



Cluster Policies in Europe

FIRMS, INSTITUTIONS, AND GOVERNANCE



Susana Borrás
Dimitrios Tsagdis

F450.0
B737

Cluster Policies in Europe

Firms, Institutions, and Governance

Susana Borrás

Copenhagen Business School, Denmark

Dimitrios Tsagdis

Hull University Business School, UK



E2009003765

Edward Elgar

Cheltenham, UK • Northampton, MA, USA

© Susana Borrás and Dimitrios Tsagdis 2008

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical or photocopying, recording, or otherwise without the prior permission of the publisher.

Published by
Edward Elgar Publishing Limited
The Lypiatts
15 Lansdown Road
Cheltenham
Glos GL50 2JA
UK

Edward Elgar Publishing, Inc.
William Pratt House
9 Dewey Court
Northampton
Massachusetts 01060
USA

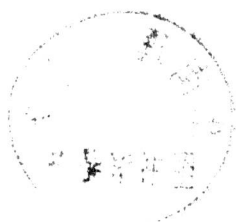
A catalogue record for this book
is available from the British Library

Library of Congress Control Number: 2008934704

ISBN 978 1 84542 758 0

Printed and bound in Great Britain by MPG Books Ltd, Bodmin, Cornwall

To our families



Cluster Policies in Europe

Abbreviations

ACS	Automotive Cluster of Slovenia
AMZ Saxony	Verbundinitiative Automobilzulieferer Sachsen (Germany)
ANEVAR	The National Association of Romanian Valuers
APAPS	Authority for Privatization and Management of State Ownership (Romania)
ARP	Business Development Agency (CZ)
ATEROM	The Romanian Textile Association (Romania)
AV	Audio Visual
AVAS	Authority for State Assets Recovery (Romania)
AWM	Advantage West Midlands (UK)
BICs	Business Information Centres
BNL	Banca Nazionale del Lavoro (Italy)
CCIS	Chamber of Commerce and Industry of Slovenia
CEECs	Central and Eastern European Countries
CECCAR	The Association of Expert and Licensed Accountants (Romania)
CEFTA	Central European Agreement
CEO	Chief Executive Officer
CIN	Czech Invest
COGs	Cluster Opportunity Groups (UK)
CMZRB	Czech Moravian Guarantee and Development Bank (CZ)
CNIPMMR	The National Council of Small and Medium Sized Private Enterprises (Romania)
CRD	Centre for Regional Development (CZ)
DETR	Department of the Environment, Transport and the Regions (UK)
DfEE	Department for Education and Employment (UK)
DG	Directorate General of the European Commission
DTI	Department of Trade and Industry (UK)
EBRD	European Bank for Reconstruction and Development
EDA	Economic Development Agency (Romania)
ESF	European Social Fund
EA	European Agreements
EU	European Union
FDI	Foreign Direct Investment

FEA	Federal Employment Agency (Germany)
FEPAIUS	The Employees Federation of Light Industry (Romania)
GDP	Gross Domestic Product
GDR	German Democratic Republic
GM	General Motors
HEI	Higher Education Institutions
ICTs	Information and Communication Technologies
ID	Industrial Districts
IMF	International Monetary Fund
IRS	Internal Returns to Scale
ISO	International Organization for Standardization
JAPTI	Agency for Entrepreneurship and Foreign Investments (Slovenia)
JIT	Just-in-Time (production method)
LSE	Large-Size Enterprises
LPS	Local Production Systems
MEAL	Ministry of Economic Affairs and Labour (North Rhine Westphalia, Germany)
MIT	Ministry of Industry and Trade (Czech Republic)
MNE	Multi-National Enterprises
MLG	Multi-Level Governance
MOPI	Medium-Term Operational Programme Industry (Czech Republic)
MPA	Ministry of Productive Assets (Italy)
MRD	Ministry for Regional Development (Czech Republic)
NACE	Nomenclature statistique des Activités économiques dans la Communauté Européenne
NATO	North Atlantic Treaty Organization
NBRD	National Board for Regional Development (Romania)
NBS	National Business Systems
NCCN	The National Centre for Clusters and Technology Networks (Slovenia)
NDP	National Development Plan (Romania)
NIE	New Institutional Economics
NGOs	Non-Governmental Organisations
NRW	North Rhine Westphalia
OECD	Organisation for Economic Cooperation and Development
OEM	Original Equipment Manufacturers
OWL	OstWestfalen-Lippe (Germany)
RAI	Italian national broadcasting corporation (Italy)
RC	Regional Conference (North Rhine Westphalia, Germany)
R&D	Research and Development
RDA	Regional Development Agency (UK)
RDC	Regional Development Concept (Germany)

