The Geography of Entrepreneurship

Regional and individual determinants of new firm formation in Sweden

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Umeå 2020
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Dissertation for PhD
ISSN: 1402-5205
Gerum – Kultugeografi 2020:1
Cover photo: © sveta/Adobe Stock
Printed by: CityPrint i Norr AB
Umeå, Sweden 2020
Acknowledgments

Writing this thesis was a great adventure and during this time I have been lucky to meet great people, who are not only excellent researchers, but also wonderful friends and colleagues.

First of all I would like to thank my supervisors Rikard Eriksson, Urban Lindgren, and Lars-Fredrik Andersson. Thank you for all our inspiring discussions, your guidance and for giving me freedom to pursue my research ideas. Thank you Rikard Eriksson for your commitment that has been far above the obligations of a supervisor. I could always count on you for replying to my emails, finding the time to talk and giving advice. Thank you for introducing me to the academic world. Due to your guidance, I had the possibility to participate in the best academic events, conferences and courses in our discipline. They all gave me so much inspiration. Thank you Urban Lindgren for your counselling and sharing your experience. You are always a person to turn to for good advice. Thank you Lars-Fredrik Andersson for all your support and finding time to read my work, even during summer breaks. Your comments always helped me a lot.

This thesis benefitted greatly from advice and comments from Hans Westlund and Martin Andersson, who provided me with excellent feedback during the midterm and final seminars. During my doctoral studies, I was also lucky to receive valuable comments from Martin Henning and Mikhail Martynovich. I would also like to thank my colleagues from the department: Dieter Müller, Kerstin Westin, Einar Holm, Charlotta Hedberg, and Linda Lundmark for reading and commenting on my work on a number of occasions. Thank you Guilherme Kenji Chihaya for all our discussions on research methods. Thank you Erik Bäckström, Lotta Brännlund and Fredrik Gärling for your help in dealing with the challenges of technology and university regulations.

My peers in and outside the department were great companions during the doctoral studies. Thank you all. In particular, I benefited from comments and discussions with my fellow economic geographers and friends Emelie Hane–Weijman, Therese Danley, Zoltan Elekes and also Toni Habersetzer, who joined us here in Umeå as a visiting PhD student. Thank you Sabina Bergstén, Heather Mackay and Emma Landby for your efforts to make the PhD time less stressful for all of us in the group and big thanks to Andreas Back for the movie nights in the department. A great part of my doctoral studies was also participating in the Young Economic Geographers Network. Special thanks for two YEGN members Kerstin Schäfer and Timo Kleiner for the time spent together at the conferences and during the summer school in Essex.
Finally, I would like to thank all my colleagues at the Department of Geography, both present and past, for all the discussions, seminars and fikas. You all have been fantastic colleagues and you all made my PhD studies a great time in my life.

The last paragraph I would like to dedicate to my family. I would like to thank my wife Anna for all her patience and support. A long time ago we decided together to move to Umeå and I believe it has been a good time for both of us. Finally, I would like to thank my Mother for her support and understanding despite that moving to Sweden meant we could not see each other very often.
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(under review)
Marcin Rataj
Author’s declaration: Sole responsibility for planning, writing and empirical analysis

Paper 2:
The geography of start-ups in Sweden. The role of human capital, social capital and agglomeration.
Published in: Entrepreneurship and Regional Development
Rikard Eriksson and Marcin Rataj
Author’s declaration: Joint effort in planning and writing the manuscript. Sole responsibility for the empirical analysis.

Paper 3:
Can non-local entrepreneurs contribute to regional development?
(under review)
Rikard Eriksson and Marcin Rataj
Author’s declaration: Joint effort in planning and writing the manuscript. Sole responsibility for the empirical analysis.
1. Introduction

Start-up is a buzzword of the modern era. Companies emerging in the most technologically advanced sectors of the economy have started from scratch and managed to disrupt and create whole sectors as well as influence the lives of billions of people by offering new ways of communicating and carrying out daily activities. At present, they are also among the companies with the highest market values in the world. Naturally, this attracts societal attention and provides inspiration for many individuals. It is also the consensus that the increasing importance of new companies reflects the current stage of global economic development. The decrease in manufacturing and the increase in service sectors shares in the economy lower the entry barriers, as service firms are on average smaller than manufacturing firms. Service firms also provide more opportunities for entrepreneurship, as do the sectors favoured by current technological change, such as information and communications technology (ICT) (Acs, 2006).

Seizing opportunities related to lower entry barriers and the formation of new firms is considered to be an important part of the market economy and to play a fundamental role in economic regional development. This is because entrepreneurs create new businesses that supply customers with products and services, intensify competition and increase productivity and incomes (Acs, 2006; Acs and Storey, 2004). They may also create new jobs and contribute to economic growth (Moscarini and Postel-Vinay, 2012; Pedace, 2010). Moreover, they are much more flexible and can potentially adapt to the changing macroeconomic conditions more easily and faster than large companies can (Sak and Taymaz 2004), which implies that more entrepreneurial regions may be able to achieve faster recovery from recessions.

Despite the favourable technological trends observed globally, new firm formation is generally still strongly rooted in the local context. Stories of start-ups in places like Silicon Valley seem to be the exception rather than the rule, and the large majority of new firms will not reach an international scale of operations (Parker 2018). However, this does not make them less important, because they contribute to the local economy by creating not only jobs, but also new amenities, services and by making places more liveable. Start-ups might also create new pathways for economic development (Parker 2018). Finally, they might provide new alternative ways of living not only for the owners, but also for employees, especially in cases where the new company is the outcome of pursuing a more ethical or environmentally friendly way of doing business.
Besides its socioeconomic contribution, entrepreneurship might also increase wellbeing in society. From an individual perspective, starting a business gives opportunities for social mobility and individual pursuit of happiness and fulfilment (Stephan and Roesler, 2010). From a societal perspective, it increases the opportunity for freedom even if the entrepreneurial career is not followed (Sen, 1993). This might be an opportunity to change one’s career path and gain more control over one’s own professional life. The research focusing on happiness and life satisfaction indicates that entrepreneurs are one of the most satisfied professional groups (Fritsch et al., 2019). On average, it takes the gainfully employed much more time to achieve the same level of satisfaction from work and a professional career (Fritsch et al., 2019).

In general, understanding the mechanisms behind entrepreneurship is of great relevance to understanding socioeconomic processes in general. Therefore, research that takes into account individual and regional differences in benefits from entrepreneurial activities can contribute to making significant socioeconomic gains, as better policies might increase the societal benefits stemming from the formation of new companies.

Policymakers are aware of these potential benefits. Consequently, research on business formation and start-up-related policies are an important part of policy debates and strategies. From this perspective, new business formation is therefore often viewed as a vehicle of economic growth and a tool for diminishing labour market tensions and reducing inequalities in society (European Commission, 2013; Iacobuta and Socoliuc, 2014; Jenner, 2013). This indicates that business formation is a focal point of societal relevance, as it is thought to be an important building block for policies aimed at responding to increasing polarization on the labour market and rising spatial inequalities in regional development (Iammarino et al., 2019; Malecki, 1993). These trends have been identified as a potential threat not only to societal wellbeing, welfare and equality, but also to political stability (Rodríguez-Pose, 2018). Both societal and regional trends towards increased inequality might also undermine political stability and be drivers for new waves of populism that can threaten an established democratic order.
Gaining a more in-depth understanding of these mechanisms also has very practical and direct implications. As emphasized by Storey (2014), all high- and middle-income countries allocate significant resources to fostering the creation of new firms and the development of small firms. Start-up policy is one of the building blocks of EU policies, including structural funds for less developed and peripheral regions as well as policies aimed at increasing competitiveness of EU economy on global scale (European Commission, 2013; European Commission, 2003). In this regard, the recent EU “Smart specialisation strategy” builds on the concepts of economic diversification and industrial relatedness (McCann and Ortega-Argilés 2013), where taking into account regional capabilities is considered a key mechanism in achieving regional growth and resilience (Boschma, 2017). Smart specialization emphasizes that the development of regional industrial capacities is based on the unique characteristics and assets of each country and region as well as on highlighting each region’s competitive advantages (EC 2014, page 8, McCann and Ortega-Argilés 2016). This approach stresses the need for emerging new economic activities, on the one hand, and the need for links with the current regional economic environment, on the other.

However, while generally recognized as a source of significant benefits for national and regional economies, start-ups have been the subject of many debates concerning regional economic development (Audretsch and Fritsch, 2002; Fritsch and Storey, 2014), and there are two important research topics related to academic and policy-oriented debates that need to be further investigated.

First, despite consensus on the idea that formation of new firms plays a fundamental role in regional development, this debate is far from being conclusive, as questions concerning the nature of the benefits of a firm formation process are still being addressed in ongoing research. On the one hand, it is seen as a very positive phenomenon, as it is believed to contribute to economic development in many dimensions. There is a substantial body of literature showing many diverse benefits, including an increase in productivity and incomes (Acs, 2006; Acs and Storey, 2004), innovation (Acs and Plummer, 2005) and competitiveness (Bosma et al., 2011) as well as job creation (Moscarini and Postel-Vinay, 2012; Pedace, 2010). On the other hand, some studies have shown that any long-term positive impact of new entrepreneurs on employment and GDP growth is rather limited, and only a small proportion of successful entrants contribute to employment growth (van Praag and Versloot, 2007; Shane, 2009). Furthermore, some researchers have argued that forming new businesses may be largely a consequence of economic prosperity rather than an antecedent (Nightingale and Coad, 2014). Establishing whether and how regional economic conditions may affect firm formation is a central research question, and a topic also addressed in the present thesis.
These two perspectives on entrepreneurship are not necessarily contradictory. Whether or not entrepreneurship fosters economic development may be conditional on the regional setting, which shifts the research attention towards investigating the spatial context of entrepreneurial activities – i.e., where and how entrepreneurship contributes to economic development.

The spatial aspect can be contextualized on different geographical scales. For example, some authors have suggested that, at the national scale, young and small companies might play a more important role in developing countries (Ayyagari et al., 2014), while in developed countries, their role might be similar to those of large companies (Dixon and Rollin, 2012; Haltiwanger et al., 2012). In addition, national legislation, administrative capacity as well as tax and labour regulations are important factors influencing the propensity to start a business as well as the productivity of entrepreneurial activities (Keuschnigg and Nielsen, 2003). Some factors – such as the quality of governance, transparency, or the rule of law – play a universally positive role for entrepreneurship and other dimensions of social development. Other factors – such as labour protection or taxation levels – require balancing diverse and conflicting societal goals (Bruce and Schuetze, 2004).

