Contents

List of Figures \hspace{1cm} \textit{page} xv
List of Tables \hspace{1cm} xvii
Foreword \hspace{1cm} xix
Contributors \hspace{1cm} xxiii

Introduction \hspace{1cm} 1

RICHARD BLUNDELL, ESTELLE CANTILLON, BARBARA CHIZZOLINI, MARCIVALDI, WOLFGANG LEININGER, RAMONMARIMON, LASZLO MATYAS AND FRODE STEEN

The COEURE Project \hspace{1cm} 2
Advances in Economic Research: Foundations for European Policies \hspace{1cm} 2
About the Chapters \hspace{1cm} 4
The Relevance of Data and Methods \hspace{1cm} 23
Acknowledgements \hspace{1cm} 28
Notes \hspace{1cm} 28

1 Innovation and Growth: The Schumpeterian Perspective \hspace{1cm} 29

PHILIPPE AGHION AND UFUK AKCIGIT

1.1 Introduction \hspace{1cm} 29

1.2 Looking for Growth Paradigms to Think about Growth Policy \hspace{1cm} 30
1.2.1 The Neoclassical Growth Model \hspace{1cm} 31
1.2.2 The AK Model \hspace{1cm} 31
1.2.3 The Product-Variety Model \hspace{1cm} 32
1.2.4 The Schumpeterian Model \hspace{1cm} 33

1.3 Some Main Applications and Extensions of Schumpeterian Growth Theory \hspace{1cm} 35
1.3.1 Growth Meets IO \hspace{1cm} 35
1.3.2 Schumpeterian Growth and Firm Dynamics \hspace{1cm} 37
1.3.3 Growth Meets Development: Appropriate Institutions \hspace{1cm} 38
1.3.4 Growth Meets Development: Firm Dynamics in Developing Countries \hspace{1cm} 40
1.3.5 Growth and Unemployment \hspace{1cm} 42

1.4 Enhancing Productivity Growth in Advanced Countries \hspace{1cm} 43
1.4.1 Pillars of Innovation-Led Growth \hspace{1cm} 43
1.4.2 Competition Policy against Industrial Policy \hspace{1cm} 45
Table of Contents

1.4.3 Reforming the State 47
1.4.4 Macroeconomic Policy 48
1.4.5 Innovation, Inequality, and Social Mobility: Making Growth Inclusive 48
1.5 Technological Waves and the Debate on Secular Stagnation 51
1.5.1 The Debate 51
1.5.2 Historical Wave Patterns 52
1.6 Schumpeterian Insights into R&D Policy 54
1.6.1 R&D Policies and Firm Selection 55
1.6.2 Basic versus Applied R&D 56
1.7 The Role of Freedom and Openness in the Innovation Process 59
1.7.1 The ADS Framework and the Role of Academic Freedom 59
1.7.2 Freedom and Openness 61
1.7.3 Evidence on the Limits of IP and the Role of Openness and Freedom 61
1.8 Towards a New Growth Pact in Europe 62
1.8.1 Structural Reforms and the Role of Structural Funds 62
1.8.2 Rethinking Industrial Policy in the EU 64
1.8.3 More Flexible Macroeconomic Policies at EU Level 65
1.9 Conclusion 66
Acknowledgements 67
Notes 67
References 69

2 European Union Dual Labour Markets: Consequences and Potential Reforms 73
JUAN J. DOLADO
2.1 Introduction 73
2.2 The Emergence of Dual Labour Markets in Europe 74
2.3 Temporary Contracts: Stepping Stones or Dead Ends? 77
2.4 Dual Labour Markets Before and After the Great Recession 80
2.5 Lessons from Spain 84
2.6 Dual Labour Markets and Youth Unemployment 88
2.7 How to Dismantle Dual Employment Protection Legislation 91
2.7.1 Recent EPL Reforms 91
2.7.2 Single/Unified Contracts in Theory 93
2.7.3 Single/Unified Contracts in Practice 100
2.8 Conclusions 104
Acknowledgements 105
Appendix 105
Notes 108
References 109

3 Population, Migration, Ageing and Health: A Survey 113
CHRISTIAN DUSTMANN, GIOVANNA FACCHINI
AND CORA SIGNOROTTO
3.1 Introduction 113
3.2 Main Stylized Facts 114
3.3 Migration and Demographic Developments 117
3.3.1 The Selection Hypothesis 120
Table of Contents

