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NEW VENTURE CREATION IN DIFFERENT ENVIRONMENTS:
TOWARDS A MULTI-LAYERED INSTITUTIONAL APPROACH
TO ENTREPRENEURSHIP

Ewald Kibler



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PART I: INTRODUCTORY ESSAY

1 INTRODUCTION

1.1 Background

Entrepreneurship has long been recognized as an important source of innovation, job creation and economic development (see e.g., Audretsch et al. 2006; Baumol 2002; Carree and Thurik 2010; Reynolds 1994), even if these relationships are not always straightforward (Carree et al. 2007) due to the diverse forms of entrepreneurial activity and economic contexts (Stam and Van Stel 2011). Subsequently, fostering entrepreneurship has been widely viewed by policy-makers and academics as a potential vehicle to address social and economic challenges in different societies, which in turn has triggered research to increasingly seek to identify the elements that can explain and promote entrepreneurial behaviors.

A large body of the previous research on entrepreneurship has sought to provide useful insights into how personal attributes and economic conditions shape either the entrepreneur's behavior or the activity of new firms (Thornton et al. 2011). This, however, has led to a tendency in entrepreneurship research to overlook the early phases of the individual venture creation process (Davidsson and Honig 2003; Newbert and Tornikoski 2011), while underestimating the role of the variety of external environments, which has limited our knowledge of the influence of spatial, social, and institutional contexts in particular (Welter 2011) on the pre-emergent phase of entrepreneurship.

Even though the importance of understanding the pre-firm formation phase on the one hand (Bird 1988; Katz and Gartner 1988; Reynolds and White 1997) and the different contexts for economic behavior on the other (Dicken 1990; Granovetter 1985; Polanyi 1957; Veblen 1919; Weber 1904, 1905) have long been recognized, academics have only recently emphasized the need for a more contextualized and multilayered approach to enhance our knowledge of when, why, and how entrepreneurship evolves in certain environments (Autio and Wennberg 2010; Jennings et al. 2013; Thornton 1999; Thornton et al. 2011; Welter 2011). This recent call for a more contextualized view of entrepreneurship has gained even more importance as environments have become more diversified and interconnected, thus creating further variations in entrepreneurial activity and economic growth on different spatial scales (Bosma et al. 2008; Veciana and Urbano 2008). While these variations over time are closely related to economic development, technological change and the

emergence of new markets, scholars have recently argued that entrepreneurship variations across nations and regions seem to be the outcome of socio-cultural contexts, emphasizing the importance of identifying other environmental conditions than economic and business contexts (Freytag and Thurik 2007; Thurik and Dejardin 2011a; Welter 2011). In other words, it has been recognized in the recent literature that entrepreneurship needs to be understood in the various contexts in which it emerges (Jennings et al. 2013; Gartner et al. 2006; Stam 2010; Sternberg 2009; Welter and Smallbone 2011; Zahra 2007). The challenge remains, however, to conceptualize and empirically examine a context ‘which cuts across levels of analysis and influences entrepreneurship directly or indirectly, but which also is influenced by entrepreneurial activities’ (Welter 2011: 176).

As a consequence, successive research has sought to address the different contexts of entrepreneurship by shifting to spatial, cultural and institutional perspectives. An institutional perspective, in particular, has been increasingly suggested as a fruitful meta-framework with which to develop our understanding of the different environmental settings that interact with entrepreneurship (Autio and Wennberg 2010; Bruton et al. 2010; Kalantaridis and Fletcher 2012; Stenholm et al. 2013; Thornton et al. 2011; Veciana and Urbano 2008; Welter 2011). Moreover, scholars have recently suggested that an institutional perspective can serve as a useful frame to uncover the various contexts for entrepreneurial cognitions and the individual decision to found new firms (Lafuente et al. 2007; Liñán et al. 2011; Lim et al. 2010; Thornton et al. 2011). At the same time, it assists in better understanding the individual’s role in changing the contexts for entrepreneurship, such as the social and institutional environment (Welter 2011; Kalantaridis and Fletcher 2012). This way of thinking is in line with Veciana and Urbano’s (2008: 373) seminal work on institutional theory and entrepreneurship, which has emphasized that ‘[i]n the field of entrepreneurship the concern should be how the institutional context affects [...] the emergence of entrepreneurs’ and new venture creation. Taken together, there is an obvious need for further research that seeks to address both the conceptual and empirical challenges of contextualizing the emergence of entrepreneurship. This dissertation argues that developing a multi-layered institutional understanding of new venture creation can offer a fruitful way forward.

1.2 Research objectives and methods

This dissertation seeks to contribute to the new debates and challenges in entrepreneurship research by theorizing and empirically analyzing the

influence of social, spatial and institutional environments on entrepreneurial cognitions and intentions, as well as on the subsequent venture creation process. Here, it particularly adds to the knowledge of how informal institutions, across different spatial contexts, shape an individual's entrepreneurial intent and progress in the business start-up process, which has received very limited attention in the previous (cross-) regional and country studies on entrepreneurship. In so doing, it will also contribute to our understanding of the role of external, institutional environments in entrepreneurial cognition processes (see Lim et al. 2010; Mitchell et al. 2007), especially the emerging literature that examines the formation of entrepreneurial intentions in different regional milieus (Lafuente et al. 2007; Liñán et al. 2011).

In addition, this dissertation provides new insights into how potential entrepreneurs are affected by their social networks, and how they can resist and potentially change social norms prevalent in their surrounding environment. Thus, it also responds to the call for further development of an institutional approach to entrepreneurship by including an individual perspective that addresses the recursive (bottom-up effects) relationship between normative institutions and entrepreneurship (Welter 2011; Welter and Smallbone 2008, 2011). Within this context, the dissertation will particularly draw attention to the under-researched topic of older individuals who shift from earning a wage to starting up a business of their own. In studying their creating and negotiating legitimacy for such a shift at a later stage in their careers the aim is to add to the knowledge of how potential entrepreneurs at an 'older' age interact with social barriers emerging from enterprising cultures, which tend to 'praise' younger entrepreneurs (Ainsworth and Hardy 2008, 2009). This will serve as a useful basis to offer new thought-provoking ideas to capture informal institutional settings for entrepreneurship, while adding to our understanding of the influence of norms on potential entrepreneurs as well as their strategic responses to normative barriers within different environments.