RLMC	Regional Labour Market Conference (North Rhine Westphalia, Germany)
ROP	Regional Operation Programme (CZ)
RPICs	Regional Business and Information centres (CZ)
SBDC	Small Business Development Centre (Slovenia)
SDC	Slovenian Development Corporation
SMEs	Small and Medium-Sized Enterprises
SOF	State Ownership Fund (Romania)
TCS	Toolmaking Cluster of Slovenia
TIPO	Agency for Economic Promotion and Foreign Investment (Slovenia)
TLC	Transport and Logistics Cluster (Slovenia)
TPSA	Toyota-Peugeot-Citroen automotive joint venture plant (CZ)
US	United States of America
VAT	Value Added Tax
VW	Volks Wagen
WEID	Western and Eastern European Industrial Districts
WIDI	Wood Industry Development Institute (Slovenia)
WTO	World Trade Organisation
WWII	The Second World War
ZIM	Zukunftsinitiative Montanregionen (Germany)
ZiMit	Zukunftsinitiative Möbelindustrie Nordrhein-Westfalen (Germany)
ZIN1	Zukunftsinitiative für die Regionen Nordrhein-Westfalens (Germany)

Foreword

There are numerous books on clusters but this is the first one on cluster policies. Accordingly it is to be enthusiastically welcomed, not least by policy scientists and particularly policy makers. In Europe the latter have been buying into cluster policy since the early experiments in pioneering European regions like the Basque Country and Scotland, then for national sectors (Germany's BioRegio contest) and more recently by whole national economies (France's poles de compétitivité) and the EU as a whole with DG Enterprise's new attachment to building clusters. Outside Europe, cluster policies probably began earlier than most places in the USA, well before Michael Porter began advising on them to the aforementioned Basques and Scots. Partly due to the study visits to Europe of consultants like Richard Hatch and Stu Rosenfeld, the Michigan Manufacturing Initiative and Pennsylvania's Ben Franklin Partnership began building alternative economic strategies in the face of deindustrialisation and Reaganomics that were influenced by Italian industrial districts and networks. Even earlier, the work of Piore and Sabel in 1984 on the same theme of a modernised artisan and craft mode of production had swiftly attracted many adherents in policy and academe.

This made me think of the first occasion I was confronted with the basic 'cluster' notion because, during numerous visits made to the US in the 1980s, the idea if not the terminology was 'in the air'. In 1980, I made my first conference visit to New York, hosted by Rob Burlage, one of the founders of the radical Students for a Democratic Society. At the conference I met planning theoretician John Forester and, with two of his rural sociology colleagues, we drove upstate to Ithaca and Cornell University where they worked. I gave a seminar to pay for food and lodgings and one of the commentators was Stan Czamanski, a regional scientist. My talk was on the disintegration of heavy industry regions like Pennsylvania, Ohio and parts of the UK like South Wales. Stan advised that a way to help such devastated economies was to identify new complementarities among surviving industries and renew the 'clusters' these economies had once represented. It transpired that he had published methodology texts on clusters as far back as 1974. He was not alone except that even he differentiated between a cluster as an abstract input-output schedule and a 'complex' as what we would now call a 'cluster'. This difference bedevilled the discourse between the aspatial economics and the economic geography communities until recently, as

represented in the work of Michael Porter in 1990 compared with 1998 by which time he had completely taken the spatial connotations of the concept on board.

Hence, this book is invaluable in anatomising such debates and keeping in the forefront the sometimes-occluded tradition of cluster studies being highly intertwined with direct policy concerns. As this valuable book points out new issues have arisen in both the analysis and policy reflection about clusters.

The policy context is one that, despite the near-universality in adoption of the cluster toolkit and its necessary instruments not only in developed but developing countries, clusters have been discovered to be extremely difficult to construct, especially upon a blank economic landscape. By now even Porter and colleagues admit that cluster evolution is highly context dependent, meaning strongly susceptible to business cycles. Thus when stock markets were booming, particularly in high-tech valuations in the 1990s, start-ups and spinouts, many valued extremely highly and more recklessly overvalued, grew like fields of mushrooms. But once the party was over, by 2001 – the period since when many European economic policy makers became wedded to the idea – it has with a few exceptions been hard to identify many rapidly growing clusters. Even ‘green clusters’, a topic along with green innovation that now occupies many of my working hours, are not growing very fast, such as the globally successful Danish wind turbine cluster in North Jutland, which has taken nearly forty years to come to its dominant global position.

