

# Contents

---

<i>List of contributors</i>	viii
<i>Preface</i>	xi

## PART I INTRODUCTION

1 Resilience, crisis and innovation dynamics: emerging challenges <i>Tüzin Baycan and Hugo Pinto</i>	3
---	---

## PART II INNOVATION, CRISIS AND RESILIENCE

2 The effects of the global economic crisis on the innovation performance of EU countries <i>Tüzin Baycan and Berna Sezen Özen</i>	17
3 The resilience of innovation systems under economic turbulence <i>Hugo Pinto and Tiago Santos Pereira</i>	47
4 Learning regions for resilience in Hungary: challenges and opportunities <i>Magdolna Benke, Klára Czimre, Katalin R. Forray, Tamás Kozma, Sándor Márton and Károly Teperics</i>	68
5 Innovation support, resilience and regional development in Slovakia <i>Valeria Szitasiova, Miroslav Sipikal and Monika Siserova</i>	90
6 The regional effects of macroeconomic shocks in Indonesia <i>Masagus M. Ridhwan and Pakasa Bary</i>	112
7 Transversality, resilience and innovation: a qualitative regional analysis <i>Philip Cooke</i>	130

**PART III LABOR MARKETS, EMPLOYMENT AND  
RESILIENCE**

- |    |   |     |
|----|---|-----|
| 8  | Labor market resilience and reorientation in disaster scenarios<br><i>Benjamin Jara and Alessandra Faggian</i>  | 153 |
| 9  | External shocks and regional economic performance in Turkey<br><i>A. Suut Doğruel, Fatma Doğruel and Yasemin Özerkek</i>  | 169 |
| 10 | Employment changes and regional resilience: an application of trade-adjusted shift-share analysis to the Greek regions<br><i>Yannis Psycharis, Dimitris Kallioras and Panagiotis Pantazis</i> | 188 |
| 11 | Resilience, reorientation and variety: an analysis of Italian provinces after the 2007 economic shock<br><i>Barbara Martini</i>   | 211 |
| 12 | Role of engineering education in the transition of industry: central steering or local resilience?<br><i>Francisco Javier Ortega-Colomer, Elias Pekkola and Tuomo Heinonen</i>                | 231 |

**PART IV CLUSTERS, INDUSTRIAL DYNAMICS AND  
RESILIENCE**

- |    |   |     |
|----|---|-----|
| 13 | Learning regions, clusters and resiliency: a typology of regional and cluster dynamics<br><i>Roger R. Stough</i>                        | 251 |
| 14 | A case study of resilience: the footwear cluster of northern Portugal<br><i>Maria Estela Ferreira</i>                                   | 267 |
| 15 | Innovation, technology transfers and regional competitiveness: a study of Oeiras bio-pharmaceutical industry<br><i>Ana Santos Bravo</i> | 289 |
| 16 | Resilience of software clusters and Turkey's experience<br><i>Mete Başar Baypınar</i>   | 307 |

*Contents*

vii

17	The resilience of knowledge from industrial to creative clusters: the case of regional craft clusters in the West Midlands (UK)	326
	<i>Roberta Comunian and Lauren England</i>	
	<i>Index</i>	347