3.3.2 The Adaptation Hypothesis 121
3.3.3 The Disruption Hypothesis 123
3.4 Permanent versus Temporary Migration 124
  3.4.1 Why Do Migrants Return? 125
  3.4.2 Who Are the Return Migrants? 126
3.5 The Fiscal Effect of Immigration 128
  3.5.1 Static Frameworks 129
  3.5.2 Dynamic Models 130
3.6 Migration and Skill Shortages 132
3.7 International Migration and the Health Care Sector 136
  3.7.1 International Migration of Health Care Professionals 136
  3.7.2 International Migration of Old Age Carers 139
  3.7.3 Immigrants’ Demand for Health Care 141
3.8 The Floridization of Europe: Old Age North–South Migration 143
  3.8.1 Determinants of Old Age Migration 144
  3.8.2 Effects on Host Country Economy 145
3.9 Conclusions 146
  Acknowledgements 147
  Appendix 147
  Notes 148
  References 149

4 Education Systems: Assignment, Admissions, Accountability and Autonomy 159
SIMON BURGESS
  4.1 Introduction 159
    4.1.1 What Can Economics Contribute to the Study of Education? 161
  4.2 The Aims of Education: Rates of Return, Inequality and Social Mobility 161
  4.3 Education Systems: Assignment, Admissions, Accountability and Autonomy 164
    4.3.1 Assignment Mechanisms 164
    4.3.2 Accountability, Autonomy and Regulation 175
    4.3.3 Education Market Structure: Policy Summary 185
  Acknowledgements 185
  Notes 186
  References 186

5 Competition and Regulation in Markets for Goods and Services: A Survey with Emphasis on Digital Markets 194
NIKOLAOS VETTAS
  5.1 Introduction 194
  5.2 A View on Competition Policy Developments in Europe 199
    5.2.1 Competition Policy: The General Context 199
    5.2.2 Digital Trade and Online Markets 200
    5.2.3 Some Recent Competition Cases 203
    5.2.4 Online Travel Agencies and MFNs 207
    5.2.5 The Digital Single Market Initiative 208
    5.2.6 Distinguishing Features of Digital Markets 209
# Table of Contents

## 5.3 Approaches in Industrial Organization

- **5.3.1 Pricing**
- **5.3.2 Vertical Relations**

## 5.4 Recent Research on Competition Issues Related to Digital Markets

## 5.5 Challenges for Research on Competition Issues in Digital Markets

## 5.6 Conclusion

- Acknowledgements
- Notes
- References

## 5.6 Conclusion

## 6 Winners and Losers of Globalization: Sixteen Challenges for Measurement and Theory

**CECÍLIA HORNOK AND MIKLÓS KOREN**

- **6.1 Introduction**
- **6.2 Advances in Measurement and Data Challenges**
  - **6.2.1 Recent Advances in Measuring the Causes and Effects of Globalization**
  - **6.2.2 Data Challenges**
- **6.3 Insights from Theories of Globalization**
  - **6.3.1 Broad Lessons about the Causes and Effects of Globalization**
  - **6.3.2 Insights for Policy**
  - **6.3.3 Open Questions**
- **6.4 Conclusion**

- Acknowledgements
- Notes
- References

## 7 Economic Approaches to Energy, Environment and Sustainability

**PAUL EKINS, PAUL DRUMMOND AND JIM WATSON**

- **7.1 Introduction**
- **7.2 Economic Approaches to the Environment**
  - **7.2.1 Environmental and Resource Economics**
  - **7.2.2 Ecological Economics**
  - **7.2.3 Institutional, Evolutionary, and Behavioural Economics**
- **7.3 Sustainability and Sustainable Development**
  - **7.3.1 Sustainable Development**
  - **7.3.2 Environmental Sustainability**
  - **7.3.3 Measurement and Indicators of Sustainable Development and Sustainability**
- **7.4 The Energy System and Climate Change Mitigation**
  - **7.4.1 Energy Security**
  - **7.4.2 Reducing CO₂ Emissions**
  - **7.4.3 Financial Requirements and Affordability**
- **7.5 Policies for Energy, Climate Change Mitigation and a Green Economy**
  - **7.5.1 Standards and Engagement**
  - **7.5.2 Information**
  - **7.5.3 Markets and Pricing**
8 Regional Disparities and Efficient Transport Policies