The key questions put by reflective policy makers today are how can I know a cluster is emergent, consolidated, repositioning or declining, and how can I give policy support to foster learning processes of its firms? I believe this book makes great progress in assisting understanding of both dimensions of this major issue in contemporary regional evolution. On the first question, most academic writing is silent, not least because academic (and consultant) careers are made by spotting a success *ex post* then publishing, publicising and/or hawking the magic ingredients around the world. But the true breakthrough of spotting analytically cluster emergence, consolidation, repositioning or even decline characteristics measured against a set of clear and indisputable model criteria remains some way off. Nevertheless, policy makers often have demands suggesting that what is already known about successful cases reduces their uncertainty in advocating clustering. Moreover, there is a herd instinct that drives them on. I was recently asked by a leading policy maker, in a workshop, how to predict a good cluster bet using a partial equilibrium modelling approach. Apart from giving a tremendous insight into some of the idiocies of the drive for ‘evidence-based’ policy making, it made me think how such a question could even be formulated in terms of my account of the thirty-years subsidy regime that had supported the aforementioned Danish wind turbine industry cluster. Note we were being asked, hypothetically, how to partial equilibrium model thirty years of global

energy volatility *ex ante*! Of course politics resolves such impasses and my estimate is that the industry in question has *ex post* returned in tax to the Danish exchequer three times its subsidy and rising. A pretty good return!

This book is thus to be commended for taking that poor policy maker's misguided concept of how to 'failsafe the future' seriously and offer informed, analytic guidance on how such crucial issues might be more sensibly approached. In so doing, this book shows how the real world of policy making takes place in multi-level and complex frameworks, and that these frameworks are crucial for understanding different forms of cluster policy design and performance. I commend the authors for their insight and effort to assist in this difficult but necessary evolving process of understanding cluster policy and governance in their dynamic and ever-changing context.

Phil Cooke, Cardiff, March 2008

Acknowledgements

This research monograph is a product of the two authors' collaboration under the auspices of the WEID project, financed by the EU 5th Framework Programme 2001-05 (under contract no. HPSE-CT2001-00098). WEID, a shorthand for 'West-East Industrial Districts Re-location Processes: Identifying Policies in the Perspective of EU Enlargement', was an interdisciplinary research project that brought together more than twenty researchers from a dozen or so research institutions spread across Eastern and Western Europe.

We incurred many debts while writing this book. First, and foremost, to our WEID colleagues, with whom we shared the good and the difficult times of gathering primary and secondary data, analysing complex evolutionary patterns and developing policy options. After a difficult and prolonged start that required the development of a shared language for dealing with such complex phenomena across a number of disciplines and countries, and what could be termed a 'methodological war', the WEID team was able to pull itself together through the difficulties, typical of large international interdisciplinary projects, with a good professional spirit and a healthy sense of humour. The success of WEID, however, is largely due to the tireless work of our coordinators Ruggiera Sarcina and Debora Giannini from the Istituto Guglielmo Tagliacarne (IGT, Rome), that facilitated WEID's research with excellent administrative skills. Our warmest thanks to them.

The WEID team provided us with stimuli and enthusiasm about the importance of clusters and industrial districts in Europe. Our gratitude for their help and contribution go especially to Manu Ahedo, Michela Bastianelli, Fiorenza Belussi, Lucio Biggiero, John Cantwell, Mahtab Farshchi, Hans-Werner Franz, Odile Janne, Marko Jaklič, Rainer Lichte, Frank McDonald, Daniel Manate, Wim Martens, Mimmo Mauriello, Alvis Mesthene, Marianna Nagy, Artur Ochojski, Brigitte Ollier, Ivana Paniccia, Ulrik Røhl, Alessia Samarra, Massimo Tomassini, Heinz-Josef Tuselmann, and Hugo Zagorsek. A special word of thanks to Anja Cotič Svetina, for her invaluable help with information about the Slovenian economy and clusters.

Thanks are also due to Matthew Pitman, Felicity Plester, and Caroline Phillips from Edward Elgar publishers for help with typesetting this book.

We would also like to thank the 500 or so firm and institutional representatives that provided primary data as well as the DG: Employment, Enterprise, Regio, and Research officers that fostered the overall effort.

