

More Information

Cambridge University Press & Assessment 978-1-108-41849-2 — An Introduction to Geographical and Urban Economics A Spiky World 3rd Edition Steven Brakman , Harry Garretsen , Charles van Marrewijk Table of Contents

Contents

	List	of Figures	page x11
	List	of Tables	xvi
	List	of Boxes	xviii
	List	of Technical Notes	XX
	List	of Exercises	xxi
	Pref	ace	xxiii
	Part	t I Empirical Foundations	1
1	A Spiky World		
	What came before (the 2001 and 2009 editions of our book)		3
	1.1	Introduction	5
	1.2	Many People	6
	1.3	Global Regions	7
	1.4	Countries	10
	1.5	Within-Country Variation	14
		1.5.1 Variation Within the USA	15
		1.5.2 Variation Within Texas	16
		1.5.3 Urban Locations in the USA	17
	1.6	Urban Development in History	18
	1.7	Recent Urban Development	20
	1.8	Urbanization and Income Per Capita	22
	1.9	Two Regularities	24
		1.9.1 Distribution Pattern (Zipf's Law)	24
		1.9.2 Interaction (Gravity Equation)	25
	1.10	Overview of the Book	27
		Exercises	29
2	Geo-Human Interaction		
	2.1 Introduction		31
	2.2	Simple Geography	33
	2.3	The Agricultural Revolution	37
	2.4	North-South or East-West?	42
	2.5	Bio-geography and Income	44
	2.6	Institutions	46
	2.7	Development by 1500	47



More Information

Cambridge University Press & Assessment 978-1-108-41849-2 — An Introduction to Geographical and Urban Economics A Spiky World 3rd Edition Steven Brakman , Harry Garretsen , Charles van Marrewijk Table of Contents

vi Contents

2.8	Reversal of Fortune	49
2.9	Selection Effects	52
2.10	Migration Flows Since 1500	54
2.11	Ancestry	58
2.12	Conclusions	60
	Exercises	62
3 Emp	irical Methods	66
3.1	Introduction	66
3.2	Inequality Measures	68
	3.2.1 Desirable Properties of Inequality Measures	68
	3.2.2 The Gini Coefficient	69
	3.2.3 Generalized Entropy Measures	71
3.3	Economic Concentration Measures	74
	3.3.1 Desirable Properties of Concentration Measures	75
	3.3.2 Ellison-Glaeser Index	78
	3.3.3 Duranton-Overman Density	80
3.4	An Experiment	85
3.5	Spatial Concentration and Productivity	91
	3.5.1 Omitted Variables and Fixed Effects	96
	3.5.2 Cause and Effect	98
	3.5.3 Natural Experiments	100
	3.5.4 Regression Discontinuity Design (RDD)	104
	3.5.5 Spatial Connections	107
3.6	Conclusions	108
	Technical Note	109
	Exercises	110
Part	: II Urban Economics	111
4 Space	ce Within Cities	113
4.1	Introduction	113
4.2	American ZIP Codes	114
4.3	The Von Thünen Model	116
4.4	Choosing Location – the Rent Curve	118
4.5	The Rent Curve in New York City	122
4.6	Choosing Transport Method - Steepness of Rent Curve	125
4.7	Choosing Land Area - Population Density	127
4.8	Population Density in Indianapolis	131
4.9	Choosing Housing – Building Height	136
4.10	Other Issues	140
	4.10.1 Heterogeneity	140



Cambridge University Press & Assessment 978-1-108-41849-2 — An Introduction to Geographical and Urban Economics A Spiky World 3rd Edition Steven Brakman , Harry Garretsen , Charles van Marrewijk Table of Contents