Finally, this dissertation aims to develop a multi-layered institutional understanding of the emergence of entrepreneurial intentions and new ventures, by both theoretically and empirically incorporating the social, spatial and (informal and formal) institutional influences on the potential entrepreneur (Welter 2011). It seeks to provide new insights into the multi-layered nature of contextual influences on new venture creation, and the role of the individual and the formation individual entrepreneurial cognitions in these processes. Here, it also responds to the need for multilevel empirical research (Autio and Acs 2010; Bosma and Schutjens 2011), while addressing the important challenges of capturing the context of entrepreneurship, by using both quantitative and qualitative methods (Trettin and Welter 2011; Welter 2011). Besides contributing to these recent scholarly debates and challenges, this dissertation aims to

generate practical implications for policy-makers and the enterprise community to assist in customizing initiatives to encourage potential entrepreneurs in different types of environments. In summary, the present dissertation seeks to generate new knowledge to help tackle the following main research question:

- *What role do social, spatial and institutional contexts play in the formation of entrepreneurial intentions and the subsequent venture creation process, and in how potential entrepreneurs are able to resist and shape their surrounding contexts?*

This dissertation is a cumulative effort comprising of a critical literature review, substantial theoretical work, and four empirical research papers, each of which adds nuanced insight to the research aims and main research question, outlined above. Specifically, *paper 1* investigates how the perceived moral legitimacy of entrepreneurship in society influences an individual's progress in the venture creation process, while *paper 2* examines how the regional, institutional environment impacts on entrepreneurial cognitions and intention. *Paper 3* examines how perceived social norms in a regional context influence the formation of entrepreneurial intentions. *Paper 4* particularly addresses the second part of the main research question by exploring how social networks' normative evaluation of entrepreneurship affect individual entrepreneurial behavior, but also how potential entrepreneurs are able to resist and change these social norms. A general overview of the research papers, including the entrepreneurship aspect and the environmental contexts studied is further given in Table 1, while the specific research gaps addressed by the four papers will be illustrated in detail in the course of the critical literature reviews.

Table 1 Research focus of the four research papers

	Paper 1	Paper 2	Paper 3	Paper 4
Individual entrepreneurship aspect	Progress across different stages of the venture creation process	Entrepreneurial cognitions and the formation of entrepreneurial intentions	Entrepreneurial cognitions and the formation of entrepreneurial intentions	Venture creation process and early firm phase
Contextual influences	Societal, informal institutional context	Regional, formal and informal institutional context	Regional, informal institutional context	Social, informal institutional context

In order to tackle the research aims and question set in this dissertation, the theoretical rationale of this work is based on the previous literature which views entrepreneurship as the creation of new firms (Davidsson 2006; Gartner et al. 1988; 2010), an evolving process determined by the relationship between the individual and the environment (Stam 2010; Sternberg 2009; Malecki 2009). Embedded in the recent institutional scholarly work on entrepreneurship (Bruton et al. 2010; Veciana and Urbano 2008; Welter and Smallbone 2011), the dissertation develops a multi-layered institutional approach drawing upon institutional perspectives in economics (Hodgson 2006; 2009; North 1990) and economic geography (Gertler 2010; Martin 2000; Rafiqui 2009) as well as organizational institutionalism (Powell and Colyvas 2008; Scott 1995, 2010) and institutional economic sociology (Fligstein 2001; Nee 2003; Swedberg 2003). The institutional perspective is combined with a social psychological approach to entrepreneurial behavior (Lim et al. 2010; Liñán et al. 2011; Mitchell et al. 2007). In doing so, the theoretical frame of this research seeks to incorporate three recently discussed contexts of entrepreneurial behavior: the social, spatial, and institutional contexts (Welter 2011), and how the impact of these contexts on entrepreneurship is reflected in individual cognitive processes and intentions, but also how individuals can shape their surrounding contexts. The empirical work of this dissertation involves both quantitative and qualitative empirical research, based on multilevel data derived at the individual, regional and national levels. In particular, the empirical analyses use primary surveys combined with official regional statistics, in-depth interviews, and a secondary cross-country dataset, while different quantitative and qualitative techniques are used to analyze and interpret the data.

1.3 Structure

The remainder of this dissertation is organized as follows. *Section 2* reviews the academic literature that explores the different phases of the new venture creation process and the formation of entrepreneurial intentions. It then goes on to briefly summarize the main insights of the previous research, while outlining the concepts that will be used in this dissertation to capture these start-up processes at the individual level. The section will conclude with an exploration of specific research gaps, serving as a basis for the further exploration in *Section 3*.

Section 3 examines the academic debates that concern the contextualization of entrepreneurial behavior, and reviews the main insights of the previous research that addresses the influence of social, spatial and institutional

contexts on new venture creation processes. In light of this research, the section will conclude with a critical summary of the prior literature, outlining the specific knowledge gaps which this dissertation seeks to address.

Drawing upon the conceptual ideas and empirical insights presented in Section 3, *Section 4* starts with an introduction of the main arguments amongst scholars about developing an institutional approach to entrepreneurship. It then provides a historical overview of the different, emerging institutional streams and approaches in social and economic sciences, and discusses their potential synergies applicable to the approach developed in this dissertation. Finally, this section develops a multi-layered institutional approach, setting the underlying theoretical basis of the dissertation and the theoretical lens to frame and interpret the empirical work in the four papers.

Section 6 describes the research methodologies used in the four individual research papers, and provides short summaries of the paper contributions.

Section 7 critically discusses the main insights of the dissertation and discusses its theoretical and empirical contributions to our improved contextualized understanding of the formation of entrepreneurial intentions and new venture creation processes. This section proposes a multi-layered institutional approach to entrepreneurship. Further, it discusses the practical implications for policy-makers and the enterprise support community. Finally, it offers a critical reading of the limitations of the study, and outlines potential directions for future research.