The role of entrepreneurship varies significantly also within national economies. There is evidence that the degree to which increased the business start-up rate promotes regional employment and productivity depends on regional conditions (Audretsch and Fritsch, 2002; Caliendo and Künn, 2014). As demonstrated by Audretsch and Fritsch (2002), regional growth can be a result of either stable enterprise structure combined with predominance of large incumbents or a consequence of high start-up rate combined with high turbulent enterprise structure, and while regional endowments provide resources for entrepreneurs, entrepreneurs simultaneously shape the regional economic output (Feldman, 2001).

The second debate considers the role of agglomeration externalities in new business development. In this regard, various perspectives on Marshallian (benefits of concentration of same industries) and Jacobsian (benefits of concentration of different industries) externalities indicate the privileged position of large, centrally located and metropolitan regions. They benefit in this regard from various types of advantages, including geographic proximity in business innovation and growth (Asheim, 1996; Maillat, 1995; Sabel, 1989; Storper, 1995), knowledge spillovers (Feldman and Kogler, 2010) and capabilities diversification (Boschma and Frenken, 2011; Frenken and Boschma, 2007).
While the advantages of metropolitan regions are well known, less is known about potential advantages for new firm formation in more peripheral, rural or depopulating regions. Some evidence reveals that the link between firm formation and economic development might be conditional on the regional setting. This shifts the research attention towards investigating the spatial context of entrepreneurial activities, but the state-of-the-art of research still cannot fully provide the answer to this question. As emphasized by Grek et al. (2011) and Westlund et al. (2014), geographical factors are often neglected in studies focusing on entrepreneurship variations, despite the fact that insights gained from studies on entrepreneurship suggest that the same type of resources may play a different role depending on regional conditions (Westlund et al., 2014). Similarly, policy recommendations tend to take into account the perspective of highly urbanized locations and to neglect the specific needs of other types of settings, such as remote and sparsely populated regions (Westlund et al., 2014). Providing new knowledge on regional variations in drivers of firm formation can help to carve out better policy strategies and to improve the targeting of these strategies across regions and social groups.

There is a growing awareness of the need for more nuanced and less metropolis-centred research (Mayer, 2020). There is already some evidence concerning the benefits and compensational mechanisms that might be at work in non-metropolitan regions. The former includes such benefits as the lower cost of locations and the increased safety against labour poaching (Eder and Trippl, 2019), the latter the acquisition of external knowledge (Fitjar and Rodríguez-Pose, 2013) or engagement in more formal collaborations (Grillitsch and Nilsson, 2015).

Reinvigorating declining regions might be difficult from a policy perspective, but at the same time, it might provide significant social gains, as recent development patterns seen in many European economies are characterized by uneven regional growth. A fast growth rate is observed mainly in the largest metropolitan regions, while less prosperous and peripheral regions often face economic decline. There is also growing evidence that this spatial division might not only create challenges concerning regional employment and restructuring, but also threaten social and political stability (Rodríguez-Pose, 2018). Growing recognition of these challenges has led to calls for actions aimed at reigniting economies in stagnating regions.
This type of investigation requires not only paying more attention to the benefits of non-metropolitan locations, but also a more nuanced approach to the categorization of regional settings. For example, as shown by Hedlund (2016), rural locations adjacent to metropolitan settings offer quite a different business environment compared to more distant locations.

Therefore, the focus of the present thesis is to look at the intersection of processes of new business formation and regional development. The thesis views an individual starting his/her own business as being embedded in the context of the regional economy. In the thesis, concepts stemming from economic geography are combined with concepts from other social scientific studies, using as a link the figure of the entrepreneur. From an evolutionary perspective, entrepreneurial individuals are viewed as important parts of economic evolution by virtue of being agents of economic change and creative destruction – individuals who take advantage of knowledge spillovers, introduce existing products and practices in new contexts and destroy existing business practices (Stam, 2010). Doing this requires, among other things, human capital in the form of managerial skills, work experience and general knowledge of the business world (Henley, 2005; LaFerrere and McEntee, 1996; Lentz and Laband, 1990). An individual starting his/her own business does not act alone, but uses the support of family, relatives, friends and acquaintances, all of whom might contribute to the business’s success (Parker, 2018). These relations are investigated using theories of social capital and social networks. Finally, the decision to start a company is being taken in the context of the individual labour market career and life-course perspective of the individuals establishing these businesses (Heijden et al., 2009; Nykvist, 2008; O’Leary, 2012).

The data on the Swedish economy used in the present thesis are very well-suited to this type of investigation, which focuses on the individual and regional context of new firm formation. First, Sweden is characterized by large differences in terms of peripherality, population density and growth as well as economic performance. This enables investigation of patterns in new firm formation across very diverse regional settings, which nonetheless share the same legislation as well as political and historical context. Second, Sweden has also exceptionally high-quality data from population and business registers. This is particularly important for this type of research project, which aims to take into account individual and regional diversity and therefore needs a large amount of data to be able to draw conclusions that are based on representative data for diverse regional and individual contexts.
Just as in many other countries, an increasing portion of economic activities in Sweden is currently concentrated to the most populated regions. A large share of national employment and population growth is restricted to the three metropolitan regions of Stockholm, Gothenburg and Malmö. At the same time, a large part of the country is characterized by a sparse population combined with high economic specialization, making Swedish peripheral regions particularly vulnerable to economic restructuring (Eriksson and Hane-Weijman, 2017). Still, there is empirical evidence showing that mechanisms exist that can be mobilized to counteract this divergence. For example, while many municipalities considered vulnerable by the Swedish Agency for Economic and Regional Growth (Tillväxtverket 2016) are located in peripheral regions, some of them have managed to significantly improve their economic conditions by diversifying their economic activities.

Since the 1990s, Sweden has introduced many liberalization policies that facilitated start-up formation. Still, the country has maintained a relatively high level of social protection and, as a result, Sweden has one of the lowest shares of individuals who start companies out of necessity and without identified market opportunity and ambition to grow (Kelley et al., 2016; Singer et al., 2015). This allows us to draw stronger conclusions regarding the potential impact of new business entities on region economy.

1.1 Contribution and Aim

As emphasized by Acs (2006), entrepreneurship has at least two meanings. It either refers to owning, managing and creating new businesses or to entrepreneurial behaviour, in the sense of seizing an economic opportunity. In this regard, both perspectives are important for the present thesis, but the latter captures its core interest, which is the intersection of the individual and regional context in seizing an economic opportunity.

While there is a rich and growing body of literature on both individual and regional determinants of entrepreneurship, the dominant perspective assumes that these factors play a similar role in different spatial contexts. The thesis aims to investigate in the first place the link between firm formation and economic opportunities that might be conditional on the regional setting, i.e., that do not necessarily provide for universal outcomes.

Investigating that link might be of particular significance for the formation and performance of new firms in peripheral and stagnating regions. Such regions may benefit the most from tailored-made and research-guided policies, but at the same time are under-investigated compared to successful metropolitan settings.
These locations might benefit only in a limited way from the advantages stemming from Jacobsian and Marshallian externalities, including knowledge spillovers (Feldman and Kogler, 2010) and capabilities for diversification (Boschma and Frenken, 2011; Frenken and Boschma, 2007). Therefore, the thesis aims to identify other types of potential regional advantages that might facilitate firm formation and performance, as they can become potential sources of economic renewal in these regions.

Unlike the case of metropolitan regions, the resources that can give peripheral and stagnating regions opportunities to reinvigorate their economies are limited. The thesis will investigate three mechanisms that are not related to agglomeration forces, but that might potentially support the business formation process.

The first mechanism considers the motivation to start one’s own business activity among employed and unemployed individuals. On the one hand, low unemployment might suggest a good moment to start a business; on the other hand, if job offers are scarce entering self-employment might be a more attractive option than lacking employment (Acs, 2006; Reynolds et al., 2001; Verheul et al., 2010). This could potentially create a wave of new business activity in a region facing difficulties on the labour market. The problem associated with this mechanism is related to the quality of new business entrants consisting of individuals with skills of lower value on the labour market. Studies on this topic have also been inconclusive regarding which mechanisms – recession-push or prosperity-pull – are of greater importance (see Audretsch et al., 2015, for an overview).

The second mechanism reflects the potential of so-called soft factors such as human capital, social capital or entrepreneurial culture. While their presence tends to be related to other agglomeration and localization patterns, their role might vary depending on regional settings. For example, as emphasized by Parker (2018), social capital might serve as a substitute for other resources that are otherwise unavailable for local entrepreneurs. This type of substitute feature of social capital might be of particular importance for regions facing unfavourable economic conditions.

Finally, the last mechanism considered in the thesis is based on individual migration. Recent research on regional growth has emphasized that regional development is largely characterized by “branching processes”, where new industries branch off from related existing activities (Frenken and Boschma; 2007; Boschma and Frenken 2011). Nevertheless, branching is not the only mechanism responsible for transformation of regional industrial structure. For example, Neffke et al. (2015) indicate that a fundamental driver of regional
change can be a transfer of activities by external firms and entrepreneurs. This mechanism might benefit regional economies, provided they are able to successfully assimilate newcomers’ competences.

The investigation is guided by three main questions, each related to one of the mechanisms and aimed at closing the identified research gap in our understanding of the potentials and limitations of these mechanisms for new firm formation and performance. Each question considers the actions of individuals as well as potential advantages of different regional economies:

1. Can an increase in regional unemployment trigger a new wave of business formation and therefore strengthen a regional economy?
2. What kind of regional characteristics can compensate for low agglomeration externalities in terms of business formation?
3. How can the potential of people moving into a region (non-local entrepreneurs) be utilized to foster entrepreneurship?

Each question has been addressed in one of the research papers. Altogether, they allow us to better understand, from a research and policy perspective, the potentials and limitations faced by peripheral and stagnating economies in relation to new business formation.

1.2 Outline

The present thesis consists of an introductory part and an annex with three research papers. The rest of the introductory part has the following structure, consisting of four main chapters: literature review, research design, drivers of entrepreneurship and discussion. The literature review is presented in three subsections: individual perspective on entrepreneurship, regional perspective on entrepreneurship, potential and limitations of entrepreneurship. The research design section introduces the data, regional division, methods and ethical aspects of the investigation. The next section presents the Swedish context in entrepreneurial research and a summary of the main findings of the research papers. The final sections draw conclusions based on the main findings of the thesis. The introductory part is followed by the empirical part, consisting of three research papers:

Paper 1: Finding a window of opportunity or escaping unemployment? The role of regional labour market dynamics in the first-time transition to entrepreneurship in Sweden.

