

# 1 INTRODUCTION AND OVERVIEW

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## 1. Entrepreneurship in the Region

Entrepreneurship has a pronounced regional dimension. Differences in start-up rates, in entrepreneurial attitudes, and the success of newly founded businesses between regions indicate a distinct importance of space and the local environment for entrepreneurship. Empirical research has shown that such differences are not at all elusive but tend to be rather persistent and to prevail over longer periods of time.

Dealing with different aspects of entrepreneurship, the articles collected in this book all approach their topic from a spatial perspective. The various regional influences on entrepreneurship analyzed entail regional peculiarities and disparities in new business formation processes, employment effects of new firms, the importance of social capital and of network structures, as well as entrepreneurship education and training provided in the regions. The contributions to this book clearly show that there is a diversified set of approaches on how to relate entrepreneurship and new firm formation processes to regions. Differences between approaches include the understanding of what is the appropriate regional level of analysis. While most of the articles utilize the highly disaggregated level of the German districts (“Kreise”), others address larger regional entities like planning regions (“Raumordnungsregionen”), the federal states (“Länder”), or analyze the differences between the eastern and the western part of the country, whose divergent historical backgrounds are still imprinted in their socioeconomic development. The articles in this book also follow different research strategies for investigating the regional context of entrepreneurship and new business formation. While some analyze the influence of regional factors by in-depth case studies of certain regions, which are often based on data that have been raised by postal questionnaires and through personal interviews, others are conducting interregional comparisons that include all regions of the country. Such differences in the types of approaches not only depend on the particular question under investigation but also reflect the research traditions of the disciplines involved. The contributions of the different academic disciplines clearly demonstrate that their research methods are complementary in character. Entrepreneurship

research is an interdisciplinary issue that benefits from the contribution of various ways of approaching the issue.

All articles in this book are based on the priority research program “Interdisciplinary Entrepreneurship Research” that the German Science Foundation (DFG) has granted in the 1998-2004 period. The research reported here has been conducted in the final phase of the program between the years 2002 and 2004.

## **2. Entrepreneurial Regions, Employment Effects, and Innovation in Regional Systems – An Overview**

The articles in this book cover three major issues. The first set of questions concerns the effect of regional characteristics on the entrepreneurial attitudes, behavior, and activities of the inhabitant population. What makes a region “entrepreneurial,” and how could policy stimulate regional entrepreneurship? Such questions are examined for the regional population as a whole (chapter 2), for particular subgroups such as (potential) women entrepreneurs (chapter 3) and for students at universities (chapter 12). The second domain of the book addresses the employment effects of newly established businesses in quantity as well as the quality of the jobs generated by the start-ups (chapters 4, 5, 6, and 7). A third group of papers puts emphasis on the development of selected innovative industries within particular regional economic systems (chapters 8, 9, and 10).

Subsequent to the introductory chapter, Ingo Lückgen, Dirk Oberschachtsiek, Rolf Sternberg, and Joachim Wagner report empirical evidence from the Regional Entrepreneurship Monitor (REM), a research project that is related to the Global Entrepreneurship Monitor (GEM) focusing on ten German regions. Their results are derived from comparing the shares of nascent entrepreneurs from 2003 to those from 2001 in the regions under investigation (chapter 2). In the contribution by Friederike Welter and Lutz Trettin they investigate the spatial embeddedness of supporting networks for and of women entrepreneurs, with a particular emphasis on the emergence of the institutional formal network structure in two regional settings (chapter 3). While the authors observe a “bottom-up”-approach for the network evolution in the State of Mecklenburg-Western Pomerania – where women entrepreneurs have been the main driving force for network creation – a more “top-down”-mechanism is identified for the Munich region.

The subsequent contributions (chapters 4, 5, 6, and 7) deal with the employment effects of new businesses. On the basis of the Establishment register derived from the German Social Insurance Statistics, Antje Weyh examines survival and the development of employment in start-up cohorts in different regions and industries of West Germany. She analyzes the characteristics of start-up cohorts that created a relatively large number of jobs as well as the

factors which influence the success of these cohorts (chapter 4). One result is that new manufacturing firms have the best survival chances in rural areas whereas start-ups in the service sector show higher employment development in agglomeration areas. High regional start-up rates have, however, a negative effect on new firm survival indicating a high intensity of competition and market selection in these regions. Dirk Engel and Georg Metzger also analyze medium term employment effects of start-up cohorts drawn from the ZEW Foundation Panels (chapter 5). Their results suggest a comparatively good performance of firms set up by founders with an academic degree as well as of firms in high-technology sectors. Building on data provided by the same source, Michaela Niefert investigates differences in entry patterns and post-entry performance between Eastern and Western Germany firms as well as between patenting and non-patenting firms (chapter 6). She finds that in the time since the unification, Eastern German start-ups have been comparatively larger, have grown faster, and have relied on more seed capital and financial support than those in West Germany. Generally, involvement in patenting activities enhances the employment growth performance of newly founded firms.

