

Contents

6.2	Shock sensitivity: the impact of shocks on equilibrium	162
6.3	Trade costs and geographical economics	1
7.1	Introduction	242
7.2	An example of geographical economics	262
7.3	The structure of the model	263
7.4	Demand	
7.5	Supply	

<i>List of figures</i>	page ix
<i>List of tables</i>	xiii
<i>List of boxes</i>	xv
<i>List of technical notes</i>	xvii
<i>List of symbols and parameters</i>	xviii
<i>Preface to the new edition</i>	xxi
<i>Acknowledgments</i>	xxvii

Part I Introduction

1	A first look at geography, trade, and development	3
1.1	Introduction	3
1.2	Clustering and the world economy	4
1.3	Economic interaction	14
1.4	Rapid change in the distribution of production and population	21
1.5	Overview of the book	26
	Appendix	28
	Exercises	31
2	Geography and economic theory	32
2.1	Introduction	32
2.2	Geography in regional and urban economics	34
2.3	International trade theory	53
2.4	Economic growth and development	68
2.5	Conclusions	76
	Exercises	77

Part II	Core models and empirical evidence	79
3	The core model of geographical economics	81
	3.1 Introduction	81
	3.2 An example of geographical economics	82
	3.3 The structure of the model	86
	3.4 Demand	89
	3.5 Supply	101
	3.6 Transport costs: icebergs in geography	106
	3.7 Multiple locations	110
	3.8 Equilibrium	112
	3.9 A first look at dynamics	121
	3.10 Conclusions	127
	Exercises	131
4	Beyond the core model: solutions, simulations, and extensions	134
	4.1 Introduction	134
	4.2 Beyond the short-run equilibrium: introducing simulations	135
	4.3 Some first results	138
	4.4 Changes in transport costs and the introduction of the tomahawk	141
	4.5 Sustain and break analysis	145
	4.6 Intermediate inputs without interregional labor mobility	151
	4.7 The bell-shaped curve and a generalized model	161
	4.8 The solvable model: two factors of production in manufactures	166
	4.9 The racetrack economy: many locations in neutral space in the core model	171
	4.10 Conclusions	175
	Appendix	179
	Exercises	182
5	Agglomeration, the home market effect, and spatial wages	183
	5.1 Introduction	183
	5.2 The spatial distribution of economic activity	184
	5.3 The facts and economic theory	196
	5.4 In search of the home market effect	201
	5.5 The spatial wage structure and real market potential	206
	5.6 Conclusions (or why we do need chapter 6)	225
	Exercises	227

6	Shocks, freeness of trade, and stability	229
6.1	Introduction	229
6.2	Shock sensitivity: the impact of shocks on equilibria	230
6.3	Trade costs and agglomeration: the bumpy road from theory to empirics and back	242
6.4	Conclusions	262
	Exercises	265
Part III Applications and extensions		269
7	Cities and congestion: economies of scale, urban systems, and Zipf's law	271
7.1	Introduction	271
7.2	Agglomeration economies and cities: the view from urban economics	275
7.3	Urban systems: urban and geographical economics in two graphs	282
7.4	Congestion as an additional spreading force	290
7.5	Zipf's law: definition, data, and estimation results	299
7.6	Explanations for Zipf's law: the congestion model and other approaches	309
7.7	Conclusions	317
	Appendix	318
	Exercises	320
8	Agglomeration and international business	322
8.1	Introduction	322
8.2	Multinational production: stylized facts	323
8.3	Explaining multinational production	329
8.4	Multinationals in geographical economics	335
8.5	Empirical evidence on the role of agglomeration in FDI	345
8.6	Conclusions	358
	Exercises	359
9	The structure of international trade	360
9.1	Introduction	360
9.2	Two manufacturing sectors	366
9.3	Comparative advantage: David Ricardo	368
9.4	Comparative advantage: factor abundance	372
9.5	Migration	384
9.6	Gravity and trade	390
9.7	Conclusions	403
	Exercises	404

10	Dynamics, growth, and geography	407
10.1	Introduction	407
10.2	Adjustment dynamics	409
10.3	Some stylized facts of economic growth	415
10.4	Explaining the facts: endogenous growth and geographical economics	424
10.5	Simulation dynamics: an experiment with the reduction of transport costs	428
10.6	Agglomeration and economic growth	436
10.7	Geography and institutions as deep determinants of economic development	445
10.8	Conclusions	453
	Exercises	454
Part IV	Policy and evaluation	457
11	The policy implications of geographical economics	459
11.1	Introduction	459
11.2	Six basic policy implications of the core model	460
11.3	Agglomeration rents, public policy, and policy competition	466
11.4	Building a bridge: a simple policy experiment in non-neutral space	481
11.5	Welfare implications	488
11.6	Conclusions about the policy relevance of geographical economics	492
	Appendix	493
	Exercises	499
12	Criticism and the value added of geographical economics	501
12.1	Introduction	501
12.2	Criticism of geographical economics	501
12.3	An evaluation of the critique	512
12.4	Growing up: where will geographical economics go from here?	518
	Appendix	526
	Exercises	526
	References	529
	Index	551