Paper 2: The geography of start-ups in Sweden. The role of human capital, social capital and agglomeration.
Paper 3: Can non-local entrepreneurs contribute to regional development?
2. Literature Review

Entrepreneurship research is a fast-developing area that has grown significantly in both its quantitative output and theoretical sophistication (Parker, 2018). One of the transformations in this field of research was moving the research focus from small firms to new firms as well as to novelty in the form of venture and innovation (Parker, 2018). There is also increasing recognition of the diversity of the business formation process, which goes beyond the characteristics of an individual or a company (Parker, 2018). In this regard, entrepreneurship is recognized as a phenomenon of individuals and firms embedded in a social and regional context.

In the present thesis, entrepreneurship is understood in the first place as a decision to gain income through self-employment or through business activity, which involves employment of the entrepreneur and sometimes of others. The focus of the thesis is on individuals who become entrepreneurs rather than new firms alone. In the literature, entrepreneurship has often been explained as the product of personal attributes and the regional environment (Stam, 2010). This distinction relates to two key types of factors: internal, which pertain to characteristics of the firm or the entrepreneur, and external, which are related to the environment in which the business might operate (Manjón-Antolin and Arauzo-Carod, 2008). These two perspectives can be traced back to seminal works of Joseph A. Schumpeter, which considered the role of the individual entrepreneur, and Alfred Marshall, who looked at industrial regions.

Joseph A. Schumpeter provided an analysis of the effects of dynamic entrepreneurs on economic growth and structural change. In his view, entrepreneurs who discover business opportunities are the agents of economic change who are able to provide new approaches to the existing economy and to transform it. They trigger a process called “creative destruction”. This process leads to qualitative economic change involving the disappearance of some firms and jobs, but ultimately results in the creation of new means of production and facilitates economic growth (Fontana et al., 2012; Fritsch, 2013).

An alternative vision of entrepreneurial process was presented by Israel Kirzner, who emphasized the role of exploitation and identification of existing business opportunities that are restricted by existing technology (Lafuente et al., 2019). This highlights the role of entrepreneurial recognition, i.e., the presence of the surprise factor (Mary George et al., 2016). Kirznerian entrepreneurial activity emphasizes proactiveness and competitive aggressiveness, while the Schumpeterian model emphasizes risk taking, innovativeness, and autonomy (Sundqvist et al., 2012).
Following the discussion on Schumpeterian and Kirznerian entrepreneurship, Sarasvathy et al. (2003) conceptualized opportunity creation as a situation in which neither product nor demand exists at the beginning, and opportunity discovery as when one of these factors is present and the other must be developed. When both factors are present, new ways to organize such demands can be conceptualized as opportunity recognition.

The discussion on opportunity discovery, creation or recognition stresses that while entrepreneurs are active players who shape their business environment, their actions are embedded in an economic place-specific context. In this regard, one important business factor might be the presence of spatial externalities.

Alfred Marshal identified the benefits of spatial concentration of specialized industries within industrial districts that come from potential externalities such as pooling and division of labour, availability of suppliers and contractors, diffusion of innovation and business practices within the industry (Eriksson and Lindgren, 2011; Marshall, 1890; Ravix, 2014). These benefits were later partly disputed by Jacobs (1969), who emphasized the role of interaction between different types of economic activities, which allows the creation of new knowledge and the diffusion of existing knowledge across industries.

While these perspectives differ regarding what might be the source of advantage – an abundance of similar or an abundance of diverse activities – both Marshallian and Jacobian perspectives can be seen as factors shaping the processes of entrepreneurial discovery, creation or recognition. Therefore, entrepreneurs might identify business opportunities, but their capacity to do this depends on their own skills and resources as well as on the economic context, such as the presence of specialized service providers and skilled workers (Marshallian externalities) and knowledge spill-overs from other sectors (Jacobian externalities).

2.1 Individual perspective: An entrepreneur and a start-up.

The individual skills and resources of entrepreneurs can be viewed as important factors in economic evolution. Hence, entrepreneurs are seen as agents of economic change and creative destruction – individuals who take advantage of technological spillovers, introduce existing products and practices in new contexts and destroy existing business practices while establishing new ones (Stam, 2010).
Being an agent of economic change requires, among other things, human capital in the form of managerial skills, work experience and general knowledge of the business world (Henley, 2005; Laferre and McEntee, 1996; Lentz and Laband, 1990). As emphasized by Schultz (1975, 1980) and Schutjens and Wever (2000), human capital is an important theoretical concept in the entrepreneurship literature. Preisendorfer and Voss (1990) distinguish three key dimensions of human capital necessary for successful entrepreneurship: (1) general human capital, created through schooling, (2) industry-specific human capital, which results from experiences in a particular industry, and (3) firm-specific human capital. The last two types of human capital are particularly important for entrepreneurs, as the likelihood of spotting a business opportunity is related to industry experience (Gelderen et al., 2005). The importance of professional experience related to the activity of the newly established firm has been confirmed by number of studies on firms from different sectors of the economy (Brouder and Eriksson, 2013; Heebels and Boschma, 2011; Klepper, 2002).

While the bulk of studies in this area view entrepreneurs as agents of change in a Schumpeterian or Kirznerian sense, a large number of nascent entrepreneurs are individuals with poor or limited labour market perspectives. This insight has been particularly well recognized in the entrepreneurial literature, which distinguishes between necessity-driven and opportunity-driven entrepreneurs (Acs, 2006; Amoros and Bosma, 2014; Reynolds et al., 2001). Necessity-driven entrepreneurs are viewed as having been pushed into entrepreneurship because other options for work are not available, and opportunity-driven entrepreneurs are defined as individuals who have been pulled into entrepreneurship based on their emerging innovative and promising business ideas (Bögenhold, 2000).

Necessity-driven entrepreneurs are often overrepresented in vulnerable groups such as the unemployed, individuals with skills that are less valued on the labour market or those facing discrimination, who are pushed into entrepreneur groups owing to the limited alternative career options. In many institutional and economic contexts, the necessity-driven business start-ups outnumber by far the opportunity-driven ones (Reynolds et al., 2001). The empirical research comparing the propensity to set up a business among employed and unemployed individuals is still quite scarce, but the few available studies suggest that the unemployed actually have a higher propensity to make the transition into self-employment than individuals who have a job (Carrasco, 1999; Evans and Leighton, 1990; Ritsilä and Tervo, 2002).

The trajectory towards entrepreneurship does not depend only on the current employment situation, but starts much earlier, at the beginning of working life. In this regard, the life-course perspective on entrepreneurship highlights the role played by individual life experiences in starting a business, as well as the
individual’s embeddedness in an economic and social context (Yu et al., 2014). From the life-course perspective, individuals accumulate the necessary resources, such as experience, social capital and financial capital, before starting their own business (Arenius and Minniti, 2005), and decisions about starting subsequent businesses are likely to be affected by the outcome of this first attempt (Hyytinen and Ilmakunnas, 2007; Mueller, 2006).

2.2 Regional perspective: Social capital and industrial structure.

While entrepreneurs are seen as agents of economic change, their capacity to reshape the regional economy also depends on the local context in which entrepreneurial opportunities are embedded. The importance of the local environment has been showed in a number of research papers (Stam 2010). The life-course perspective highlights the importance of the entrepreneur’s links with other individuals. A popular way of classifying these relationships was developed by Granovetter (1973), who distinguished between strong social ties, which include family and one’s close circle of friends, and weak social ties, which include acquaintances and colleagues. Family background as well as parental entrepreneurial experience might affect the probability of starting a business and succeeding, because individuals might receive support from family members in the form of know-how or financial resources. The entrepreneurial experience of a parent is also important because of the inter-generational transfer of entrepreneurial norms and attitudes (Niittykangas and Tervo, 2005).

In addition, the power of weak ties shapes the social embeddedness of the entrepreneur. The literature on embeddedness has argued that local entrepreneurs have a home advantage through their access to local networks, information or locally recognizable credibility that takes time to accumulate (Dahl and Sorenson, 2012; Figueiredo et al., 2002; Schutjens and Völker, 2010; Stam, 2007). Local entrepreneurs are therefore more likely to be competitive than non-locals, whose routines and skills they transfer from their home region – routines and skills that might not be equally functional in the new region.

While social embeddedness in the local context can be seen as advantageous, it has also been argued that locals are less prone to engage in new opportunities and hence less willing to become agents of change (Akgün et al., 2011). They might be considered to be largely a product of regional path dependence in start-up activities (Andersson and Koster, 2010). The latter notion is confirmed in recent studies emphasizing that non-local actors (firms as well as entrepreneurs) induce significantly more change in terms of industrial structures into the regional economy than local actors do (Neffke et al., 2018). This is because non-local
entrepreneurs are more likely to introduce activities present in their home regions into the industrial structure of the new region. In the context of entrepreneurial activity, the role of migrant entrepreneurs (i.e., individuals who were economically active in another region prior to starting the company) is therefore likely to be of particular importance, as regional entrepreneurship en masse is strongly embedded in local conditions (Stam 2010).

From a geographical perspective, an investigation of entrepreneurial activities is also strongly related to the discussion about the benefits of Jacobsian and Marshallian externalities. Urbanization, localization and diversity all matter for entrepreneurial investigation, and knowledge spillovers are geographically localized (Feldman and Kogler, 2010). Still, they may not matter to the same degree for firms at different stages of development and for different entrepreneurs. In this regard, recent geographic research on regional growth has emphasized that regions differ in their comparative advantages – advantages that support entrepreneurship at specific stages of development (Audretsch and Fritsch, 2002; Schutjens and Wever, 2000). For example, according to Duranton and Puga (2001), in the formative stages of new business formation, businesses are more likely to be located in regions with diverse economies and corresponding spillovers, as both factors are conducive to the creation of new products. However, once a new product line or process is introduced onto the market, actual production may be more efficient in more specialized localizations, where geographical clustering of similar types of firms can be observed. While regions with high diversity of industries create conditions that favour start-up activities and make new business formation more inclusive for less endowed individuals, specialized regions may instead provide conditions where competition between firms of the same profile is fiercer and, hence, where these individuals may be squeezed out of the market.