STEF PROOST AND JACQUES-FRANÇOIS THISSE

8.1 Introduction 324
8.2 What Is Spatial Economics About? 325
8.2.1 Location Does Matter 326
8.2.2 Moving Goods and People is Still Costly 327
8.3 The Drivers of Regional Agglomeration 330
8.3.1 The Home-Market Effect 332
8.3.2 Agglomeration Economies and the Emergence of Asymmetric Clusters 339
8.3.3 The Core–Periphery Structure 340
8.3.4 Input–Output Linkages and the Bell-Shaped Curve of Spatial Development 343
8.3.5 Communication Costs and the Relocation of Plants 345
8.4 Does the Market Yield Over or Under-agglomeration? 346
8.4.1 Does the Home-Market Effect Generate Excessive Agglomeration? 346
8.4.2 Is the Core-Periphery Structure Inefficient? 347
8.5 Do EU Interregional Transport Investment Policies Fulfil their Role? 348
8.5.1 Assessing Transport Investments Using Econometric Models 350
8.5.2 Assessing Transport Investments Using Model Simulations 351
8.5.3 Assessing Transport Investments Using Case Studies 353
8.6 Is the EU Moving to a Better Utilization of Its Existing Transport Policy? 355
8.6.1 Competition on Diesel Fuel Taxes Leads EU Countries to Revise Their Pricing of Road Freight 355
8.6.2 Europe Does Not Make the Best Use of Its Rail and Air Transport System 356
8.7 What Have We Learnt? 357
Acknowledgements 360
Notes 360
References 361

9 Skilled Cities and Efficient Urban Transport

STEF PROOST AND JACQUES-FRANÇOIS THISSE

9.1 Introduction 366
9.2 Agglomeration Economies 368
9.2.1 The Nature and Magnitude of Agglomeration Economies 371
9.2.2 Cities as Consumption Centres 375
## Table of Contents

### 9.3 The Trade-Off between Commuting and Housing Costs

- **9.3.1 The Monocentric City Model**
- **9.3.2 Why Do Employment Centres Emerge?**
- **9.3.3 Land Capitalisation and Housing**
- **9.3.4 Residential Segregation**

### 9.4 More Cities or Bigger Cities?

### 9.5 The Organization of Metropolitan Areas

### 9.6 Managing Traffic and Congestion

- **9.6.1 External Costs of Urban Transport**
- **9.6.2 The Difficult Road to First-Best Pricing of Congestion**
- **9.6.3 The Patchwork of Policy Instruments**
- **9.6.4 Public Transport Pricing**

### 9.7 The Benefits of New Transport Infrastructure

- **9.7.1 Does New Infrastructure Reduce Congestion?**
- **9.7.2 The Wider Benefits of Urban Transport Projects and New Developments in Assessment Methods**

### 9.8 Where Do We Stand?

- **Acknowledgements**
- **Notes**
- **References**

### 10 Fiscal and Monetary Policies after the Crises

#### CHARLES BRENDON AND GIANCARLO CORSETTI

- **10.1 Introduction**
- **10.2 The Pre-Crisis Consensus, and Heterogeneity**
- **10.3 The Context and Challenges Posed by the Crisis**
  - **10.3.1 Headline Macroeconomic Trends**
  - **10.3.2 Market Impairment and the Transmission of Stabilization Policy**
  - **10.3.3 The Zero Bound on Nominal Interest Rates**
- **10.4 The Zero Lower Bound: Implications for Stabilization Policy**
  - **10.4.1 Savings Decisions and Nominal Interest Rates**
  - **10.4.2 Shock to the ‘Natural’ Rate of Interest**
  - **10.4.3 Forward Guidance as a Solution?**
  - **10.4.4 Fiscal Stimulus as a Solution?**
  - **10.4.5 Central Bank Asset Purchases as a Solution?**
  - **10.4.6 The Benefits and Risks of Structural Reform**
  - **10.4.7 Empirical Evidence on the ‘Expectations Channel’**
- **10.5 Policies and Diagnoses of the Crisis**
  - **10.5.1 What Causes ‘Savings Shocks’?**
  - **10.5.2 The Possibility of Secular Stagnation**
  - **10.5.3 Dynamic Interactions through the Labour Market**
  - **10.5.4 Deflation Traps, Self-Fulfilling Dynamics and Equilibrium Selection**
- **10.6 Risk Sharing and Fiscal Policy in a Monetary Union**
  - **10.6.1 Imbalances and Imperfect Risk Sharing**
  - **10.6.2 Complete Markets are not a Substitute for Risk Sharing via Transfers**
  - **10.6.3 Fiscal Devaluation**
### Table of Contents