Susana Borrás would like to acknowledge LTH and Lund University (Sweden) for the generous invitation as Lise Meitner guest professor in the Spring semester 2007 at CIRCLE. My special thanks to its director Charles Edquist, who made my stay possible and provided an exciting academic opportunity which was highly inspiring for the book. I would also like to thank my colleagues at the International Centre for Business and Politics, Copenhagen Business School (Denmark), and at CIRCLE, Lund University (Sweden) for their invaluable comments throughout the process of writing this book.

Dimitrios Tsagdis would like to acknowledge Roskilde University (Denmark) for an Associate Research Professorship during 2003-04 and Hull University Business School (UK) for a brief study leave during 2006-07. Prof Gerard De Zeeuw for advice and discussions on methodology. Dr Qihai Huang and Dr Caterina Muzzi for SPSS analysis in the early and late stages of the WEID project respectively. The former and Mr Pier Andrea Podda for primary data collection in the Scottish ICT cluster and UK RDAs. The latter also for reviewing draft chapters on Italy and the CZ, and Mr Conrad Roemhild for reviewing the Germany draft chapter. Dr Ioannis Salamouris and Mr Mohammed Dauda for post-WEID SPSS analysis and related discussions. Dr Stilianos Alexiadis for input and feedback on regional economics and externalities. Mrs Chrysoula Papatriantafyllou for tireless language revisions in WEID interim reports and draft book chapters, Ms Christina Tan for assistance with the index. Among the many institutional representatives who went beyond their call of duty to help with WEID and this book special thanks ought to go to Ross Brown, Janko Burgar, Gary Marsh, Philip Raines, Simona Rataj, and Reza Zadeh. My thanks should also go to a number of individual researchers located all over the globe that took time to provide additional information to their published work relevant to various aspects of the issues raised in this book; they are too numerous to list individually and most remain only electronic acquaintances. I hope one day to be able to meet them and thank them in person.

Last but not least, apologies should go to those whose contributions we have forgotten. Still, we wish to thank them. Neither they nor the people whose contributions we have been able to mention, are to be held responsible for the fact that we may not have profited sufficiently from what they have contributed. Still, we hope that they will recognise some of it, and that they will appreciate the way it has been used.

Finally, we would like to express our deepest gratitude to our families, whose love and support made the hard process of writing this book more bearable. Our most sincere thanks for their patience and encouragement; this book is dedicated to them.

Contents

<i>List of abbreviations</i>	vii
<i>Foreword by Phil Cooke</i>	xi
<i>Acknowledgements</i>	xv
1. Cluster Policies in Europe: Governance and Learning	1
2. Methodology	29
3. Cluster Policy in Germany	58
4. Cluster Policy in the United Kingdom	88
5. Cluster Policy in Italy	115
6. Cluster Policy in Slovenia	144
7. Cluster Policy in the Czech Republic	176
8. Cluster Policy in Romania	211
9. Comparative Findings and Conclusions	243
<i>References</i>	269
<i>Index</i>	283

1. Cluster Policies in Europe: Governance and Learning

1.1 INTRODUCTION

In spite of the ever-growing interest in cluster-related policies, it is a paradox that we know relatively little about them. In particular, there is still very limited scientific understanding about: the role of policies and (semi-)public institutions in clusters, the changing trends in cluster-related policies during the past decade, the precise policy needs and demands of firms in clusters given the changes taking place around the globe, the issues ahead in terms of policy design and opportunities, the changing role of public and semi-public cluster leaders. Understanding the role of policy and of institutional initiatives is particularly important given the changing international and European contexts, which are putting pressure on the competitiveness of old and new clusters. In Europe, and the European Union (EU) in particular, the recent accession of new member states from Central and Eastern Europe is unleashing unprecedented adjustments (e.g. movements of labour and firms) – trends that are having a tremendous impact on existing and emerging clusters.

For the reasons above, this book aims at addressing some of the most compelling questions regarding cluster-related policies in Europe. Namely, what are the changing policy needs of the clusters in view of the transforming trends in the European manufacturing sector? How (and how far) are public and private actors reorganising and reconceptualising their action with regard to clusters? What sort of public-private actors' interactions are emerging from this? How is governance being articulated in each country? What lessons can be drawn from a comparative analysis of cluster-related policies and governance forms? And last but not least, what do the empirical findings tell us about the need for policy action at the EU level?

