

Science and Innovation

Rethinking the Rationales for Funding and Governance

Edited by

Aldo Geuna

*Senior Lecturer, SPRU – Science and Technology Policy
Research, University of Sussex, UK*

Ammon J. Salter

*Research Fellow, SPRU – Science and Technology Policy
Research, University of Sussex, UK*

W. Edward Steinmueller

*Professor, SPRU – Science and Technology Policy Research,
University of Sussex, UK*

NEW HORIZONS IN THE ECONOMICS OF INNOVATION

Edward Elgar

Cheltenham, UK • Northampton, MA, USA

Contents

<i>List of figures</i>	vii
<i>List of tables</i>	ix
<i>List of contributors</i>	xi
<i>Acknowledgements</i>	xiii

General introduction	xv
----------------------	----

PART I THE EVOLVING RESEARCH POLICY ENVIRONMENT

Introduction

1. The changing social contract for science and the evolution of the university	7
<i>Ben R. Martin</i>	
2. The increasing involvement of concerned groups in R&D policies: what lessons for public powers?	30
<i>Michel Callon</i>	
3. Interdisciplinary research and the organization of the university: general challenges and a case study	69
<i>Patrick Llerena and Frieder Meyer-Krahmer</i>	
Commentaries	89
<i>Keith Pavitt</i>	
<i>David A. Wolfe</i>	

PART II NEW ACTOR RELATIONSHIPS

Introduction

4. Links and impacts: the influence of public research on industrial R&D	109
<i>Wesley M. Cohen, Richard R. Nelson and John P. Walsh</i>	
5. The evolution of French research policies and the impacts on the universities and public research organizations	147
<i>Patrick Llerena, Mireille Matt and Véronique Schaeffer</i>	
6. Public research and industrial innovation: a comparison of US and European innovation systems in the life sciences	169
<i>Massimo Riccaboni, Walter W. Powell, Fabio Pammolli and Jason Owen-Smith</i>	

7. Research productivity and the allocation of resources in publicly funded research programmes	202
<i>Fabrizio Cesaroni and Alfonso Gambardella</i>	
Commentaries	233
<i>Paula E. Stephan</i>	
<i>W. Edward Steinmueller</i>	
PART III MODELS OF RESEARCH FUNDING	
Introduction	
8. The economics of scientific research coalitions: collaborative network formation in the presence of multiple funding agencies	251
<i>Paul A. David and Louise C. Keely</i>	
9. On the workings of scientific communities	309
<i>Robin Cowan and Nicolas Jonard</i>	
10. Funding basic research: when is public finance preferable to attainable 'club goods' solutions?	335
<i>G.M. Peter Swann</i>	
11. On the provision of industry-specific public goods: revisiting a policy process	360
<i>Dominique Foray</i>	
Commentaries	375
<i>Cristiano Antonelli</i>	
<i>Bronwyn H. Hall</i>	
Conclusions	393
<i>Index</i>	401