2 THE EMERGENCE OF NEW VENTURES

‘New businesses are not
created by accident’
(Carter et al. 2003: 17)

2.1 Towards a process-orientated view of entrepreneurship

Towards the end of the twentieth century, entrepreneurship scholars increasingly highlighted the process nature of new firm formation, emphasizing the importance of understanding the initial and pre-emergent phase of entrepreneurial behavior and new ventures (Bhave 1994; Bird 1988; Bull and Willard 1993; Carter et al. 1996; Gartner 1985, 1988; Katz 1990; Low and MacMillan 1988; Reynolds and Miller 1992; Reynolds and White 1997; Van de Ven et al. 1989; Venkataraman 1996). Accordingly, academics have steadily recognized that ‘the creation of an organization is a very complicated and intricate process’ (Gartner 1988: 28), and that ‘before there can be entrepreneurship there must be the potential for entrepreneurship’ (Krueger and Brazeal 1994: 91).

This growing body of research has sought to respond to the over-dominance of studies on existing entrepreneurs and firms or, in other words, to the lack of knowledge of how (potential) entrepreneurs and firms emerge (Reynolds and White 1997). This branch of academic work has also started to critically address a prior, established research stream (see e.g., McClelland 1961), which mainly focused on the traits that distinguish entrepreneurs from non-entrepreneurs in society, for instance by tackling questions on whether ‘entrepreneurs are born or made’ (Lundström and Stevenson 2005: 18). Here, Gartner (1988) and Katz and Gartner (1993) in the late 1980s, symbolically raised the need for ‘a reorientation of entrepreneurship research from characteristics of individuals to behaviors in the process of emergence’ (Davidsson 2006: 1). Moreover, inspired by the emphasis laid by other influential scholars on the process nature of venture creation (Bhave 1994; Van de Ven et al. 1989), a dynamic and process-oriented view of entrepreneurship has begun to replace an established static view, rooted in the work of Knight (1921), ‘which sees entrepreneurship as a state which one can adopt or not’ (Van der Zwan et al. 2010: 2183).

In this context, one major stream of this emerging research has begun to seek to uncover the factors that influence the very early stage of the

entrepreneurial process, that is, an individual's intention to start up in business (Bird 1988; Krueger 1993; Shapero and Sokol 1982; Tkachev and Kolveried 1999). Another stream has started to investigate the decisions and activities of individuals (often called nascent entrepreneurs) who are already actively preparing their business (Delmar and Davidsson 2000; Reynolds and White 1997), while other scholars have sought to develop frameworks that explore the different phases of the entire business start-up and early firm process (Katz 1990; Katz and Gartner 1988; Carter et al. 1996). Thus, there is an increasing body of research that seeks to develop our knowledge of the emergence of entrepreneurship, by investigating entrepreneurial cognitions (Mitchell et al. 2002a,b; Mitchell et al. 2007), the formation of entrepreneurial intentions (Kautonen et al. 2013; Liñán and Chen 2009), the nascent entrepreneurship phase (Müller 2006; Newbert and Tornikoski 2011, 2012; Reynolds et al. 2005) or a combination of different phases of the entrepreneurial process (Rotefoss and Kolvereid 2005; Van der Zwan et al. 2010).

2.2 The different phases of new venture creation

At this point, many scholars agree that 'entrepreneurship is a process of emergence' (Baron and Shane 2005; Davidsson 2006; Grilo and Thurik 2008; Reynolds 2007; Sternberg 2009: 15; Stam 2007; Welter 2011), while others even consider the processes of new venture creation to be the core characteristic of entrepreneurship (Carter et al. 1996; Gartner and Carter 2003; Gartner 2010: 100). Subsequently, many theoretical conceptions and empirical studies have emerged in the past decades seeking to describe and explore the various phases involved in the individual process of founding a business, while also focusing on the continuation of different stages after the business start-up (Gartner and Carter 2003).

For instance, Wilken (1979) has sought to explain how individuals need to develop a business idea and concept, and then carefully plan the new business before actively engaging in the business establishment. Birley (1984) has suggested that the firm formation process emerges in a sequential order, from deciding to found a business, creating a bank account, acquiring premises and resources, handling initial orders, and paying the first taxes through to hiring workers. Vesper (1990) has stated that the venture creation process consists of the acquisition of five key elements, while adding that these elements can be combined in a different order: technical know-how, product or service idea, personal contacts, physical resources and customer orders.

Katz and Gartner (1988) have proposed four significant properties that conceptualize the creation of a new venture: intention to found an

organization, acquiring resources to form an organization, establishing the boundaries of the organization, and exchanging resources across these boundaries. Katz (1990) has further argued that individuals need to overcome three hurdles in the process of becoming self-employed, those being the hurdles of aspiring, preparing and entering. The aspiring hurdle indicates an individual's intent to become self-employed, while the preparing hurdle reflects their preparations (e.g., scanning the environment and acquiring resources) before facing the entering hurdle that arises when they actually open the business. Learned (1992) has suggested a framework that illustrates three sequential elements that lead to an individual's decision to start or not to start a business: propensity to become an entrepreneur, intention to start a business, and making sense of information acquired during the attempt to develop ideas and accumulate resources. Rotefoss and Kolvereid (2005) have conceptualized three milestones of the business creation process (i.e., the aspiring, preparing and entering milestone) by combining the models developed by Katz (1990) and Learned (1992). According to their definitions, 'reaching the aspiring milestone represents an intention to pursue, or commitment to continue, an entrepreneurial career; [...] reaching the preparing milestone indicates an attempt to establish a business; and [...] the entering milestone implies the actual start-up of a fledgling new business' (Rotefoss and Kolvereid 2005: 110).