More Information

		Con	tents	vii
	4.11	4.10.2 Amenities 4.10.3 Miscellaneous Conclusions Technical Notes Exercises	144 145 146 147 150	
5	5.15.25.35.45.5	Introduction Cities on a Map Urban Power Laws Zipf's Law Urban Economics Theory of City Systems Differentiated Cities Conclusions Exercises	153 153 154 158 163 166 174 182 183	
6	6.1 6.2 6.3 6.4 6.5	Introduction The Spatial Equilibrium Revisited Measuring the Relevance of Amenities Agglomeration: Introduction and Key Concepts Terminology, Sources, and Mechanisms 6.5.1 Terminology 6.5.2 Sources and Mechanisms Empirical Research on Agglomeration Economies 6.6.1 A Stripped-down Model to Test for Agglomeration Economies 6.6.2 Empirical Specification Regional Agglomeration Economies Agglomeration: The Way Forward 6.8.1 Spanish Wages and City Size, Once Again 6.8.2 The Endogeneity of City Size 6.8.3 Alternative Approaches and Strategies Conclusions Technical Note Exercises	184 184 186 188 193 194 194 195 198 198 199 201 204 207 208 212 213 214	
	Part	III Geographical Economics	217	
7	7.1 7.2 7.3	Core Model Introduction Origin of the Core Model Demand in the Core Model	219219221222	



More Information

Cambridge University Press & Assessment 978-1-108-41849-2 — An Introduction to Geographical and Urban Economics A Spiky World 3rd Edition Steven Brakman , Harry Garretsen , Charles van Marrewijk Table of Contents

viii Contents

		7.3.1	Spending on Manufacturing Varieties	223			
		7.3.2	Demand Effects: Income, Price, Elasticity ε , and Price Index I	225			
	7.4	Suppl	y in the Core Model	227			
		7.4.1	Price Setting and Zero Profits	228			
	7.5	Trans	port Costs: Icebergs in Geography	231			
		7.5.1	Introducing Different Locations	233			
	7.6	Equili	brium in the Core Model	235			
		7.6.1	Short-run Equilibrium	235			
		7.6.2	Long-run Equilibrium	238			
	7.7	A Firs	st Look at Dynamics	241			
		7.7.1	Simulations	245			
		7.7.2	Transport Costs and Stability	247			
	7.8	Analy	rtical Results: The Tomahawk Diagram	248			
		7.8.1	Sustain Point	249			
		7.8.2	Break Point	250			
	7.9	Concl	usions	255			
		Techn	ical Notes	258			
		Exerci	ises	263			
8	Exte	Extensions of the Core Model 26					
	8.1	Introduction					
	8.2	Intermediate Inputs Without Inter-Regional Labour Mobility					
		8.2.1	Demand	269			
		8.2.2	Manufacturing Supply	269			
		8.2.3	Supply of Food	270			
		8.2.4	Equilibrium with Transport Costs	271			
		8.2.5	Intermediate Good Simulations	272			
	8.3	The B	ell-Shaped Curve and a Generalized Model	276			
		8.3.1	Decreasing Returns	276			
		8.3.2	Generalized Model	279			
	8.4	The Solvable Model: Two Factors of Production for Manufactures 2					
	8.5	Many	Regions	286			
		8.5.1	Many Locations in Neutral Space	286			
		8.5.2	Preferred Frequency	289			
	8.6	Conge	estion as an Additional Spreading Force	290			
		8.6.1	The Modelling of Congestion	290			
		8.6.2	The Two-City Model and Congestion	292			
		8.6.3	Many Locations and Congestion	294			
	8.7	Empirics of Urban Power Laws					
		8.7.1	The World and Continents	298			



Cambridge University Press & Assessment 978-1-108-41849-2 — An Introduction to Geographical and Urban Economics A Spiky World 3rd Edition Steven Brakman , Harry Garretsen , Charles van Marrewijk Table of Contents More Information