This book takes the stance of regarding policy as an integral part in the daily life of clusters; in other words, the stance that policy is an unavoidable aspect of clusters. As detailed in the forthcoming sections, the notion of *policy* in this study is treated as a synonym for the notion of *public action* that can be performed by a series of public and semi-public actors. This wide notion of policy indicates its emergence at the interface of a complex set of

territorially embedded interactions between such actors. In spite of its ubiquity, cluster policy is a neatly discernible object of study because it is the result of a series of intended, explicit, and strategic actions aiming, allegedly, at improving cluster conditions.

During the 1990s most European countries increased their attention to industrial districts/clusters/local production systems as components of their industrial policy. The attention was related to the growing acceptance that flexibility and 'creative destruction' of local production systems were important means of job creation as well as responses to the challenges of globalization. Successful cases like Silicon Valley or Route 128 in the US were on the lips of everyone. However, industrial policy in Europe also changed in far more fundamental ways. The negative experiences of supporting troubled 'national champions' during the 1970s and 1980s provided a new impetus in the 1990s towards a collaborative stance above and below the national level. These general trends placed significant consideration on framework conditions, collaborative efforts and intangible aspects of economic growth. In particular, some of the instruments developed in the 1990s included, among others, the reinforcement of public-private partnerships for the development of the territory, the reinforcement of local and/or sectoral networks of small and medium-sized enterprises (SMEs), the development of a more horizontal approach to industrial policy, an increased emphasis on territorial improvements of framework conditions, and last but not least, a growing interest on boosting the knowledge base and the learning abilities at subnational levels. Needless to say, these approaches have not substituted the other main economic policies, e.g. regarding research and development, competition, financial and fiscal incentives, employment and vocational training, corporate governance, or physical infrastructure development in general. The cluster-approach policies in the 1990s have been complementing these traditional sectoral policies by giving them an important territorial dimension.

Alongside these changes, most European countries have also engaged in a decentralisation process of their political structures devolving powers to their subnational levels (e.g. regions and municipalities). For Western European countries this was the case in the 1980s and early 1990s, whereas for Central and Eastern ones this has taken place in the last part of the 1990s and early 2000s, as part of their transition to democracy. The process of decentralisation has contributed to a more complex picture regarding the combined role of national and subnational government in the area of economic/industrial development, especially as regional and local governments have been increasingly granted new legal competences and financial resources to engage actively in the economic development of their territory.

Apart from decentralisation, national governments have also transferred power upwards to the supranational and international levels. After several

treaty reforms and enlargement rounds, the EU has gained new regulatory powers and financial resources in the areas of market-creation, correction of negative economic externalities, economic and monetary policy, and cohesion and wealth redistribution. Moreover, since the launch of the Lisbon strategy in March 2000, the EU's role was even further expanded in order 'to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion by 2010' (European Council 2000, p. 2). That is, the EU started to coordinate national economic and social policy areas, particularly in education and the labour market, where it has no legal competences. This expansion of the EU's role means that today the EU does not only make use of traditional supranational instruments (e.g. regulation and economic resources) but also of transnational instruments coordinating national policies in a series of fields related to competitiveness and economic development, most of them with an important territorial impact at subnational levels.

The two parallel processes: downwards towards more decentralisation, and upwards towards more supra- and international involvement have created a complex picture of multi-level policy action and governance forms towards clusters and local production systems (Borrás 1998; Borrás et al. 1994). The richness of these patterns shows that there is today a high degree of diversity in Europe. As a result, this book claims that in-depth comparative studies of European clusters' governance patterns are now far more necessary than ever before. In particular, there are three very strong reasons why this is so pertinent at present: firstly, because most cluster-oriented initiatives launched in the 1990s are starting to bear fruit these days; secondly, because of the significant efforts now taking place in the EU27 (at EU, national, and subnational levels) to streamline and coordinate policy initiatives towards clusters; and thirdly, because the consequences of globalisation are felt much more clearly than ever before.

This book is concerned with such changing aspects of cluster policies and governance in the European context. In contrast to previous cluster policies studies, this book focuses on one very important element which has so far been partly neglected by the literature, namely, the extent to which these novel and complex dynamics of multi-level governance (MLG) are producing learning processes in clusters. So far, the theoretical treatments of the governance and MLG notions have tended to be more normative than analytical. The assumptions that governance and MLG offer an important problem-solving capacity in contemporary complex capitalist societies have not been fully tested empirically, and today there is a relative lack of substantial analytical frameworks to examine the conditions under which such potential is fulfilled or not. In the EU, as well as globally for that matter, the cluster perspective has been largely influenced by authors like Piore and Sabel, Becatini (the Italian school) and since the mid-1980s also Porter. They