Moreover, Reynolds and Miller (1992) have sought to trace four different events that can indicate the 'gestation markers' of the emergence of an operating business: personal commitment (i.e., starting to invest personal time and resources), financial support (i.e., obtaining external financial support), sales (i.e., receiving first sales income) and hiring (i.e., employing someone full- or part-time). Their study has indicated that not all events necessarily occur in the firm creation process and that the events do not take place in a particular order, while mainly concluding that '[t]he gestation period, from conception to birth, should be treated separately from the post-birth period' (Reynolds and Miller 1992: 416). Reynolds (1997) and Reynolds and White (1997) have continued to propose a specific distinction between the different stages of the firm formation processes, which includes the conception, gestation, infancy, adolescence, maturity and decline stages; whereas the notion of 'nascent entrepreneurship' has subsequently become increasingly pronounced in entrepreneurship research (Reynolds et al. 2005), representing the gestation and infancy phase. Supporting these developments, the study by Carter et al. (1996) has uncovered three different profiles of nascent entrepreneurs. They have distinguished between those who are very active and actually open a new business; those who are active but give up when realizing that their business would not lead to success, and those who are still 'trying' to

found a business, as they tend not to put 'enough effort into the start-up process in order to find out whether they should start the business or give up' (Carter et al. 1996: 152). These critical processes and outcomes in the nascent entrepreneurship phase can be further understood by the suggestion that potential entrepreneurs need—almost constantly—to discover and exploit entrepreneurial opportunities to successfully found and establish businesses (Shane and Venkataraman 2000).

Inspired by these prior studies, Grilo and Thurik (2005, 2008: 1114) have proposed seven levels of an individual's involvement in the entrepreneurial process, noting that the levels do not necessarily indicate an increasing degree of entrepreneurial engagement. Their concept includes two early stages of entrepreneurial engagement ('thinking about it' and 'taking steps to start a business'), and levels that indicate if an entrepreneur is running a young or older business, or has given up or even closed their business. Besides that, they have defined a level that represents individuals who are not thinking of becoming an entrepreneur, and thus are not (yet) engaging in the entrepreneurial process. Following their work, Van der Zwan et al. (2010) invented the concept of the entrepreneurial ladder, by incorporating five of the seven entrepreneurial engagement levels in a sequential order: 'Never thought about it', 'Thinking about it', 'Taking Steps', 'Young business' and 'Old business'. The idea behind this framework is that entrepreneurship is seen as a process, where each level captures an increasing degree of engagement in the entrepreneurial process, while the determinants of entrepreneurship can vary across these levels (Grilo and Thurik 2008; Van der Zwan et al. 2010: 2184). This dissertation will particularly focus on the very early phase of the venture creation process (see research paper 2 and 3), suggesting that the formation of entrepreneurial intentions represent the initial phase of the start-up process.

2.3 Entrepreneurial intentions and the theory of planned behavior

'The study of entrepreneurial intentions opens new arenas to theory-based research [... as it] directs attention toward the complex relationships among entrepreneurial ideas and the consequent outcomes of these ideas' (Bird 1988: 442). This concluding statement by Bird (1988) in her article 'Implementing entrepreneurial ideas: The case for intention' symbolizes the growing interest from the 1980s onward in intentions when researching the emergence of entrepreneurial behavior. Bird (1988) together with Katz and Gartner (1988) were among the first scholars to develop a concept of the nature of entrepreneurial intentions. Following their work, mainly starting from the 1990s, the explanation of entrepreneurial intentions has become an area of research

where a large body of entrepreneurship studies using social psychological theories has emerged¹ (Bird 1992; Kolvereid 1996; Krueger 1993; Krueger et al. 2000; Gird and Bagraim 2008; Liñán and Chen 2009; Van Gelderen et al. 2008; Kautonen et al. 2013).

In light of this emerging research, scholars have suggested that becoming an entrepreneur involves a complex cognitive and decision-making process (Gatewood et al. 1995; Liñán 2008; Mitchell et al. 2002a; 2007), while, as outlined earlier, the start-up process involves a range of actions, such as saving money, finding premises and equipment, or innovating and developing a product or service, among others (Carr and Sequeira 2007; Aldrich and Martinez 2001). Considering these initial decisions and steps as essential in the pre-start-up phase of founding a business, many scholars agree that becoming an entrepreneur is an emerging (Gartner et al. 2010; Sternberg 2009), but also intentional process (Carr and Sequeira 2007; Carter et al. 1996; Krueger et al. 2000; Lafuente et al. 2007). In this context, Kolvereid (1996) has already emphasized the intentional nature of entrepreneurial behavior by suggesting that entrepreneurial intentions, among other things, include a willingness to make decisions, being independent and creative, and seeking performance-based remuneration.

Based on this logic, entrepreneurship scholars have increasingly suggested that since entrepreneurial behavior is intentional, entrepreneurial intentions can predict subsequent behavior aimed at starting a business (Bird 1988; Krueger and Carsrud, 1993; Liñán and Chen 2009). Underlying this argumentation, a substantial amount of empirical research from diverse behavioral domains has demonstrated that intention is a good predictor of subsequent action. For instance, meta-analyses by Armitage and Conner (2001) and Sheeran (2002) have reported mean correlations of 0.53 and 0.47 between intention and behavior, while a recent study by Kautonen et al. (2013) shows that entrepreneurial intention explains a significant amount of the variance in subsequent start-up behavior. Accordingly, the present dissertation considers entrepreneurial intention as a strong predictor of future (nascent) entrepreneurial behavior.

Recognizing new firm formation as an intentional act calls for theory-driven process models of entrepreneurial cognition focusing on intentions and their perceptual bases (Bird 1988; Katz and Gartner 1988). Building on the theory of reasoned action (Fishbein and Ajzen 1975), the theory of planned behavior (TPB) (Ajzen 1988; 1991) has become one of the most widely used psychological theories when explaining and predicting human behavior

¹ See e.g., Krueger (2009) for a detailed, critical overview of the history, developments and recent challenges of entrepreneurial intention research.