Alternative arguments may be based on the literature on the role of geographic proximity in business innovation and growth (Asheim, 1996; Maillat, 1995; Sabel, 1989; Storper, 1995). Territorial closeness to firms in the same line of business or in a related industry branch may be seen as promoting information exchange and, hence, decreasing transaction costs and reducing business uncertainty. Such local business networking may be particularly important for small entrepreneurs who lack the specific resources that enhance exchange over large distances (Almeida and Kogut, 1997). A high concentration of a set of complementary sectors within the region can therefore trigger higher start-up rates through clustering externalities, i.e., spillover effects (Bosma and Sternberg, 2014; Porter, 2000). From this perspective, specialized regions may provide more favourable conditions for new business formation and may be more open for individuals with fewer individual resources. At the same time, these new businesses might experience high exit rates due to the high level of competition.
Another perspective on the role of regional context for entrepreneurship emphasizes the role of “branching processes” (Boschma and Frenken, 2011; Frenken and Boschma, 2007) and the transfer of activities by external firms and entrepreneurs (Neffke et al., 2018) as two drivers of regional change. In the case of “branching processes”, new industries branch out from related existing activities (Boschma and Frenken, 2011; Frenken and Boschma, 2007). This can take place within existing companies or by starting new businesses. Such a development pattern is chiefly evolutionary and path-dependent in nature, as endogenous industrial development tends to favour diversification into related activities and ceasing unrelated ones (Boschma, 2015; Neffke et al., 2011). The transfer of activities by external firms and entrepreneurs can instead be seen as a fundamental driver of regional change (Neffke et al., 2018), because it might potentially introduce new unrelated industries into the regional economy.

Like social ties on the individual level, regional social capital can be perceived as another regional asset related to entrepreneurship activities. Social capital consists of obligations, expectations and trustworthiness, information channels and the propensity to conform to social norms. Sandefur and Laumann (1998) identify three main benefits of social capital: information, influence and control, and social solidarity. High social capital allows for trust and cooperation among individuals, and obeying laws and social rules is beneficial to the entire local community. In the case of an entrepreneur, high social capital allows gathering and fulfilling obligations, exchanging information (and therefore saving time and money) and the expectation that the obligations of others will be met on time. Helliwell and Putnam (1995) and Putnam (2007) specify higher social capital as the source of differences in economic growth, while Scott and Storper (1995) underline the importance of regional industrial culture in relation to mutual trust in local economic development. According to Westlund and Bolton (2003), social capital can in fact play both an entrepreneurial-facilitating and an entrepreneurial-inhibiting role. While, generally speaking, most human networks act in line with society’s interests, some networks, mutual commitments, and loyalties inhibit entrepreneurship rather than facilitating it. This is because a high level of social capital can create too much bonding, which brings the risk of conformity and of restricting entrepreneurial initiative and individual freedom (Malecki, 2012).

Empirical research in economic geography has also shown that not only the individual human capital of an entrepreneur, but also the human capital accumulated in regions might have positive external effects on the local businesses. As emphasized by Rauch (1993), having a more educated workforce can be perceived as serving the local public good. This means that highly skilled workers in a given region improve labour market opportunities for other workers in the same region (Henderson, 2007; Moretti, 2004; Winters, 2013) as well as
for incumbent and new firms, which benefit from access to a pool of skilled workers (Acs et al., 2009). Borggren et al. (2016) also underline the importance of the content of recruited employees’ skills for the future development of rapidly growing firms.

2.3 Entrepreneurship - potential and limitations.

While both individual and regional factors are important for entrepreneurial activities, the significance of entrepreneurship is related not only to the direct performance of new business entities, but to how their emergence reshapes the regional economy. New entrants mobilize the activities of incumbent firms, which need to increase their productivity in the face of increased competition (Parker, 2018). Successful new businesses can create another spin-offs and business opportunities for the next generation of business ventures (Parker, 2018). From the perspective of the regional labour market, these effects are typically first seen after five to seven years; the period after the start of a business activity when regional job creation responds positively to competition from the entrants by increasing the productivity of incumbent firms. This pattern, also called the “Fritsch wave”, is characterized by initial job creation as the result of new venture formation, which in the next years is followed by temporal job losses related to the exit of incumbent and new firms. Finally, five to seven years after the formation of new businesses, increased productivity again results in job growth (Parker, 2018).

The role of entrepreneurship varies significantly also on the intra-national scale. The degree to which the increased business start-up rate promotes regional employment and productivity depends also on regional conditions. This is because regional endowments provide resources for entrepreneurs, but also differ in terms of the structural and institutional conditions that shape opportunities to benefit from entrepreneurs’ output (Audretsch and Fritsch, 2002; Caliendo and Künn, 2014; Feldman, 2001).

As shown by Audretsch and Fritsch (2002), regional growth can be the result of either a stable enterprise structure combined with the predominance of large incumbents or a consequence of a high start-up rate combined with a high turbulent enterprise structure. According to this conceptualization of growth regimes, four distinct types of such regimes can be distinguished based on employment and firm formation dynamics (Fritsch and Kublina, 2015). In the routinized growth regime, economic growth is the result of a stable enterprise structure and the predominance of large incumbent firms that support regional economic growth. In the entrepreneurial growth regime, the formation of start-ups and the high turbulent enterprise structure results in economic development. The downsizing growth regime is characterized by low start-up rates that cannot
substitute for losses in incumbent firms, which results in low economic growth. Finally, in the case of the revolving door regime, the high start-up rate does not translate into economic growth due to the low innovativeness of new business entrants.

Importantly, regional entrepreneurship rates tend to be particularly persistent, and the regional differences measured by start-up rates are more persistent over time than the differences measured by economic growth (Fritsch and Kublina, 2015; Fritsch and Wyrwich, 2015). Nevertheless, little is known about specific mechanisms concerning how different types of regional structures, and in particular their transformations, are related to the formation, development and survival of businesses. Existing findings are also rather speculative in nature and do not allow conclusions to be drawn on causal relations.

While much of the research focused on the role of entrepreneurship has looked at job creation and productivity gains, new ventures are also important simply for meeting the everyday needs of the local population. In this regard, a typical new firm often serves the needs of the local population (Morris and Lewis, 1991). Its contribution to regional development might be to increase the quality and availability of everyday products. New business ventures such as restaurants, hairdressers or shops often increase the quality of life of the local population as well as the attractiveness of location and might be seen as local amenities (Morris and Lewis, 1991).
3. Research Design

The aim of the present thesis is to investigate the link between firm formation and economic opportunities that might be conditional on the regional setting, i.e., that do not necessarily provide universal outcomes. The order of the research papers in the thesis reflects the specificity of the theorized mechanisms, from the most general to the most particular. Paper 1 investigates the links between firm formation and unemployment, which are considered to be universal in nature, but might be of greater practical importance to regions facing economic decline. Paper 2 investigates how the geographic context moderates the impact of human capital, social capital, entrepreneurial culture and industrial specialization on start-up rates. Finally, Paper 3 investigates the particular role of non-local entrepreneurs in the performance and survival of new firms.

As emphasized by Acs (2006), there are two ways of studying start-ups empirically: looking at the self-employment data or investigating only new businesses with employees (incorporated or not). The present thesis favours the first approach for a number of reasons. First, from the individual perspective, transition into entrepreneurship is a key life-course event. Even if it does not involve employment of others, it significantly changes individuals’ security, opportunities and also allows them to accumulate important experience. For this reason, ignoring the mechanisms behind such a decision limits our understanding of the mechanisms underlying business formation. Furthermore, in the case of the first transition into entrepreneurship, starting subsequent businesses is likely to be affected by the outcome of this first attempt (Hyytinen and Ilmakunnas, 2007; Mueller, 2006).

Second, looking at the self-employment data allows us to consider the whole variety of economic opportunities identified by entrepreneurial individuals. Because nascent entrepreneurs are often uncertain about their chances of success, they frequently avoid hiring employees at the inception phase. Still, their business activities might have the potential for and objective of employment growth, and furthermore they might take advantage of the support of family and friends during the inception phase. This means that while officially having no employees, these kinds of businesses might have larger-scale operations initially. For this reason, focusing only on entrepreneurs who have employees could mean disregarding new business activities that are less successful.

This is related to what can be measured using existing data. The data based on the registers used in the present thesis provide excellent information on regional and individual characteristics that can be formally measured. It is easy to identify how many firms operate in the same industry or whether an individual starting a
company has a higher education. Therefore, individual and regional measures, such as human capital or agglomeration, can be easily operationalized in line with the existing literature. More problematic are the characteristics related to the individual aspirations of entrepreneurs concerning company growth, or their emotional and cognitive links to other people and places. Given that it is not possible to approach individuals for information beyond that found in the registers, such characteristics need to be proxied using some behavioural features or other aggregated data. For example, individual attachment to the region can be identified by the time the individual lived there and involvement in non-profit organizations can proxy social capital within the local community.

Nonetheless, using register-based data has significant advantages. The vast body of literature on entrepreneurial decisions has emphasized the role played by individual characteristics and individual heterogeneity in business formation and success. These characteristics might also play different roles in different regional contexts. Consequently, proper investigation of such mechanisms requires large samples of individuals who can be investigated in different regional settings. In this regard, access to rich register data is a significant advantage. Furthermore, applying panel data methods allows us to consider characteristics that are not recorded in the registers and that might not be known by the individual.

The research papers in the thesis differ in terms of the methods and data used in the empirical investigation. In this regard, the Paper 1 and 3 are more similar in terms of research design, as they both utilize register-based data on individual level and hazard models. In Paper 3, panel data models were also used. Alternatively, in Paper 2, the data aggregated on the municipality level were used, and the estimation procedure approach was based on multilevel models. Table 1 presents a summary of the research design of each paper, and more detailed descriptions are provided in the subsequent sections.
Table 1 Overview of the methods and data

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3.1 Data

The mechanisms theorized and identified through the literature review were verified using quantitative data from Swedish registers and other sources provided by Statistics Sweden. The investigations presented in the present thesis are all quantitative in nature, enabling verification of whether the theorized mechanisms are significant enough to explain the spatial variations in firm formation and performance across the country.

In each paper, a different aspect of firm formation is investigated, but in all of the papers, the focus is kept on individuals who become entrepreneurs rather than on new firms alone. In Paper 1, the conditional probability of transition to
entrepreneurship is estimated. It enables linking of development on the regional labour market to the individual characteristics and labour market career of potential entrepreneurs. Paper 2 investigates regional start-up rates, but to keep the focus on firms founded by individuals only, formation of microenterprises is taken into account. This is done because establishment of larger companies is more likely to be the result of the activities of large corporations than those of individual entrepreneurs. Similarly, Paper 3 investigates the survival and employment growth of newly founded firms, and the analysis includes all firms that could be linked to the activities of individual entrepreneurs.

