

Contents

<i>List of figures</i>	viii
<i>List of tables</i>	ix
<i>Acknowledgements</i>	xi
Introduction	1
PART I THE CHANGING ROLE OF MULTINATIONAL FIRMS IN INNOVATION	7
1 Views on multinational firms and innovation	
1.1 Introduction	9
1.2 Technology and internationalisation	10
1.3 A key distinction: asset exploiting and asset seeking	12
1.4 How important are asset seeking activities of multinationals?	15
1.5 Factors underlying the evolution of strategies and structure of MNFs	18
1.6 Multinationals, innovation and the double network structure	22
1.7 Organising the international generation and use of knowledge	27
1.8 Multinationals as bridging institutions	33
1.9 Concluding remarks	36
2 The double network structure of multinational firms: a review of the evidence	
2.1 Introduction	39
2.2 Evidence on the double network organisation of innovative activities	39
2.3 How complementary are internal and external networks?	53
2.4 Internal and external networks in electronics and chemical industries	57
2.5 Concluding remarks	66

PART II	HOW FIRMS DIFFER IN INNOVATION, PRODUCTIVITY AND INTERNATIONALISATION	69
3	Heterogeneity and international involvement	
3.1	Introduction	73
3.2	Differences in internationalisation across countries and sectors	74
3.3	Intra-industry heterogeneity: productivity and self-selection into foreign markets	77
3.4	Intra-industry heterogeneity: explaining firms' advantages and international involvement	79
3.5	A synthesis of views on heterogeneity and international involvement	84
3.6	Empirical studies on heterogeneity and international involvement	86
3.7	Evidence on the heterogeneity and international involvement of Italian firms	89
3.8	Concluding remarks	98
4	Heterogeneity across and within multinational firms	
4.1	Introduction	100
4.2	Heterogeneity across multinationals	102
4.3	Heterogeneity within multinationals	111
4.4	Heterogeneity across and within multinationals: evidence for Italy	121
4.5	Concluding remarks	134
PART III	FIRM HETEROGENEITY, MULTINATIONALS AND SPILLOVERS	139
5	Multinational firms and spillovers: theoretical, methodological, and empirical issues	
5.1	Introduction	141
5.2	Effects of multinationals on host economies: technological and pecuniary externalities	142
5.3	Channels for the creation of externalities	143
5.4	Empirical evidence on spillovers from multinational firms	153
5.5	Concluding remarks	173

6	In search of horizontal spillovers from multinationals: the role of firms' heterogeneity	
6.1	Introduction	175
6.2	Heterogeneity of foreign firms and spillovers	177
6.3	Heterogeneity of domestic firms and spillovers: the role of international involvement	185
6.4	Heterogeneity across and within multinationals: spillovers from domestic parent companies	189
6.5	A broader perspective: who learns from whom?	192
6.6	Concluding remarks	194
<i>Appendix</i>		
	Data sources	197
	The Elios dataset	197
	<i>The Community Innovation Survey (CIS)</i>	200
	The CIS-Elios dataset	201
	<i>Endnotes</i>	203
	<i>References</i>	212
	<i>Index</i>	239