(Armitage and Conner 2001). It is also the most common theoretical framework in the study of entrepreneurial intention² to this day (Carr and Sequeira 2007; Liñán and Chen 2009; Kautonen et al. 2013; Kolvereid 1996; Krueger and Carsrud 1993; Krueger 2009; Tkachev and Kolvereid 1999). According to Thompson's definition (2009: 676), entrepreneurial intent is 'a self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future', while Ajzen (1991: 181) defines intentions as 'indications of how hard individuals are willing to try, of how much of an effort they are planning to exert, to perform the behavior'. Subsequently, the stronger an individual's intention to engage in a specific behavior, the more likely it should be to translate into their actual performance or, in other words, intention is the immediate antecedent of behavior (Ajzen 1991; 2000).

Ajzen's (1991) TPB framework is here adopted as the basis for understanding entrepreneurial cognitions and the formation of entrepreneurial intentions. Within this framework, entrepreneurial intention is conceptualized as a function of three cognitive antecedents which, as prior applications of the TPB show (Kolvereid, 1996; Liñán and Chen, 2009; Van Gelderen et al., 2008), explain 30–45% of the variance in entrepreneurial intention: attitude, subjective norm and perceived behavioral control. According to Ajzen (1991), *attitude* refers to the degree to which a person makes a favorable or unfavorable evaluation or appraisal of the behavior in question. *Subjective norm* stands for an individual's perceived social acceptance, with their closer social environment, of performing that behavior. *Perceived behavioral control* refers to the degree to which an individual believes they are able to perform the behavior. Accordingly, Ajzen and Fishbein (2004) suggest that the three theoretical antecedents should be sufficient to predict intentions. Thus, generally speaking, the more favorable the attitude and the subjective norm with respect to the behavior, and the greater the perceived behavioral control, the stronger is the individual's intention to perform the behavior (see also research paper 2 and 3 for the dissertation's specific theoretical and empirical application of the TPB model).

² Even though Ajzen's TPB has gained most popularity among scholars in research on entrepreneurial intentions (Krueger 2009), Shapero's model of the 'entrepreneurial event' (see e.g., Shapero 1984; Shapero and Sokol 1982) has to be considered as a further dominant, useful model of behavioural intentions in entrepreneurship research (Krueger et al. 2000, 2009).

2.4 Understanding the emergence of new ventures

Research over the past decades has suggested that becoming an entrepreneur is an emerging process consisting of complex choices and different activities depending on the level of engagement in the venture creation process. While scholars have focused on developing concepts and measurements to capture the different phases and levels of the entrepreneurial process, they have also explored the practical decisions and activities involved in founding and developing a business. This dissertation will draw mainly upon the former research branch, since the aim is to investigate factors that influence intentions to engage in and their progress across the different conceptual phases of the firm formation process; thus it will draw less attention to the variety of practical start-up activities.

As indicated above, scholars have particularly explored different notions applied to the very early phase of the emergence of new ventures, such as aspiration (Katz 1990), intention (Katz and Gartner 1988; Learned 1992), personal commitment (Reynolds and Miller 1992), the conception (Reynolds 1997) and the initial thought (Grilo and Thurik 2008) of founding a business. However, referring to the work of Rotefoss and Kolvereid (2005), an individual's entrepreneurial intent to start up in business reflects in their aspiration and commitment to found a venture, while these elements arguably mirror that an individual considers becoming an entrepreneur as a potential career option. Furthermore, the notion of conception indirectly refers to the emergence of an individual's intention and commitment to found a firm, which, in turn, is a prerequisite of starting to prepare their business, and entering the nascent entrepreneurial phase (Reynolds and Miller 1992; Reynolds 1997). Accordingly, the formation of an individual's intention to start a new venture is argued to relate to or capture the different elements of the initial start-up phase that has been discussed in the prior literature. Supporting the role of intentions in the new firm formation process, Gartner et al. (1992: 17) have stated that 'Emerging organizations are elaborate fictions of proposed possible future states of existence.' Krueger (2009) has even suggested that entrepreneurial intentions may reflect the final phase before actually launching a business, highlighting the closeness of the genuine form of intent and nascent activity.

Subsequently, this section of the dissertation suggests that, in order to understand the pre-emergent phase of entrepreneurship, from an individual perspective, it is important to recognize the process nature of starting up in business, the different levels of entrepreneurial engagement, and particularly the entrepreneurial cognitions and intentions that deter the translation into the nascent entrepreneurial activities respectively starting up in business. Following this, and from the existing body of entrepreneurship research

discussed above, Rotefoss and Kolvereid's (2005) three-stage-concept (aspiring, nascent and fledgling entrepreneur) is adopted as a broad basis for understanding the firm formation process in this study. Additionally, the concept of the entrepreneurial ladder by Van der Zwan et al. (2010) is used to complement the three-stage concept particularly with the stage of 'never thinking about starting a business' as well as a more specific differentiation between the early firm phases (i.e., 'young' and 'old' business). These two proposals are combined here to suggest that the relevant stages in the entrepreneurial processes are as follows: *never thinking about starting a business*; *intending to become an entrepreneur* (aspiring entrepreneur); *preparing a business* (nascent entrepreneur); *young business* (fledgling entrepreneur); and *operating a mature business*. Further, as explored above, the phase of intending to become an entrepreneur is particularly understood in line with the TPB framework, which emphasizes that *entrepreneurial intentions* are determined by three *cognitive antecedents* (attitude, subjective norm and perceived behavioral control). Against this backdrop, this dissertation will now turn to exploring some of the main challenges in contextualizing the new venture creation processes. In doing so, it examines the existing literature that discusses and empirically analyzes the different contexts of entrepreneurship, while particularly drawing attention to studies that explore the role of those contexts in the formation of entrepreneurial intention and the business start-up process.