The main source of data used in Paper 1 and 3 is a longitudinal micro-database created by merging several administrative registers at Statistics Sweden. It contains matched information on the individuals and their human capital resources (e.g., education, industry-specific and firm-specific working experience) as well as on the characteristics of all enterprises (e.g., industry sector, geographic coordinates, productivity) in the Swedish economy (Boschma et al., 2014). Given the database’s longitudinal character and informational richness, it is very useful for the present research purposes. It links information on individual labour market dynamics and business formation to information on firms as well as the geographic setting in which these individuals live and work. Hence, the dataset is a perfect source for research linking a micro- and macro-approach and combines analysis of individual-level as well as firm-level processes under diverging geographic contexts.

While the data based on Swedish registers provide detailed information on individuals and firms, they do not contain information on relationships between individuals other than family ties. Therefore, in the case of Paper 2, where the role of social capital was investigated, other data sources were utilized. The data used in Paper 2 derive from three different sources. Regional macro-data for the entire Swedish economy come from Statistics Sweden, the rAps-RIS database that is maintained by the Swedish Agency for Economic and Regional Growth (Tillväxtverket), and the Business Climate Database managed by the Federation of Swedish Enterprise (Svenskt Näringsliv). All of these data are available online and are aggregated at the municipal level. As the focus of Paper 2 was the regional not individual context, it did not decrease the quality of the findings.

Still, in such a case, when the measures are not directly linked to the individual entrepreneur or firm, selection of the right indicator is an important aspect of the investigation. In this regard, one possible solution might be reliance on previous research and robustness checks using alternative indicators. As in the case of social capital, the literature review suggested that, for comparing levels of social capital on the regional level, membership in associations might the preferred
option. At the same time, using other measures in model estimations revealed similar patterns.

3.2 Regional division

Investigating the capacities of regions in the form of new firm formation requires spatial delimitation that is not based on administrative divisions, but rather captures economic and social links. This is because everyday individual and business activities, such as commuting or customer services, tend to regularly transcend administrative borders. In this regard, the most useful category for this type of investigation is functional regions (FA regions), which is the regional division developed by the Swedish Agency for Economic and Regional Growth (Tillväxtverket).

In the case of FA regions, each of the 290 Swedish municipalities is assigned to one of the 72 regions representing economic, labour market and transportation links between the municipalities (Tillväxtanalys, 2013). This geographical division reflects the scale of the labour market in which each individual operates, as the functional region reflects most of the commuting opportunities between the place of residence and possible job locations. Therefore, it captures the most important characteristics that might be at a significant scale for the nascent entrepreneur.

In the case of FA regions, the regional division is not proxied by distance only, but is the result of existing infrastructure, labour flows and industrial links between municipalities (Tillväxtanalys, 2013), and does not follow regional administrative divisions. For example, municipalities that belong to the same county are often categorized as parts of different functional regions. As emphasized by Shearmur (2011), functional regions are clearly preferable to arbitrary administrative units, and in order to fully account for industrial links between municipalities, we measure the degree of relative specialization on the FA regional level.

3.3 Methods

Among the essential challenges faced in the present study are the problems of reversed causality and potential confounders. The proposed methods and utilization of high-quality data are intended to tackle these difficulties.

The empirical approach adopted in the thesis takes a dynamic perspective. Instead of depicting the characteristics of entrepreneurs at one point in time and describing these characteristics, the approach analyses the determinants of
transition into entrepreneurship as well as the determinants of business growth. The analytical framework includes methods of multilevel modelling, event history analysis as well as panel data models, which provide an opportunity to incorporate into the analysis the labour market history of individuals who eventually become entrepreneurs and to examine their companies’ dynamics of innovativeness and productivity.

These modelling approaches also allow us to control for initial conditions and path dependence in the analysed relationships. While some characteristics of individuals can be directly observed and measured, other personal attributes – such as diligence, discipline, independence or risk aversion – can be difficult to measure, but still can be taken into account through the use of longitudinal data and methods (Caliendo et al., 2007; Dunn and Holtz-Eakin, 2000; Henley, 2007). This is because repeated measures enable the estimation of unobserved, but time invariant factors. Moreover, the contemporaneous outcomes of individuals and their businesses may be directly related to their outcomes in the past. Hence, the present project uses recent innovations in modelling entrepreneurship, i.e., considering the dynamic aspects of entrepreneurship as well as the potential confounding role of unobserved heterogeneity (Furdas and Kohn, 2011; Wooldridge, 2010).

Hazard models can be particularly useful in investigating the decision to start a company. Hazard models provide an opportunity to follow individuals from the moment they become adults – and are, thereby, eligible to set up their own company – until they become entrepreneurs. They enable not only incorporation of variables that are fixed in time, but also measurement of the impact of time-varying variables, such as the labour market history of individuals (Rabe-Hesketh and Skrondal, 2005).

3.4 Ethical aspects of the investigation

At first glance, research on entrepreneurship might seem to be quite an innocuous topic, far from touching on any sensitive social issues. Still, as in every research project, ethical considerations must be carefully reflected on and, as stated in the Swedish Research Council’s guidelines (VR 2017), a reasonable balance must be found between various legitimate interests. In the case of the present project, ethical considerations were carefully taken into account from the very first stage of project planning and design, thorough final implementation.

The ethical standards of the project were secured through independent and transparent supervision on various levels. First, the grants financing the project were approved by ethics committees. Second, every extraction of information
from registers available at data lab required separate internal approval at the departmental level. Finally, external experts evaluated the work done within the project during the mid-term and final seminar for the PhD thesis.

In the present case, the issue of utmost importance was data protection. As most of the model estimations presented in the thesis are based on individual register data, the research activities required high standards of personal data protection. During the data extraction phase, personal information was removed so that no individual identification was possible based on the data available for the analysis. Despite removing personal information, it might still be theoretically possible to identify individuals from the registers. This is because in case of very sparsely populated areas such as in the northern, inland part of Sweden, the population is so small that there might be only one person with specific socioeconomic characteristics living there. Therefore, the extracted data were still available for use only in a secured room on password-protected computers with no access to the academic network or to the Internet.

Prioritizing data protection has also created some challenges for other important aspect of ethical scientific investigation – replication of the results. While the data used in the present project are available for researchers interested in replicating the results at Statistics Sweden, due to data protection it is not possible to make the data available online. Therefore, a special effort was made to provide a detailed description of the data as well as the chosen methods (such as saving estimation results and log files).

Starting a company might be beneficial to the individual who owns a company as well as to the society the entrepreneur lives in. A number of studies have shown that the individual benefits of starting a company extend far beyond financial gains and might include a high levels of life satisfaction and good health outcomes (Stephan and Roesler, 2010). Still what makes research on entrepreneurship such an interesting topic is that the population of entrepreneurs consists of people who are the most and the least skilled individuals in the population. This distinction is broadly conceptualized as necessity- and opportunity-driven entrepreneurship. Taking into account that the benefits of being an entrepreneur are distributed very unequally between these two groups, one highly relevant question concerns what characteristics the individuals who comprise these groups have.

This question tends to be downplayed in the Swedish context, as Sweden is traditionally perceived as a country with one of the lowest shares of necessity-driven entrepreneurs (Kelley et al., 2016; Singer et al., 2015). Nevertheless, the present results indicate that, even in the Swedish context, necessity-driven entrepreneurship is an important social phenomenon among some groups of the population and in some regional settings. As a result, some of the discussion
presented here considers potentially disadvantaged groups, such as immigrants, the unemployed and the lower educated. It also concerns gender divisions on the labour market. In this regard, the aim of the present research project was to better understand the needs of the disadvantaged groups, while special attention was paid to the use of non-discriminatory language and interpretation.
4. Entrepreneurship drivers

4.1 Swedish context

Since the beginning of the industrial revolution, the Swedish economy has been characterized by three patterns of region economic growth. As shown by Henning et al. (2011), the first industrial revolution benefitted mainly natural-resource-rich and peripheral regions and was concentrated around wood, steel and paper. In contrast to many other European countries, the second industrial revolution benefited the whole country rather equally. This universal growth pattern was interrupted in the late 1970s by the oil crisis. After the crisis, a period of divergence began, and differences in growth between metropolitan regions and the periphery became more significant (Henning et al., 2011). Just as in many other countries, development of Sweden is currently concentrated to the most populated regions. A large share of employment and population growth is restricted to the three metropolitan regions of Stockholm, Gothenburg and Malmö.

Since the 1990s, Sweden has introduced many liberalization policies that have facilitated start-up formation. These policies include cuts in taxes and public spending, reduction of bureaucracy, deregulation of historical monopolies in transport and energy, and allowing private companies to start schools and enter healthcare system (Reforminstitutet, 2014). This resulted in high employment growth in the private sector and a reduction in the public sector. Sweden is also considered a very good place to do business in an international comparison, but does not significantly differ in this respect from other Scandinavian countries, which show similar levels of development (Doing Business, 2020).

Still, Sweden maintained a relatively high level of social protection, which reduces the role of push factors. As a result, the share of necessity-driven entrepreneurship is one of the lowest among the developed countries, and the vast majority of entrepreneurial decisions are driven by identified opportunity (Kelley et al., 2016; Singer et al., 2015). This evidence, however, does not exclude the possibility that necessity-driven entrepreneurship might be prevalent in some regional contexts, as previous studies have shown that the availability of job opportunities in incumbent firms is scarcer in the most remote areas in Sweden (e.g., Eriksson and Hane-Weijman, 2017).

There is an ongoing debate as to whether the current levels of firm formation are optimal for economic performance in Sweden. On the one hand, some international comparisons indicate that the rates of firm formation in Sweden are lower than in other OECD countries (Kelley et al., 2016; Singer et al., 2015); on
the other hand, there are indicators showing that this difference is not pronounced if the specific structure of Swedish economy is considered. It is characterized by a high share of capital-intensive industries such as manufacturing, which are marked by lower rates of entrants (Vikström et al., 2007).

Sweden is characterized by great differences in peripherality, population density and growth as well as economic performance. A large part of the country is marked by a sparse population together with high economic specialization, thus rendering Swedish peripheral regions particularly vulnerable to economic restructuring (Eriksson and Hane-Weijman, 2017). There is considerable evidence to indicate that this disadvantage of sparsely populated and peripheral regions might be persistent in nature. Still, there is empirical evidence that there are mechanisms that can be mobilized to counteract this unfavourable divergence trend. For example, while many municipalities considered as vulnerable by the Swedish Agency for Economic and Regional Growth (Tillväxtverket, 2016) are located in peripheral regions, some municipalities have managed to significantly improve their economic conditions by diversifying their economic activities. This opens the question of whether entrepreneurship could foster job creation and economic development in these disadvantaged regions. Therefore, the following papers investigate possible mechanisms for improving regional economic standing through entrepreneurship: using unemployment as encouragement for new business formation, utilizing social capital for entrepreneurship and using the skills of non-local entrepreneurs to foster economic growth.

