

Contents

Preface.....	V
--------------	---

Contents.....	VII
---------------	-----

1 Globalization and Regional Economic Modeling: Analytical and Methodological Challenges.....	1
--	----------

Kieran P. Donaghy

1.1 Globalization and Regional Economies.....	1
1.2 Meeting the Analytical and Methodological Challenges.....	3
1.3 Concluding Remarks.....	10

Part A: Advances in the Analysis of the Effects of Globalization on Regional Economies

2 Technology, Information and the Geography of Global and Regional Trade.....	15
--	-----------

Philip McCann

2.1 Introduction to Geography and Trade.....	15
2.2 Spatial Transactions Costs.....	17
2.3 International Geographical Peripherality and Competitive Advantage.....	22
2.4 Agglomeration Economics and Economic Growth.....	23
2.5 Alternative Models of Industrial Clusters.....	26
2.6 Economic Geography and Public Policy.....	30
2.7 Conclusions.....	31

3 Transport, Globalization and the Changing Concept of the Region.....	35
---	-----------

Roger Vickerman

3.1 Introduction.....	35
3.2 Inter- and Intra-regional Linkages.....	36
3.3 Changing Spatial Labor Markets.....	39

3.4	Defining Regions.....	40
3.5	Regional Models in Changing Regional Structures.....	41
3.6	Conclusions.....	42
4	ICT, the New Economy and Growth: The Potential for Emerging Markets.....	45
	Russel J. Cooper and Gary Madden	
4.1	Introduction.....	45
4.2	General Purpose ICT and Cascading Innovation: Theoretical Notions and Empirical Evidence	46
4.3	A Stylized Model of ICT Network Growth Driven by Demand for New Economic Products.....	49
4.4	Empirical Specifications and Results.....	59
4.5	Conclusions.....	66
5	The Aging of the Labor Force and Globalization.....	69
	Ronald W. McQuaid	
5.1	Introduction.....	69
5.2	Population Change.....	71
5.3	Labor Force Participation Rates.....	75
5.4	Productivity and Aging.....	80
5.5	Policy Issues and Conclusions.....	81
6	The Role of Intraindustry Trade in Interregional Trade in the Midwest of the US.....	87
	Darla K. Munroe, Geoffrey J.D. Hewings, and Dong Guo	
6.1	Introduction.....	87
6.2	Conceptual Framework.....	88
6.3	IIT and Midwestern Trade.....	96
6.4	Directions for Further Study.....	99
7	Globalization, Regional Economic Policy and Research.....	107
	Edward Feser	
7.1	Introduction.....	107
7.2	Today's Globalization.....	108
7.3	Globalization, Regional Economic Policy	114
7.4	... and Research.....	118
7.5	Summary.....	125

Part B: Methodological Advances—Models of Networks

8	Globalization and Intermodal Transportation: Modeling Terminal Locations Using a Three-Spatial Scales Framework.....	133
	Jan H.R. van Duin and Gijsbertus P. van Wee	
	8.1 Introduction.....	133
	8.2 Policies for Intermodal Transportation.....	135
	8.3 Modeling Intermodal Networks.....	142
	8.4 Conclusions.....	151
9	The Evolution of OECD ICT Inter-Cluster Networks 1970-2000: An Input-Output Study of Changes in the Interdependencies Between Nine OECD Economies.....	153
	Brian Wixted and Russel J. Cooper	
	9.1 Introduction.....	153
	9.2 Clusters as Production Network Nodes.....	155
	9.3 Multi-Regional Input-Output Modeling of Inter-Cluster Interdependencies.....	157
	9.4 The Evolution of Country Requirements for Imported Components.....	168
	9.5 The Changing Spatial Structure of ICT Inter-Cluster Networks 1970-2000.....	172
	9.6 Conclusions.....	180
10	The Co-Evolution and Emergence of Integrated International Financial Networks and Social Networks: Theory, Analysis, and Computations.....	183
	Anna Nagurney, Jose Cruz, and Tina Wakolbinger	
	10.1 Introduction.....	183
	10.2 The Supernetwork Model Integrating International Financial Networks with Intermediation and Social Networks.....	185
	10.3 The Dynamic Adjustment Process.....	206
	10.4 The Discrete Time Algorithm.....	214
	10.5 Numerical Examples.....	218
	10.6 Summary and Conclusions.....	222