3 CONTEXTUALIZATING THE EMERGENCE OF NEW VENTURES

‘Ventures are not
started in isolation’
(Vesper 1990: 109)

3.1 Towards a contextual view of entrepreneurship

For many years, academics have been illustrating that economic behavior is facilitated by different social, cultural, economic and geographical contexts (Amin and Thrift 1994; Dickens 1990; Granovetter 1985; Jacobs 1969; Hodgson 1988, 2004; Lee and Wills 1997; Martin 1994; Massey 1973, 1984; North 1990; Oinas 1997; Polanyi 1957; Thrift and Olds 1996; Storper 1997; Veblen 1919; Weber 1904, 1905). In the last two decades there has been also an increasing recognition that entrepreneurship can be better understood when considering the context(s) within which it is embedded (Aldrich and Fiol 1994; Aldrich and Zimmer 1986; Drakopoulou-Dodd and Anderson 2007; Gartner 1995; Jack and Anderson 2002; Steyart and Katz 2004; Stam 2010; Sternberg 2009; Thornton 1999; Thornton and Flynn 2003; Ucbasaran et al. 2001; Veciana and Urbano 2008; Wennekers and Thurik 1999; Welter 2011; Zafirovski 1999). Reflecting these rather recent developments in entrepreneurship research, Welter’s (2011: 166) recent work has sought to (re)emphasize the importance of exploring ‘the multiplicity of contexts and their impact on entrepreneurship [...] for understanding when, how, and why entrepreneurship happens and who becomes involved.’

Such a contextualized lens has become even more important in recent entrepreneurship research since environments have become more diversified and interconnected, as a result of globalization processes, thus creating further spatial variations in entrepreneurial activity (Veciana and Urbano 2008; Thornton et al. 2011). This has led recent research to increasingly argue that the–conceptual idea of–‘context’ is a very ‘multiplex phenomenon’ (Welter 2011), which directly or indirectly facilitates entrepreneurship at various levels of analysis (Thornton 1999; Thornton et al. 2011; Welter 2011), while acknowledging that context is shaped by entrepreneurial activities themselves (Welter 2011; Garud et al. 2007; Bruton et al. 2010). Complementary to this

view, academics have further emphasized 'entrepreneurship as a multidimensional phenomenon spanning different units of observation ranging from the individual to the firm, region or industry, and even nation' (Grilo and Thurik 2008: 1116; see also, Lundström and Stevenson 2005; Wennekers and Thurik 1999; Davidsson, 2004; Wennekers et al. 2002). Subsequently, there is a growing body of scholars, from different disciplinary and theoretical strands that has begun to recognize the multiple nature of both context and entrepreneurship, aiming to develop our understanding of the contextual conditions and boundaries that support, restrict or interact with the different forms and levels of entrepreneurship (Aldrich and Martinez 2001; Armington and Acs 2002; Fritsch and Schmude 2006; Begley et al. 2005; Blanchflower 2000; Bosma et al. 2009; Brixy and Grotz 2007; Gartner et al. 2006; Malecki 2009; Stam 2010; Stam and Van Stel 2011; Sternberg 2009; Tamásy 2006; Thornton 1999; Thornton et al. 2011; Welter 2011; Veciana and Urbano 2008).

While a range of influencing factors has been identified and discussed (Blanchflower 2000), scholars have pointed out that economic factors and business contexts have been widely addressed (and perhaps even overemphasized) in studies on entrepreneurship, which, in turn, has limited our multilevel understanding of the social and cultural influences on entrepreneurial behavior (Autio and Wennberg 2010; Freytag and Thurik 2007; Schendel and Hitt 2007; Thornton et al. 2011; Welter 2011). These developments have apparently come as a surprise to many academics as the idea that individuals influence and are influenced by their social context is not new (Thornton et al. 2011; Welter 2011), for instance, when remembering the work of Max Weber (1904, 1905) in the early twentieth century. Here, scholars are reminded that Weber's work has already highlighted the validity of holding a multi-layered lens up to approaching the relationship between culture and economy, by arguing that the protestant culture has promoted individualism, which in turn has deterred economic activity and development (Steyaert and Hjorth 2006; Thornton et al. 2011; Welter 2011).

In this context, Thornton et al. (2011) have emphasized the importance of combining the social and cultural context to understanding the nature of entrepreneurial decisions and behavior, while Welter (2011) has offered a similar, but somewhat broader conceptual approach. Inspired by the work of John (2006), Whetten (2009) and Hackman (2003), among others, Welter (2011) has suggested that in order to be able to conceptualize and analyze entrepreneurship through a 'context lens', it is important to capture the lower and higher levels of analysis, by particularly at the social, spatial (or geographical), and institutional (cultural and political) ('where' contexts), within which the (potential) entrepreneur is embedded.

Against this backdrop, this dissertation seeks to contribute to these recent challenges in entrepreneurship research, drawing upon a contextual view of the emergence of entrepreneurship, where entrepreneurship is ‘taking place in intertwined social, societal, and geographical contexts, which [...] can be perceived as an asset or a liability by entrepreneurs’ (Welter 2011: 176-177). In the current research, that statement is taken as being equally applicable to prospective entrepreneurs. Underlying this argumentation, Low and McMillan (1988) have already suggested that it is important to capture process and context, to understand the emergence of entrepreneurship. More recently, Newbert and Tornikoski (2011) have concluded that nascent entrepreneurs are embedded in different relational and structural relationships that in turn affect a nascent organization’s transformation into an operating business. Fuller et al. (2008) have argued that the core rationale for the emergence of entrepreneurship assumes that it is due to interactions between the individual and the environment, calling for future research that addresses the different levels of contextual analyses, applying multilevel theoretical concepts. Supportive of this call, Bosma and Schutjens’ (2011: 737) recent work has argued ‘that understanding entrepreneurial behavior and attitudes, and eventually influencing entrepreneurship in general, calls for different instruments at different spatial scales in different stages of entrepreneurship’. Drawing upon such conceptual introductions, this dissertation now proceeds to provide an extensive review of the entrepreneurship studies that have both explicitly and implicitly sought to explore the social, spatial, and (formal and informal) institutional influences on (the emergence of) entrepreneurship.