4.2 Start-ups and unemployment

Paper 1 Finding a window of opportunity or escaping unemployment? The role of regional labour market dynamics in the first-time transition to entrepreneurship in Sweden.

Author: Marcin Rataj

Macroeconomic conditions can both determine the impact of push factors and, at the same time, shape business prospects (Parker, 2018, p. 267). For example, Carassco (1999) emphasizes that there are two competing predictions regarding the impact of favourable labour market conditions on the founding of new companies. On the one hand, a favourable labour market indicates better business prospects, which lower the risk of failure. Growing local demand might facilitate new firm formation particularly in case of entrepreneurs active in the service sector, which depends more on the local economy (Andersson, 2015). Additionally, the costs of failure are lower, as an abundance of job offers provides
a relatively large amount of opportunities to return to paid employment if the entrepreneur is unsuccessful.

On the other hand, if job offers are scarce, entering self-employment might be a more attractive option compared to inactivity or job searching. Furthermore, less favourable labour market conditions are likely to overlap with the closure of enterprises, which lowers the costs and increases the availability of second-hand business equipment and premises (Ritsilä and Tervo, 2002). Therefore, it is difficult to assess the outcome of regional economic conditions a priori. Unsurprisingly, previous research has provided mixed evidence (Carrasco, 1999; Ritsilä and Tervo, 2002; see also Audretsch et al., 2015, for an overview).

Some authors have argued that better labour market opportunities in fact depress start-up activities (Fairlie, 2013; Koellinger and Roy Thurik, 2012). Recently, the increasing availability of micro-level and longitudinal data have allowed us to better disentangle the combined effect of firm exits and openings. For example, a very recent analysis of this type conducted for Germany suggests that start-up formation has a counter-cyclical and therefore stabilizing effect on the economy (Konon et al., 2018). This effect remains even when the analysis is run for separate categories of industries.

Such findings do not exclude the possibility that different categories of individuals might have heterogeneous responses to developments on the labour market. Following this line of thought, some studies have postulates a pro-cyclical relation in the case of opportunity-driven entrepreneurship and a counter-cyclical relation in the case of necessity-driven entrepreneurship (Fairlie and Fossen, 2018). Similarly, Tervo (2006) and Svaleryd (2015) have demonstrated heterogeneity of responses to aggregate unemployment across population subgroups. Tervo (2006) shows that high unemployment pushes individuals with a self-employment family background into entrepreneurship, while it prevents the transition in the case of individuals with wage-earner family background. Svaleryd (2015) indicates that people with a higher level of education are pulled, while those with a lower education are pushed, into self-employment.

Paper 1 investigates how individual labour market trajectories and regional labour market outcomes affect the first-time transition to entrepreneurship. Specifically, the study explores how unemployed and employed people differ in terms of the probability of setting up their first company and how developments on the regional labour market can influence these decisions. This investigation is independent from the regional perspective, as fluctuations in employment levels are universal for various types of regional economies. Still, a deeper understanding of this mechanism is particularly important for regions that lack other potential sources of economic growth, regions such as peripheries and
highly specialized economies. The study also aims to answer a policy-related question concerning the degree to which new companies can reignite the growth of a stagnating economy. The hypotheses regarding the relation between labour market developments and transition to entrepreneurship are developed based on three key aspects of entrepreneurial decisions: opportunity identification, analysis of benefits and costs, and examination of the potential consequences of possible business failure.

The empirical analysis proved that long-term positive conditions on the labour market facilitate entrepreneurship because they indicate good business perspectives, which is a key factor taken into account by all individuals planning to start a business. Short-term labour market improvements, on the other hand, decrease the probability of starting a company, because these fluctuations on the labour market shape to a lesser extent the anticipation of business perspectives, but more likely create attractive alternatives to starting a business. The analysis of differences between the unemployed and the employed proved that while the unemployed have a higher probability of starting a company compared to employed individuals, the difference in this probability is moderated by short-term developments on the labour market. An improvement in the labour market situation decreases the probability of starting a company to a greater extent among unemployed than among employed individuals.

The findings of Paper 1 support recently emerging evidence showing that start-up formation follows a counter-cyclical pattern and, thus, plays a stabilizing role (Konon et al., 2018). Still, according to the results, this effect is mainly driven by unemployed individuals, whose entrepreneurial decisions are strongly influenced by short-term labour market changes. Such start-ups might be considered as underperforming, less innovative and as having a higher probability of failure. At the same time, the paper provides evidence that long-term low unemployment is the factor that supports new firm formation in the longer perspective. For this reason, start-up formation en masse should be considered a self-reinforcing mechanism that might have limited potential in the case of regions facing longer-term economic decline.

Overall, the results suggest that while entrepreneurial activities might be a tool to absorb some redundant employees during times of labour market crisis, entrepreneurial policies cannot be considered a universal and anticyclical driver of economic growth in stagnating regions with poor labour market conditions. Instead, the more acute the labour market conditions are, the lower the quality of an average start-up becomes.
4.3 Social capital and a new firm formation

Paper 2 Geography of start-ups in Sweden. The role of human capital, social capital and agglomeration

Authors: Rikard Eriksson, Marcin Rataj

A large body of research indicates that rates of new firm formation tend to be quite persistent over time (Armington and Acs 2002). For example, Fritsch and Wyrwich (2014) show that, in the case of Western Germany, regional differences in entrepreneurship levels were stable for eight decades despite disruptive historical events. The argument explaining such tendencies is that the changes in factors influencing entrepreneurial activities are evolutionary in nature. The literature also indicates that both soft factors (related directly to social characteristics, such as level of human capital and social capital or entrepreneurial culture) and hard factors (structure and size of local economy) should be considered when analysing regional entrepreneurial patterns (Armington and Acs, 2002; Fritsch and Wyrwich, 2014).

The focus of Paper 2 is on investigating how the geographic context moderates the impact of human capital, social capital, entrepreneurial culture and industrial specialization on start-up rates. While there is empirical evidence on the importance of these factors to new firm formation, there is no sufficient theoretical understanding or empirical evidence concerning how the importance of these determinants differs across regions.

Therefore, the aim of Paper 2 is to analyse the regional mechanisms underlying start-up rates. These mechanisms are scrutinized by investigating how start-up rates vary across municipalities in Sweden and how spatial differences in regional levels of human capital, social capital, entrepreneurial culture and industrial specialization can explain this variation. In the paper, particular attention is paid to rural and peripheral regions, the goal being to investigate which factors might be of particular importance to these types of settings.

The findings suggest that human capital, social capital and entrepreneurial culture are important for the variation in start-up rates across municipalities in Sweden, while relative specialization impedes new firm formation. According to these results, human capital might enhance start-up activities in a similar way in different regional contexts. Similarly, the effects of entrepreneurial culture might be a concern of entrepreneurship policies on the national level, but at least in the Swedish context, it does not explain differences in start-up levels between similar spatial settings. Therefore, it seems to be a universal aspect of strategies for economic development.
Social capital, in contrast, is a key aspect of entrepreneurial policies in peripheral regions, as it can moderate the scarcity of local resources. Furthermore, this effect seems to be stronger in denser peripheral settings. This suggests that utilizing social capital should be an important part of growth strategies aiming to support micro-urbanized centres within peripheral regions. The results also suggest that only metropolitan regions are large enough to alleviate some negative effects of relative specialization through demand-driven entrepreneurship.

The paper’s contribution to the literature is threefold. First, it provides evidence regarding the role of soft and hard place-specific factors that promote formation of new companies. Second, it shows how the geographic context moderates the impact of both soft and hard factors on start-up rates, thereby demonstrating that the determinants of start-ups differ in space. Third, it provides evidence that effects related to rural and peripheral dimensions need to be distinguished in estimation procedures if we are to capture aspects specific to these two geographical settings.

The results also allow formulation of practical recommendations regarding start-up policies, considering the specificity of rural and peripheral regions. According to our results, human capital enhances start-up activities in a similar way in different regional contexts. Therefore, it seems to be a universal aspect of strategies for economic development. Similarly, high relative specialization has a detrimental effect across different locations. Nevertheless, this effect might be underestimated, in particular in metropolitan regions, during periods of economic upturn when the detrimental effect is partially compensated by demand-driven entrepreneurship. As a result, entrepreneurial activities in specialized regions might be more pro-cyclical. From this perspective, and particularly in a metropolitan context, public policies could use periods of economic downturn to support start-up activities in new business areas, which otherwise could face problems due to competition for resources (employees, office space, etc.) from demand-driven entrepreneurship.
4.4 Performance of non-local entrepreneurs

Paper 3 Can non-local entrepreneurs contribute to regional development?

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The performance of newly founded companies is the focus of the final paper. From an evolutionary perspective, the newly founded firm can be seen as part of the evolution of the regional industrial structure. At the same time, a newly founded firm can be viewed as an evolution of routines of the mother firm in relation to how the new routines are combined with the inherited one. On the other hand, the inception of a firm established by a migrant entrepreneur might be interpreted as introducing new routines to the region. As shown by Neffke et al. (2018), a transfer of activities by external firms and entrepreneurs can be a fundamental driver of regional change. However, despite having a potentially profound impact on the regional economy, migrant entrepreneurs might still be in a disadvantaged position compared to local entrepreneurs. This is because the routines and skills they transfer from their home region might not be equally well suited to the pre-existing regional system.

Furthermore, non-local entrepreneurs might lack access to the local networks, information or locally recognizable credibility that takes time to accumulate (Dahl and Sorenson, 2012; Figueiredo et al., 2002; Schutjens and Völker, 2010; Stam, 2007). In this regard, the advantages of local entrepreneurs might potentially come from two locally available assets. That is, the power of strong ties (i.e., support of family and close relatives and friends) and access to weak ties (i.e., connections to more distant relatives and acquaintances). Both types of ties have been identified in the literature as important to entrepreneurial success (Mary George et al., 2016; Parker, 2018). The closest circle of family and friends might provide support in the form of financial investments in the founder’s company, guarantees of bank loans, as well as unpaid labour during the inception phase (Parker, 2018). Additional family support might also be activated in the case of poor business performance in order to avoid bankruptcy or large financial loses for a family member (Parker, 2018).