Part C: Methodological Advances—General Equilibrium Models

11	Regional Adjustment to Globalization: A CGE Analytical Framework.....	229
	James A. Giesecke and John R. Madden	
	11.1 Introduction.....	229
	11.2 CGE Framework.....	231
	11.3 Examining Globalization.....	234
	11.4 Regional Labor Market Adjustment.....	241
	11.5 Concluding Comments.....	254
12	Modeling Small Area Economic Change in Conjunction with a Multiregional CGE Model.....	263
	Ian Sue Wing and William P. Anderson	
	12.1 Introduction.....	263
	12.2 A State-level Computable General Equilibrium Economic Model.....	265
	12.3 Preliminary Calibration Efforts.....	276
	12.4 Population Dynamics.....	280
	12.5 Concluding Remarks.....	282
	Appendix: Estimating Transportation Activity Levels and Mobile Source Emissions.....	287
13	Impact Assessment of Clean Development Mechanisms in a General Spatial Equilibrium Context.....	289
	Shunli Wang and Peter Nijkamp	
	13.1 Introduction.....	289
	13.2 A Brief Introduction in CGE Model Context: GTAP-E.....	292
	13.3 Behavioral Rules for Clean Development Mechanism.....	295
	13.4 A General Sketch of Economic Impacts as a Result of CDM.....	302
	13.5 Numerical Calibration.....	307
	13.6 Simulation Experiments.....	314
	13.7 Conclusions.....	321
14	An Environmental Socioeconomic Framework Model for Adapting to Climate Change in China.....	327
	Bin Li and Yoshiro Higano	
	14.1 Introduction.....	327
	14.2 Literature-Review: China-Specific Environmental Models.....	328
	14.3 Eco-conscious Socioeconomic Framework Model.....	329
	14.4 Simulation.....	340
	14.5 Conclusions.....	346

Part D: Methodological Advances—Econometric Models

15	Effects of Trade on Emissions in an Enlarged European Union: Some Comparative Dynamics Analyses with an Empirically Based Endogenous-Growth Model.....	353
	Nazmiye Balta-Ozkan, Kieran P. Donaghy, and Clifford R. Wymer	
	15.1 Introduction.....	353
	15.2 Specification of the Representative Agent Model.....	355
	15.3 Estimation of the Model.....	363
	15.4 Simulations of Changes in Trade Patterns.....	373
	15.5 Concluding Remarks.....	380
	Appendix 15.A Derivation of the Model.....	383
	Appendix 15.B Data Aggregation.....	387
16	Modeling Globalization: A Spatial Econometric Analysis.....	393
	Bernard Fingleton	
	16.1 Introduction.....	393
	16.2 Theorizing Globalization.....	394
	16.3 An Empirical Model.....	397
	16.4 Model Estimates.....	399
	16.5 Implications of the Model.....	403
	16.6 The Impact of Shocks.....	407
	16.7 Conclusions.....	414
17	Risk and Growth: Theoretical Relationships and Preliminary Estimates for South Africa.....	417
	Russel J. Cooper and Kieran P. Donaghy	
	17.1 Introduction.....	417
	17.2 The Relationship Between Intertemporal Substitutability and Risk Aversion.....	420
	17.3 Notation, Assumptions, and Preliminary Results.....	423
	17.4 Solution of the Intertemporal Problem.....	437
	17.5 Specification of the Home Country Component of the Model.....	449
	17.6 Estimation.....	457
	17.7 Conclusion.....	462
	List of Contributors.....	465
	Subject Index.....	471

Globalization and Regional Economic Modeling

Cooper, R.; Donaghy, K.; Hewings, G. (Eds.)

2007, XIII, 475 p. 38 illus., Hardcover

ISBN: 978-3-540-72443-8