				Contents	ix
		8.7.2 Country	y Estimates in 2015	301	
	8.8	_	ban Power Laws	304	
		-	onomic Explanations	305	
			Power Laws in the Core Model with Congestion	307	
	8.9	Conclusions		310	
		Exercises		311	
9	Emp	irics of Econor	312		
	9.1	Introduction	312		
	9.2	Empirical Hyp	313		
	9.3	In Search of t	he Home Market Effect	316	
		9.3.1 Evidend	ce to Support the Home Market Effect	317	
		9.3.2 The Ho	me Market Effect and Geographical Economics:		
		An Ass	essment	318	
	9.4	The Spatial W	age Structure and Real Market Potential	319	
		9.4.1 Wages	and the Market Potential Function	320	
		9.4.2 Spatial	Wages and Real Market Potential: the Hanson		
		(2005)	Model	321	
		9.4.3 An Ext	ension: Spatial Wages Without Real Wage		
		Equaliz	ation	325	
	9.5	Taking Stock		327	
	9.6	The Impact of	Shocks on Equilibria	329	
		9.6.1 City Gr	owth, the WW II Shock, and the Return to the		
		Initial I	Equilibrium	329	
		9.6.2 Shocks	and Multiple Equilibria	337	
	9.7	Trade Costs ar	nd Agglomeration	341	
		9.7.1 Where	on the Tomahawk Diagram or Bell-Shaped		
		Curve A	Are We?	341	
		9.7.2 The Fre	e-ness of Trade and the Limitations		
		of the T	Two-Region Models	342	
		9.7.3 Free-ne	ess of Trade, Agglomeration, and Multi-Region		
		Simula	tions: An Example	346	
		9.7.4 Where	on the Curves Are We? A Multi-Region		
		Simula	tion Answer	353	
	9.8		Economics in Modern Empirical Research	355	
			Use Micro-data to Test for Agglomeration		
		(vs Sele	ection) Effects	357	
			e of Quasi-Natural Experiments	360	
	9.9		ne 'What If' Question of Geographical Economic		
		Exercises		365	



Cambridge University Press & Assessment 978-1-108-41849-2 — An Introduction to Geographical and Urban Economics A Spiky World 3rd Edition Steven Brakman , Harry Garretsen , Charles van Marrewijk Table of Contents More Information

x Contents

	Part IV Development and Policy	369
10	Geography and Development	371
	10.1 Introduction	371
	10.2 Income, Economic Growth and Stylized Facts 1 & 2	374
	10.3 Income Inequality and Stylized Facts 3 & 4	377
	10.4 Explaining the Four Facts: Endogenous Growth and Spatial	
	Economics	384
	10.4.1 Endogenous Growth and Dealing with Facts 1 & 2	385
	10.4.2 Geographical Economics and Dealing with Facts 3 & 4	386
	10.5 Geography, Growth, and the Four Facts: A Synthesis Model	390
	10.5.1 Main Ingredients of the Synthesis Model	390
	10.5.2 Agglomeration and Growth in the Baldwin-Forslid Model	391
	10.5.3 Discussion of the Main Implications of the	
	Baldwin-Forslid Model	394
	10.6 Deep Determinants of Development: The Geography of	
	Institutions	399
	10.6.1 Institutions Trump Geography?	399
	10.6.2 The Geography of Institutions	400
	10.7 What Happens to China If Its Internal Labour Mobility Rises?	405
	10.8 Conclusions	409
	Technical Note	410
	Exercises	413
11	Policy Implications	415
	11.1 Introduction	415
	11.2 The Temptation of Regional Policy: A Closer Look at Clusters	418
	11.3 The Rationale for Regional Policy: Motivation and	110
	Measurement	422
	11.4 Regional Policy: Think Twice!	426
	11.5 Policy Making in Urban and Geographical Economics Models	430
	11.5.1 Policy and Spatial Equilibrium for Both Urban and	
	Geographical Economics	430
	11.5.2 Stylized Policy Implications in the World of the Tomahawk	432
	11.6 Building a Bridge in Geographical Economics	435
	11.6.1 The Pancake Economy	438
	11.6.2 Bridges and the Equilibrium Spatial Distribution	440
	11.6.3 The Hypothetical Bridge Versus Real Bridges	441
	11.7 Welfare Implications	444
	11.7.1 Introducing Welfare Analysis	444
	11.7.2 Welfare Implications of a Bridge in the Pancake Economy	445



Cambridge University Press & Assessment 978-1-108-41849-2 — An Introduction to Geographical and Urban Economics A Spiky World 3rd Edition Steven Brakman , Harry Garretsen , Charles van Marrewijk Table of Contents More Information

	Contents	xi
11.8 Places, People, Policies, and <i>Proper</i> Economic Geography	449	
11.9 Closing Remarks	452	
Exercises	454	
References	456	
Chapter 1 References	456	
Chapter 2 References	457	
Chapter 3 References	458	
Chapter 4 References	460	
Chapter 5 References	461	
Chapter 6 References	463	
Chapter 7 References	467	
Chapter 8 References	468	
Chapter 9 References	471	
Chapter 10 References	476	
Chapter 11 References	480	
Index	485	