

# An Economic Analysis of Innovation

Extending the Concept of National Innovation  
Systems

Markus Balzat

*Formerly at the University of Augsburg, Germany*

NEW HORIZONS IN INSTITUTIONAL AND EVOLUTIONARY  
ECONOMICS

**Edward Elgar** (y  
Cheltenham, UK • Northampton, MA, USA

# Contents

<i>List of figures and boxes</i>	<i>vii</i>
<i>List of tables</i>	<i>ix</i>
<i>Abbreviations and acronyms</i>	<i>xi</i>
<i>Preface and acknowledgements</i>	<i>x&gt;H</i>
1. Introduction	1
1. Points of departure	1
2. Motivation	6
3. Structure of the book	7
2. Explaining basic elements of the NIS concept	11
1. Introduction and overview	11
2. Notes on the systemic perception of innovation processes	12
3. Clarifying the term national innovation system	14
4. Defining the components of an NIS	19
5. Revisiting the theoretical roots of the NIS concept	27
6. Examining the national scope of innovation processes	33
7. Conclusions	47
3. The development of the NIS concept	55
1. Introduction and overview	55
2. Origins and introduction of the NIS concept	55
3. Elaboration and dissemination of the NIS concept	58
4. Latest developments of the NIS concept	62
5. Conclusions	71
4. The specifics and the usefulness of NIS benchmarking	79
1. Introduction and overview	79
2. The meaning of benchmarking and the characteristics of NIS benchmarking	80
3. Discussing the usefulness of NIS benchmarking	87
4. Conclusions	95

5.	Development and application of an NIS performance model	99
1.	Introduction and overview	99
2.	The structure of the model	101
3.	Technical details	113
4.	Empirical results	118
5.	Scrutinizing the model	134
6.	Conclusions	138
6.	Summary and outlook	147
1.	Introduction and overview	147
2.	Review of main findings	147
3.	Outlook	152
	Appendix A: Data sources for Chapter 5	157
	Appendix B: Indicators entering the applied NIS performance model, by NIS building block	159
	Appendix C: Weighting factors of the NIS building blocks and NIS sub-blocks	163
	<i>References</i>	165
	<i>Index</i>	181