#### 10.7 Conclusions
- Acknowledgements
- Notes
- References

#### 11 Financial Regulation in Europe: Foundations and Challenges
**Thorsten Beck, Elena Carletti and Itay Goldstein**

- 11.1 Introduction
- 11.2 Recent Financial Reforms in Europe
  - 11.2.1 Capital Requirements
  - 11.2.2 Liquidity Requirements
  - 11.2.3 Resolution Framework and Bail-In Instruments
  - 11.2.4 Banking Union
  - 11.2.5 Activity Restrictions and Other Reforms
- 11.3 Microfoundations for Financial Reforms
  - 11.3.1 Basic Failures in the Financial System
  - 11.3.2 Mapping between Basic Failures and the Reforms Enacted in Europe
- 11.4 Moving beyond Banks and Traditional Activities: The Regulatory Perimeter
  - 11.4.1 The Regulatory Perimeter
  - 11.4.2 Financial Innovation
  - 11.4.3 Complexity
- 11.5 Special Issues in Europe and How they Affect Future Regulation
  - 11.5.1 Crisis Resolution and Macro-Management in a Monetary Union
  - 11.5.2 Financial Structure: Does Europe Suffer from a Bank Bias?
- 11.6 Summary, Policy Lessons and Directions for Future Research
  - Acknowledgements
  - Notes
  - References

#### 12 Inequality and Welfare: Is Europe Special?
**Alain Trannoy**

- 12.1 Introduction
- 12.2 Inequality and Welfare: Two Interconnected Notions
  - 12.2.1 Inequality
  - 12.2.2 Welfare
  - 12.2.3 Aggregating Welfare
  - 12.2.4 The Relationship between Inequality and Welfare
  - 12.2.5 Two Assumptions about Individual Welfare
- 12.3 Normative and Positive Issues Involving Several Sciences
  - 12.3.1 Political Philosophy
  - 12.3.2 History
  - 12.3.3 Sociology and Political Science
  - 12.3.4 Psychology
  - 12.3.5 Neurosciences: Happiness in the Twenty-First Century
12.4 Europe’s Inequality Pattern vis-à-vis the US 532
12.4.1 Inequality of Income 533
12.4.2 Forces behind the Increase in Gross-Income Inequality 535
12.4.3 Convergence Process in Europe 538
12.4.4 Inequality of Opportunity and Intergenerational Mobility 540
12.4.5 Attitudes to Inequality 545
12.4.6 Well-Being and the Size of the Welfare State 548
12.4.7 Partial Conclusion 550
12.5 Europe Is at the Forefront of Research on Many Topics 551
12.6 Data Are Improving but Remain Largely Incomplete when Looking at More Specific Issues 553
12.7 Inequality and Welfare as Transversal Issues 554
12.8 Cutting Edge Research Issues 555
12.9 Issues More Specific to Europe 557
12.10 Conclusion 558
Acknowledgements 560
Notes 560
References 561

13 Developments in Data for Economic Research 568
ROBERTO BARCELLAN, PETER BØEGH NIELSEN, CATERINA CALSAMIGLIA, COLIN CAMERER, ESTELLE CANTILLON, BRUNO CRÉPON, BRAM DE ROCK, LÁSZLÓ HALPERN, ARIE KAPTEYN, ASIM I. KHWAJA, GEOGR Kirchsteiger, VIGDIS KVALHEIM, JULIA LANE, MARKUS MOBIUS, LUKE SIBIETA, JOSEPH TRACY, FREDERIC UDINA, GUGLIEMO WEBER AND LISA WRIGHT
13.1 Introduction 568
13.2 Organizing Access to Microdata 569
13.2.1 Legal and Technical Background 570
13.2.2 The Nordic Leadership 571
13.2.3 Improving Data Access: Two Case Studies 574
13.2.4 Concluding Remarks 577
13.3 Data Standards and Cross-Country Datasets 577
13.3.1 The Lessons of the Financial Crisis for the Data Environment 578
13.3.2 The G20 Data Gaps Initiative 579
13.3.3 Linking Existing Microdata 581
13.3.4 Towards a New Data Environment 584
13.4 Researcher-Generated Databases 585
13.4.1 Measurement and Experimentation in the Social Sciences Project 586
13.4.2 The UMETRICS Programme 587
13.4.3 The Survey of Health, Ageing and Retirement in Europe 588
13.4.4 Lessons from Successful Researcher-Led Databases 589
13.5 Data Generation in Controlled Environments 590
13.5.1 Laboratory Experiments 590
13.5.2 Randomized Control Trials 594
13.6 The Changing Face of Public and Private-Sector Collaborations in Economic Research
13.6.1 New Private-Sector Collaborations in Economic Research
13.6.2 New Public-Sector Collaborations in Economic Research
13.6.3 Risks, Challenges and Outlook
13.7 Concluding Comments
Notes
References

14 Big Data in Economics: Evolution or Revolution?

14.1 Introduction
14.2 The Curse of Dimensionality and Regularization
14.3 Policy Analysis and Causal Inference
14.4 Prediction
14.5 Computational Issues
14.6 Conclusions
Notes
References

Index