‘[T]he notion of entrepreneurship [...] in isolation from social process is passé’
(Anderson and Miller 2003)

3.2 Social context

Inspired by the well-established, sociological literature on the intertwined notions of social capital (Jacobs 1962; Coleman 1988), social networks (Burt 1992; Podolny 2001) and social embeddedness (Granovetter 1985; Stinchcombe 1965), many studies have emerged over the past two decades that seek to understand entrepreneurship as a social phenomenon (Aldrich and Zimmer 1986; Anderson and Jack 2002; Baron and Markman 2003; De Carolis and Saporito, 2006; Greve and Salaff 2003; Jack and Anderson 2002; Katz 1993; Liao and Welsch 2005; Drakopoulou-Dodd and Anderson 2007). This increasing body of literature has begun to address the limitations of the

dominant 'atomized' view of entrepreneurs in research, calling for a more socially embedded, process-based view of entrepreneurial activity (Drakopoulou-Dodd and Anderson 2007). Welter and Smallbone (2011: 120) have further underlined that 'it is necessary [...] to incorporate the role of social context if [...] the nature and extent of entrepreneurship [...] are to be understood.' Thus, even if academics differ in their views on the role of the individual in the entrepreneurial process (see Section 2), it has been increasingly recognized that the emergence of new firms is embedded in and affected by social processes (Anderson and Miller 2003; Davidsson and Honig 2003; Katz and Gartner 1993; Liao and Welsch 2005; Gartner et al. 2010).

Drawing upon these ideas, academics are increasingly exploring and theorizing on the social embeddedness of entrepreneurship. For instance, Alistair Anderson and his colleagues (Jack and Anderson 2002; Anderson and Miller 2003; Drakopoulou-Dodd and Anderson 2007) have begun to postulate that 'the formation and development of a firm is related to the business founder's social world [i.e., social groups and social ties], and to all of the subjective configurations associated with this social world' (Anderson and Miller 2003: 19). Linking to the work of Becker and Gordon (1966), Nelson and Winter (1982), Pfeffer (1982), among others, Gartner et al. (2010) have also argued that the process of organization formation is rooted in social interaction where individuals continuously re-organize resources, routines and structures, to found their business. Underlining these developments, Anderson and Miller (2003) have illustrated that social capital is embodied within social networks, supporting resource-acquisition strategies necessary for operating a business. Thornton et al. (2011) have outlined that many social network analyses have emerged that highlight how entrepreneurs access non-internal resources, which emphasizes that entrepreneurs have the necessary resources available (i.e., human capital), but that they also need to *proactively* acquire resources, such as information and financial capital, through their social contacts (Aldrich and Zimmer 1986; Casson and Della Guista 2007; Cooper et al. 1995; Hoang and Antoncic 2003; Ribeiro-Soriano and Urbano 2009). This also links to the literature that has sought to investigate how entrepreneurial opportunities are recognized and created through social network members (De Carolis and Saporito 2006; Fletcher 2006), suggesting that social contexts influence the entrepreneurial process, but that these contexts are also shaped by individual action (Welter 2011). In other words, entrepreneurs' ability to use social capital gained through social networks is essential for new venture creation (Granovetter 2004; Greve and Salaff 2003; Nahapiet and Ghoshal 1998).

Specifically referring to the pre-emergent phase of entrepreneurship, Sirmon and Hitt (2003) and Greve and Salaff (2003) have suggested that

individuals need to utilize their human capital and interact within the closer social contexts to obtain resources that are important to prepare their new business. David and Honig (2003) have shown that *bonding social capital* based on strong ties, such as having parents or close friends who are entrepreneurs, and the active support from family and friends encourages individuals to engage in nascent entrepreneurial activities. Their study has further illustrated that *bridging social capital* based on weak ties, such as membership of Chambers of Commerce, enhanced an individual's general activity level and progress in the nascent entrepreneurial phase. Applying the widely used social network concept of Nahapiet and Goshal (1998), Liao's and Welsch's (2005: 358) empirical study has concluded that, '[f]or nascent entrepreneurs, what matters is how to utilize their social ties and interaction (structural capital) to influence and shape the norms and practices of their networks (cognitive capital) and in turn to develop trust and trustfulness and access to various actors' support (relational capital).'

Tornikoski and Newbert (2007) have further emphasized that it is important for a nascent entrepreneur to be legitimized in the eyes of their potential network members and resource gatekeepers, by convincing them that their nascent organization is operational. In a later study, these authors added that while a nascent entrepreneur might have a large number of ties with contacts, it does not necessarily mean that those contacts have the ability and motivation to support their venture creation. They have also concluded that once the nascent entrepreneur has a larger number of contacts that directly support them with valuable resources, the importance of enlarging the network diminishes (Newbert and Tornikoski 2012).

Academics have also begun to add family perspectives more explicitly to social capital and network approaches (Chang et al. 2009). For instance, Anderson and Miller (2003) have illustrated how the development of an entrepreneur's social capital is determined by their family background, while Aldrich and Cliff (2003) have explored how family networks influence the emergence and recognition of entrepreneurial opportunities and resources, and the final decision to go ahead and create a new venture. Greve and Salaff (2003) have argued that family members act as important resource holders to potential entrepreneurs who lack access to other social support networks during the firm formation process, while previous research has pointed out that this is particularly the case when family members have an entrepreneurial background (Aldrich and Cliff 2003). However, investigating family businesses, Anderson et al. (2005) have also shown that family members that are not directly involved in the (family) business or in other entrepreneurial activities also offer essential resources to entrepreneurs, such as professional advice and emotional support. Supporting this argumentation, Chang et al.'s

study (2009) has highlighted that the support of family networks (in)directly influences new venture creation by helping individuals to become better prepared for entrepreneurial activities and to carry out their ideas to actually open their new business. Their study has further argued that support from both family and other social actors facilitates an individual's entrepreneurial intentions and their subsequent acquisition of resources to prepare the new venture.