Therefore, the aim of Paper 3 is to assess how the performance of new business activities is conditioned by their embeddedness in the region. To answer this question, the study links start-ups established in Sweden between 1995 and 1997 with the individual characteristics and professional history of their founders and analyses the business performance using two important measures of business success: survival and job growth. This allows us to investigate whether there are
potential windows of opportunity for introducing new industry into the regional industrial portfolio and for transforming existing development paths.

Our results show that local embeddedness can be perceived as a supportive as well as a detrimental factor for entrepreneurial success, depending on how entrepreneurial success is defined. More locally embedded entrepreneurs have lower exit rates, but our results also show that benefits stemming from access to local networks, information or locally recognizable credibility can be diminished when more diversity is introduced into the regional economy.

These findings point to the self-reinforcing character of the entrepreneurial activities of non-local entrepreneurs. As soon as more diversity is introduced into a regional economy, regional conditions become more favourable for non-local entrepreneurs, who in turn have the capacity to introduce more variety. Nonetheless, the possible outcome of this mechanism might be also a lock-in effect, as according to the results, regions with little variety are the least favourable environment for non-local entrepreneurs.

Nevertheless, there is also a positive aspect of such a mechanism, in that variety can be introduced into the regional economy not only through development, but also through crisis, i.e., negative idiosyncratic shock. If the key sector is affected by the shock, the window of opportunity might open for non-local entrepreneurs because the benefits of local embeddedness are weakened. In such a case, new non-local entrepreneurs might introduce even more variety into the region and, therefore, start self-reinforcing regional transformation. This finding suggests that policies aiming to attract new economic actors and to facilitate regional restructuring, rather than supporting the affected sector, are the most suitable response when idiosyncratic shock occurs.
5. Conclusions

The ambition of the present thesis was to investigate the link between firm formation and economic opportunities that might be conditional on regional settings. Investigating that link is seen as of particular significance to the formation and performance of new firms in peripheral and stagnating regions. Such regions may benefit the most from tailored-made and research-guided policies and are, at the same time, under-investigated compared to metropolitan settings. To address this goal, three quantitative studies were conducted based on data on Swedish individuals embedded in regional economies. Each study aimed to answer one of the key questions regarding firm formation and regional development: the potential of regional unemployment to trigger a new wave of business formation, regional characteristics that can compensate for low agglomeration externalities and utilization of the potential of people moving into a region (non-local entrepreneurs) to foster entrepreneurship.

The first research question raised the issue of the potential of regional unemployment to trigger a new wave of business formation and, therefore, to strengthen a regional economy. The study in Paper 1 revealed that a high unemployment rate might indeed create an increase in business formation, but with a limited long-term impact on the regional economy. As investigated in Paper 1, the formation of new companies is counter-cyclical, but also path-dependent in nature. Increasing unemployment rates are correlated with the higher probability of starting a company, but this effect is much stronger among unemployed individuals, whose start-ups are considered to be underperforming and to have a higher probability of failure. At the same time, it is a long-term low unemployment rate that correlates with new firm formation in the longer-term perspective. These findings indicate that while increased rates of firm formation in the recession can potentially help to alleviate short-term problems on the labour market, this factor cannot support economic growth in the longer-term perspective. The study pinpoints the limitations of using policies to support entrepreneurship as a tool in the fight against regional inequality in economic development.

The second research question concerned what kind of regional characteristics can compensate for low agglomeration externalities in terms of business formation. According to the results of Paper 2, a high level of social capital can help to compensate for the scarcity of local resources. The mechanism behind it might be its substitutitional role. Social capital allows compensation for other missing resources in the regional economy, as it facilitates the interaction between people and therefore shortens the social distances between individuals with relevant knowledge and resources. Furthermore, as shown in Paper 2, this effect seems to
be stronger in denser peripheral settings, which suggests that utilizing social capital should be an important part of growth strategies aiming to support micro-urbanized centres within peripheral regions. Hence, more broadly, social capital enhances the region-specific benefits deriving from entrepreneurship.

The final research question considered utilizing the potential of people moving into a region (non-local entrepreneurs) to foster entrepreneurship. The findings from Paper 3 indicated that while firms started by non-local entrepreneurs have on average lower survival rates, the benefits stemming from access to local networks, information or locally recognizable credibility can be diminished when more diversity is introduced into the local economy. In light of these findings, regions with the most stagnant economies, which need new entrepreneurial ventures and diversification, are also the least favourable for non-local entrepreneurs. Nevertheless, there are also positive aspects of such a mechanism. Diversity is introduced into a regional economy not only through development, but also through crisis, such as a negative idiosyncratic shock. This means that even periods of economic recession might be relatively favourable for non-local entrepreneurs and create for them a window of opportunity in which to establish new economic ventures.

In general terms, the present thesis contributes to debates about the role of entrepreneurship in regional development and its connections to agglomeration externalities. From the regional perspective, the findings suggest that factors such as social capital might exert effects of different magnitude depending on other regional characteristics. The results presented here also suggest that regional disadvantages might be offset at least to some degree by other types of regional assets. These findings lead to more flexibility in our thinking about entrepreneurship agendas as a part of regional development that do not need to deal with all regional challenges, but instead focus on some regional advantages and how they can compensate for a lack of some resources that are abundant in other regions.

Altogether, the present results provide new insights into the grand debate about the benefits and drawbacks of new firm formation for regional economies and explain why new firm formation does not necessarily translate into regional prosperity. In light of the findings, there are potential mechanisms that can help peripheral and stagnating economies, but a more in-depth understanding of the possible interactions between different factors is required. First, increased unemployment might result in increased firm formation, which might be useful as an immediate response to economic problems. Still, it might not constitute a long-term solution for unemployment problems, as difficult labour market conditions can be related to lower quality of an average start-up. This might be one of the mechanisms behind what Audretsch and Fritsch (2002) conceptualize
as a “revolving door” growth regime, that is, when a regional economy is characterized by high start-up rates, but not by high economic growth.

The results also suggest that in the case of peripheral regions, more social cohesion might be needed to benefit from formation of new companies. General investments in social security and social cohesion might be important conditions for benefitting from new business activities. Investments in social security reduce the number of start-ups established by individuals who have limited skills to succeed as an entrepreneur, and investments in social cohesion increase the potential support nascent entrepreneurs can receive from society. Otherwise, the regional economy might suffer from formation of firms that have low potential for growth, but that nonetheless engage local resources. Social investments seem to be more beneficial than direct support for declining industries in the form of firm subsidies from the government.

The results also indicate that industrial stagnation might create more detrimental effects than closure of existing companies, as it blocks access to the new competencies and routines that can be added by new companies started by non-local entrepreneurs. Furthermore, while a recession can create a new wave of business entities, long-term stagnation suppresses formation of low-quality start-ups.

Finally, at the general level, the present thesis contributes to the literature by highlighting alternatives to agglomeration-based growth and provides evidence on compensational mechanisms that might be at work in non-metropolitan regions. Importantly, this evidence is quantitative in nature, which is not common in the research on non-metropolitan regions, and is based on high-quality data covering the whole country. This evidence emphasizes two important aspects of peripheral growth: the importance of social connections and that experiencing stagnation might be more detrimental than facing a recession, as the latter might create new possibilities. This is quite an optimistic finding, because it can be applied no matter how small or distant the region is.

The findings also suggest substantial interdependence between individual entrepreneurs and regional contexts in relation to decisions to start new ventures as well as their performance. From the individual perspective, the present findings suggest the importance of individual characteristics across time and regional variations. Previous findings (Svaleryd, 2015; Tervo, 2006) have already pointed out the heterogeneous responses of individuals to the same labour market trends. Nevertheless, the results suggest that heterogeneity of responses might also differ in the short-term and long-term perspectives and that the benefits of local embeddedness are not constant, but evolve following the development patterns of the regional economy. While emphasizing the
heterogeneous effects of regional settings, the results also show that individual embeddedness in the regional economy might indeed have long-lasting consequences and might be a significant determinant of business performance even 20 years after starting a business.

These three studies provide scientific and policy insights into how new firm formation can be used to reinvigorate peripheral and stagnating regions despite their limited resources and capabilities. The findings suggest that, in the case of economic downturn, entrepreneurial activities might be a tool to temporarily absorb some redundant employees, but this that mechanism will not translate into long-term economic growth. Other long-term policies are needed to support stagnating regional economies. For this reason, regional entrepreneurship and labour market policies should instead focus on long-term capacity building among the most skilled individuals, who are the least likely to face unemployment due to recession. Such policies could be accompanied by general plans to strengthen social networks and build social capital through community centres and social activities, which provide a local platform for everyday social interactions. Such policies could be particularly successful in the economic centres of peripheral regions.

Peripheral regions could also benefit also from individual mobility. In this regard, the focus of local strategies should not be on fighting population decline, but rather on facilitating short-term visits and maintaining the links with individuals who once lived in, but have left the region. The result of such mobility might be increased identification of business opportunities among people who temporarily visit the region.

Still, an important question related to findings and policy recommendations formulated in the thesis is to what degree these findings can be generalized for the context of other countries. This thesis identified the mechanisms based on an unemployment push towards entrepreneurship and the role of social capital. The Swedish context may be considered one of the most difficult in which to pinpoint the role of these mechanisms and it might be expected that their magnitude is larger in other contexts. This is because high levels of social security might undermine the role of unemployment which could be more directly observed in case of other countries. Similarly, Sweden is considered a country with high level of social capital in international comparison, but the relatively small variance of social capital among Swedish regions seems to be still an important factor. It can be again expected that it might play an even more pronounced role in case of countries with moderate levels of social capital. Nevertheless, it should be emphasized that in general, mechanisms that are not based on agglomeration forces might be less important from the policy perspective for locations with higher population density that more readily can rely on agglomeration forces.
While answering some questions, the thesis also suggests some new promising avenues for future research. One highly relevant line of investigation could be the potential of new companies to facilitate society’s adjustment to one of its most important and current challenges: population aging. Recent research suggests that the relation between age and engaging in entrepreneurship no longer follows an inverse U-shape curve, but that there is another peak in entrepreneurial activity among people approaching retirement age (Zhang and Acs, 2019). This might have important implications for regional development and, as suggested by Mayer and Leick (2019), the opportunities and challenges associated between old age and entrepreneurship might depend on the regional context. For this reason, further investigation into the relation between entrepreneurship, age and regional labour market dynamics might generate findings with important implications for depopulating regions.

