creation and Diffusion of Technology</i>	103
	Introduction	103
	The Historical Trend Towards Technological Systems	104
	The Dependence of International Technology Transfer and Diffusion on the Structure of Industries	106
	The Dependence of International Technology Creation and Dissemination on the Global Investment Strategy of MNEs	111
	The Policy Implications of the Closer Relationship Between the International Creation, Transfer and Diffusion of Technology	115
7	<i>International Direct Investment in Innovation: The Pharmaceutical Industry</i>	123
	Introduction	123
	The Scale in International Investment in Pharmaceutical R & D	123
	Motives for International Investment in Research	128
	The Choice of Host Country	130
	Gains and Losses: A General Review	133
	The UK Pharmaceutical Industry	136
	Conclusions	141
8	<i>The Consequences of the International Transfer of Technology by MNEs: A Home Country Perspective</i>	144
	Introduction	144
	The Problem Stated	145
	The Conditions of Technology Transfer	147
	Multinational Enterprises and Technology Transfer to Developing Countries	151
	Implications for Industrialized Countries	159
	Conclusions: Some Policy Implications	167
9	<i>Multinational Enterprises, Industrial Restructuring and Competitiveness: A UK Perspective</i>	172
	Introduction	172
	Historical Background	173
	A New International Division of Labour	176
	The Impact of New Technology	177

The Structural Impact of MNEs in the 1960s and 1970s:	
Some Theoretical Considerations	178
Measuring the Impact of MNEs on UK Industrial Structure	180
The Statistical Testing	183
Policy Implications	195
Conclusions	199
Appendix	201
10 <i>The UK's International Direct Investment Position     in the Mid-1980s</i>	203
Introduction	203
Some Theoretical Issues	203
Foreign Direct Investment and Economic Welfare	204
UK Inward and Outward Investment: The Statistical Picture	208
An Explanation of the Data	218
Some Structural Considerations	223
International Direct Investment and the Efficiency of Resource Allocation	224
Conclusions	230
Appendix	232
11 <i>The Anglo-American Connection and Global     Competition</i>	233
Introduction	233
An Historical Perspective	234
Anglo-American Investment Flows Since 1970	236
The Japanese Challenge and New Technological Advances	239
Some Effects of Globalization	240
The Concept of 'Engineered' Comparative Advantage	244
Summary and Conclusions	247
12 <i>Multinational Enterprises and the Organization of     Economic Interdependence</i>	251
Introduction: Some Taxonomic Issues	251
The Organization of Economic Interdependence	252
The Nature of Transactions	253
An Historical Review	254
The Situation Prior to the First World War	256
The Retreat into Protectionism	257
The Movement Towards Regional Integration	258
The Schizophrenic Nature of International Economic Relations	260
Conclusions	262
References	264
Index	275