Udo Brixy, Susanne Kohaut, and Claus Schnabel investigate wage setting and labor fluctuation in newly founded and in established firms with a linked employer-employee data set generated from the German Social Insurance Statistics (chapter 7). The authors show that start-ups are characterized by higher labor fluctuation, lower bargaining coverage, and lower wages than incumbent establishment. Their results, however, indicate that such differences disappear rather rapidly as new firms mature.

Chapters 8 to 10 focus on specific economic sectors such as knowledge-intensive services or the surgical instruments industry within particular regions. Ralf Binder and Björn Sautter investigate the effects of the regional environment on new firm formation and survival in the surgical instrument cluster of Tuttlingen, which is one of the most important locations of the industry world-wide (chapter 8). A particular emphasis of their analysis is on the importance of social ties within this cluster. They show that the relationships between the members of the cluster are often characterized by considerable mistrust towards actors outside as well as within the cluster. According to their analysis, social ties and personal trust between actors play a decisive role for getting access to critical resources. Knut Koschatzky and Thomas Stahlecker investigate structural ties of young firms of the knowledge-intensive business (KIBS) sector in the regional innovation system of the city of Bremen (chapter 9). A focus of the empirical analysis is the role of these firms for the transfer of knowledge and technology. They conclude that in the innovation system of Bremen, KIBS play a significant role for the modernization and development. In particular, they have an important function as being a bridge between the sector of public education and research (universities, public research institutions), on the one side, and the commercial application

of new knowledge, on the other side. Andreas Koch and Harald Strotmann in their contribution analyze determinants of innovation activity based on data from three German agglomerations (chapter 10). They find that the managerial characteristics of the firm founders as well as interaction between firms in networks are crucial for innovative behavior.

The contribution by Michael Fritsch and Pamela Mueller gives an overview of their research on the employment effects of new business formation, the evolution of regional entrepreneurship, and the transition of regional growth regimes (chapter 11). They emphasize the importance of indirect employment effects of new business formation. Analyzing the level of new business formation over a longer period of time, they find that the changes are rather small. This suggests that a policy that intends to stimulate start-ups can only be effective in the longer run. An analysis of typical patterns of start-up activity and regional development confirms this need of a long-run orientation of entrepreneurship policies.

Finally, Kerstin Wagner, Frank Bau, Juergen Schmude, and Michael Dowling investigate regional differences of entrepreneurship education in universities focusing on three regions (chapter 12). They particularly focus on the effects of regional structures on students' entrepreneurial attitudes. Surprisingly, those attitudes are hardly at all likely to depend on such regional structures. Rather they may be considerably determined by the type of faculty at which the courses of entrepreneurship education are located as well as by the size of the university.

### **3. Outlook**

The articles in this book provide strong evidence for the importance of regional factors for entrepreneurship and new firm formation processes. They also demonstrate that a plurality of approaches in the analysis of entrepreneurship can be very fruitful. Entrepreneurship is a rather complex phenomenon, and there is no single appropriate way of analyzing the issue. The emergence and the success of a new firm should be explained and understood as a multi-dimensional product of numerous factors. For example, the success of a newly founded firm does not only depend on the abilities and resources of the founder but also on the availability of funds, on public policy, on technological development, on the industrial context and, of course, on regional parameters such as infrastructure, the regional workforce, local networks of customers and suppliers, spatial proximity to research institutes, the intensity of knowledge spillovers, and support by the public administration. Therefore, a variety of approaches, particularly the involvement of different disciplines, is needed in order to arrive at a proper understanding of entrepreneurship and new firm development. Further research programs should account for this need for a plurality of approaches. To organize a fruitful cooperation of dif-

ferent approaches and academic disciplines may be regarded a main challenge for future research on entrepreneurship.

Apart from this need for variety, the articles collected in this book clearly suggest that further research on entrepreneurship as well as entrepreneurship policy should account for the regional dimension. Space and location do matter a lot for entrepreneurship. Therefore, entrepreneurship policies of a “one size fits all”-type, i.e. operating with uniform measures that are performed nearly the same way all over the country may not be appropriate. This leads to the question of appropriate ways to regionalize entrepreneurship policies. One way of accounting for region-specific factors in national entrepreneurship policies could be to involve regional actors in the design, administration, and financing of the programs. Because nearly all new businesses are set up at a location close to the place where the founder lives, stimulating entrepreneurship could be an important element of a policy that tries to promote the endogenous growth potential of regions. How this could be effectively done is another question for further research.