This thesis also tested empirically some identified mechanisms, but it did not estimate precisely the magnitude of their effect on regional development. This could be potentially the next step and a task of more practically oriented research. Future research could also reverse the question of what the individual or regional determinants of entrepreneurial success are, and instead asking what the specific locations favouring individuals with specific skills or social backgrounds are? Another line could investigate further the relationship between individual and regional heterogeneity. For this line of research, a particularly interesting topic might be investigation of new companies from the perspective of more specific change that could be introduced into the regional economy.
6. Sammanfattning (Swedish summary)

Nystartade företag som växer inom de mest tekniskt avancerade sektorerna i ekonomin har lyckats nå fram till miljarder människor genom att erbjuda nya sätt att kommunicera och hantera allehanda praktiska bestyr i vardagen. Dessa företag återfinns också i tätgruppen av företag med högst marknadsvärde. Den snabba tillväxten har skapat ett stort intresse för dessa företag och inspirerat till nytänkande på många områden. Tillkomsten av nya företag är emellertid fortfarande starkt kopplat till det lokala sammanhanget. Berättelser om nystartade företag på platser som Silicon Valley förefaller vara undantaget snarare än regeln, och de allra flesta av de nya företagen kommer inte att expandera i sådan omfattning att de kommer ha produktion eller annan verksamhet utomlands. Denna omständighet förminskar dock inte deras betydelse, eftersom de bidrar till den lokala ekonomin genom att skapa jobb och inkomster. Dessutom gör de samhällena mer levande och attraktiva för människor och företag.

Det finns en omfattande litteratur om både individspecifika och regionala faktorer som samspelar med entreprenörskap. Trots detta är det dominerande perspektivet att dessa faktorer spelar samma roll i olika rumsliga sammanhang. I avhandlingen studeras i första hand kopplingen mellan företagsbildning och affärsmöjligheter som kan te sig olika beroende på resurser och omständigheter i det lokala och regionala sammanhanget. Denna koppling skulle kunna ha särskild betydelse för hur nya företag presterar i perifera och stagnerande regioner. Sådana regioner skulle kunna ha mest nytta av en skäddarsydd och forskningsstyrdd politik, men dessa delar av landet undersöks i mindre omfattning än framgångsrika storstadsområden. Dessutom är resurserna begränsade vad gäller att ge perifera och stagnerande regioner möjligheter att stärka sina ekonomier.

I avhandlingen undersöks tre mekanismer som inte är relaterade till betydelsen av agglomeration (d.v.s. koncentrationer av människor och/eller företag), men som potentiellt skulle kunna stödja företagsbildning. Den första mekanismen härrör till drivkrafter att starta eget bland anställda och arbetslösa. Å ena sidan kan låg arbetslöshet ge goda förutsättningar att starta företag, men å andra sidan om arbetslösheten är hög kan egenföretagande vara ett attraktivt alternativ för den som saknar sysselsättning. Detta skulle potentiellt kunna skapa en våg av nya affärsaktiviteter i regioner med svag arbetsmarknad.

Den andra mekanismen har att göra med potentialen hos så kallade mjuka faktorer såsom humankapital, socialt kapital och företagsklimat, vars betydelse för nyföretagande varierar beroende på den regionala kontexten. Exempelvis kan
socialt kapital utgöra ett substitut för andra resurser som inte är tillgängliga för lokala företagare. Denna typ av substitution skulle kunna vara av särskilt stor betydelse för regioner med svag ekonomi.

Den tredje mekanismen som behandlas i avhandlingen fokuserar på hur migration kan verka som drivkraft för regional förändring; migration kan fungera som en rumslig överföring av aktiviteter och kompetens. Denna mekanism skulle kunna gynna de regionala ekonomierna, förutsatt att de lyckas ta till vara på inflyttarnas kompetens.

Respektive mekanism behandlas i de tre i uppsatser som ligger till grund för avhandlingen. I den första uppsatsen undersöks hur arbetslösa och anställda skiljer sig åt vad gäller sannolikheten att starta företag och hur utvecklingen på den regionala arbetsmarknaden påverkar dessa beslut. Analysen visar att långsiktigt positiva förhållanden på arbetsmarknaden underlättar nyföretagande tack vare goda förutsättningar för lösnämnd. Kortsiktiga förbättringar på arbetsmarknaden minskar däremot sannolikheten att starta företag, eftersom dessa fluktuationer i högre grad skapar attraktiva arbetsplatser än förväntningar om god lösnämnd i eget företag. Analys av skillnader mellan arbetslösa och anställda visar att det är mer sannolikt att arbetslösa startar företag jämfört med anställda. Denna skillnad påverkas också av den kortsiktiga utvecklingen på arbetsmarknaden. En förbättring av arbetsmarknadssituationen minskar sannolikheten att starta företag i större utsträckning bland arbetslösa än bland anställda.

Resultaten från den första uppsatsen stödjer uppfattningen att etableringen av nya företag följer ett konjunkturnässigt motcykliskt mönster som därigenom spelar en stabiliserande roll i den regionala ekonomin. Enligt resultaten drivs denna effekt av gruppen arbetslösa, vars beslut om att starta företag påverkas starkt positivt av kortvariga försämringar på arbetsmarknaden. Sådana nystartade företag är ofta lågpresterande, mindre innovativa och löper större risk för nedläggning. Samtidigt ger uppsatsen stöd för att långvarigt låg arbetslöshet är den faktor som driver förändringar i den regionala företagssammansättningen i ett längre tidsperspektiv.

I den andra uppsatsen undersöks hur det geografiska sammanhanget modererar effekterna av humankapital, socialt kapital, entreprenörskapskultur och industri specialisering på företagsbildning. Resultaten tyder på att humankapital, socialt kapital och företagsklimat är viktiga faktorer för att förstå skillnader mellan kommuner avseende nyföretagande. Vidare tyder resultaten på att en näringslivsstruktur som är väldigt specialiserad hindrar nyföretagande. Enligt dessa resultat kan humankapital och företagsklimat öka nyföretagande på liknande sätt i olika regionala sammanhang. Följaktligen verkar detta vara en
universell faktor med avseende på strategier för ekonomisk utveckling. Socialt kapital är däremot en viktig faktor för politik som har för avsikt att stärka nyföretagande i perifera regioner, eftersom socialt kapital kan kompensera för bristen på andra lokala resurser. Detta pekar på att användningen av socialt kapital bör vara en viktig del i tillväxtstrategier som syftar till att stödja perifera regioner.

Syftet med den tredje uppsatsen är att bedöma hur nya affärsverksamheters prestationer är kopplade till hur väl dessa företag är inbäddade i det lokala sammanhanget. Detta mäts som entreprenörens tidigare erfarenhet av regionen och graden av branschmässig samstämmighet mellan det nya företaget och regionens befintliga industristruktur. Resultaten tyder på självförstärkning, dvs. att nya företag ofta uppstår i eller nära dominerande branscher i den lokala ekonomin. De lokala entreprenörerna drar nytta av att ha lokal erfarenhet på så sätt att deras företag har större sannolikhet för överlevnad, men vid större branschmässig bredd blir de regionala förhållandena gynnsammare för icke-lokala företagare, som i sin tur har kapacitet att tillföra ytterligare mångfald.


Denna avhandling bidrar till debatten om entreprenörskapets roll för regional utveckling. Utifrån ett regionalt perspektiv visar resultaten att faktorer såsom socialt kapital kan ha varierande betydelse beroende på andra regionala egenskaper; regionala nackdelar kan åtminstone till viss del kompenseras av olika regionala tillgångar. Detta resultat ger förutsättningar för mer flexibilitet i vårt tänkande om entreprenörskapets betydelse för en regional utvecklingsstrategi som inte behöver hantera alla regionala utmaningar, utan istället fokusera på vissa regionala fördelar som kan kompensera för brister inom andra områden. Vidare bidrar avhandlingen till litteraturen genom att lyfta fram alternativ till mer urbana tillväxtnormer genom existerande kompensationsmekanismer i befolkningsmässigt glesa regioner. Detta leder fram till två viktiga aspekter på tillväxt i glesare miljöer, nämligen betydelsen av sociala kontakter och att upplevelsen av stagnation kan vara mer problematisk än en lågkonjunktur i sig, eftersom det senare kan skapa nya tillväxtmöjligheter.
References


Babbie E, 2015 The Practice of Social Research (Cengage Learning)


Boschma R, 2015, “Towards an Evolutionary Perspective on Regional Resilience” Regional Studies 49(5) 733–751

Boschma R, 2017, “Relatedness as driver of regional diversification: a research agenda” Regional Studies 51(3) 351–364


Caliendo M, Künn S, 2014, “Regional Effect Heterogeneity of Start-up Subsidies for the Unemployed” Regional Studies 48(6) 1108–1134


Fitjar R D, Rodríguez-Pose A, 2013, “Firm collaboration and modes of innovation in Norway” Research Policy 42(1) 128–138


Granovetter M S, 1973, “The Strength of Weak Ties” American Journal of Sociology 78(6) 1360–1380


Hedlund M, 2016, “Mapping the Socioeconomic Landscape of Rural Sweden: Towards a Typology of Rural Areas” Regional Studies 50(3) 460–474


Maillat D, 1995, “Territorial dynamic, innovative milieus and regional policy” Entrepreneurship & Regional Development 7(2) 157–165


Parker S C, 2018 The economics of entrepreneurship (Cambridge University Press)


Rabe-Hesketh S, Skrondal A, 2005 Multilevel and longitudinal modeling using stata (Stata Press College Station, TX)


Rodríguez-Pose A, 2018, “The revenge of the places that don’t matter (and what to do about it)” Cambridge Journal of Regions, Economy and Society 11(1) 189–209

Sabel C F, 1989, “The reemergence of regional economies”


Shane S, 2009, “Why encouraging more people to become entrepreneurs is bad public policy” Small Business Economics 33(2) 141–149


Stam E, 2010 Entrepreneurship, evolution and geography. Boschma, RA & Martin, RL (eds.) The Handbook of Evolutionary Economic Geography, 139–161 (Cheltenham: Edward Elgar)


Storper M, 1995, “The Resurgence of Regional Economies, Ten Years Later The Region as a Nexus of Untraded Interdependencies” European Urban and Regional Studies 2(3) 191–221

52

Svaleryd H, 2015, “Self-employment and the local business cycle” Small Business Economics 44(1) 55–70


Tillvaxtanalys, 2013, “Regional tillväxt 2013– en rapport om regional tillväxt och utveckling”

Twenty five years of Swedish Reforms - Reforminstitutet, https://www.reforminstitutet.se/twenty-five-years-of-swedish-reforms/