These insights are in line with the large number of entrepreneurship studies that apply Ajzen's (1991) TPB, where the perceived social support is conceptualized as one important determinant of intention. Thus, most of these studies have empirically demonstrated that an individual's entrepreneurial intention is stronger when they perceive positive social support and approval from networks of family and friends (see e.g., Krueger 1993; Van Gelderen et al. 2008; see also discussion in Section 2.2.). Liñán and Chen (2009) have further argued that the social expectations of family and friends can indirectly shape an individual's entrepreneurial intention by affecting their entrepreneurial attitude and self-belief in being able to operate a venture. Utilizing the intention model of Shapero and Sokol (1982), Liñán and Santos (2007) have shown that individuals' perceived *bonding social capital*, as outlined above, influences their desire to become an entrepreneur, while illustrating that *bridging social capital*, in other words the perceived social support in a broader network context, has an impact on their perception of the feasibility of entrepreneurial activity. Uniting those ideas, De Caloris et al. (2009) have suggested that an individual's social capital and ties with social networks can influence their entrepreneurial cognitions, such as risk propensity and impression of being in control in the context of entrepreneurship, and consequently, their progress in preparing and starting a new venture.

‘[T]he [firm formation] process is
essentially geographically constrained’
(Birley 1985: 112)

3.3 Spatial context

Over the last two decades, the spatial, or geographical, dimension of entrepreneurship has become increasingly pronounced (Trettin and Welter 2011) in light of the emerging body of (inter)national and regional studies that have found spatial variations in and conditions for new firm creation, (pre-)nascent entrepreneurial activity and (macro-) economic development (Armington and Acs 2002; Bosma et al. 2008; Bosma and Levie 2010; Blanchflower 2000; Reynolds et al. 1994; Stam 2007; Tödting and Wanzenböck 2003; Wennekers

and Thurik 1999; Wennekers et al. 2002). Accordingly, entrepreneurship scholars have steadily begun to explore the role of spatial contexts in co-determining the opportunity structure (on the demand side) and the resources, capabilities and interests (on the supply side) that affect different forms of entrepreneurship (Blanchflower 2000; Bosma et al. 2009; Malecki 1997, 2009; Schmude et al. 2008; Stam 2009, 2010; Sternberg 2009; Thurik et al. 2002; Trettin and Welter 2011).

While the existing literature addresses different spatial influences on various forms of entrepreneurship, spatial contexts have been analyzed along a range of different geographical scales. To give a brief overview, a recent literature review by Trettin and Welter (2011: 28, see Table 3) has summarized the main applied geographical foci and scales as follows: (1) cross-national comparison (2) research of the national situation (3) nationwide comparison of larger regions / different types of regions (4) comparison of sub-regions within one larger region of a nation (5) large city (incl. hinterland) (6) urban district(s) of a large city or small towns / villages in a peripheral location. Following that literature analysis, studies on the larger geographical scales (see 1–3) have dominated previous spatial entrepreneurship research, while focusing to a large extent on spatial variations in business start-up and death rates, nascent entrepreneurial activity, individual start-up decisions and economic influences of entrepreneurship. In contrast, the smaller, but increasing, body of studies at the lower geographical scale (see 4–6) has tended to explore ‘policies, entrepreneurship promotion and services,’ and ‘networks, social capital, embeddedness, culture and ethnicity’ (Trettin and Welter 2011: 7–8).

Scholars have argued that, due to the processes of globalization, spatial contexts at local, regional and (inter)national levels have become more diversified and interconnected, so creating further variations in entrepreneurship and economic growth (Bosma et al. 2008; Lundström and Stevenson 2005; Reynolds et al. 2000; Tödtling and Wanzenböck 2003; Veciana and Urbano 2008) as well as challenges for spatially orientated research (Trettin and Welter 2011). At the same time, scholarly debates have suggested that these globalization processes have increased the importance of local and regional markets, limiting the possibility of macroeconomic policy actions in order to support and regulate the economy (Bosma et al. 2008; Lundström and Stevenson 2005; Nyström 2009). Moreover, while certain spatial variations of entrepreneurship can be better explained at national levels, such as areas of tax legislation, Sternberg (2009: 14) has suggested ‘that in addition to nationally more or less similar framework conditions, there are also a large number of other framework conditions that vary between regions of the same country and which influence the individual decision for and against (entrepreneurship).’

Stam (2009: 497) has further underlined that the increasing ‘regional heterogeneity in the determinants of entrepreneurship leads to an even higher heterogeneity in the spatial distribution of entrepreneurship.’ Subsequently, while entrepreneurship research on larger geographical scales has become widely established, for instance via the US-Panel Study of Entrepreneurial Dynamics (PSED) and the GEM national surveys (Trettin and Welter 2011), the openness of markets and heterogeneity of regions has increasingly forced the debates to focus on local and regional contexts for entrepreneurship, as the relevance of national markets has been gradually diminished (Bosma et al. 2008). In other words, scholars now widely acknowledge that the local and regional dimension (see classification groups 3–6) must be included in entrepreneurship research (Acs and Stough 2008; Fritsch and Schmude 2006), particularly when seeking to understand the emerging process of new ventures (Sternberg 2009; Stam 2010).

Against this backdrop, scholars have steadily turned to discussing different forms of local and community entrepreneurship (Johannisson 1990; Frederking 2004; Haugh 2007; Spilling 2011; Trettin and Welter 2011; Welter et al. 2008) and to a larger extent to investigate the local and regional conditions (on the demand and supply side (Stam 2010)) that positively or negatively influence firm creation and exit strategies, nascent entrepreneurship and economic development (Armington and Acs 2002; Audretsch and Keilbach 2004; Bosma et al. 2008; Brixy and Grotz 2007; Fritsch and Mueller 2007; Fritsch and Schmude 2006), including support policies, attitudes and skills of the population, availability of incubators, and demographic and industry structure (Sternberg 2009; Stam 2010), among others. To give some specific examples, for instance, Tödtling and Wanzenböck (2003) have shown that urban and tertiary regions display significantly above-average rates of company formation and more favorable structural features in their new businesses, compared to traditionally industrial and rural areas. Here, previous research suggests that urban areas support company creation by providing more (accessible) local entrepreneurial opportunities and resources than rural areas (Armington and Acs 2002; Bosma et al. 2008; Reynolds et al. 1994; Stam 2009, 2010), while the threshold of starting a business is usually much lower in the service sector than in the capital-intensive manufacturing sector (Bates 1995; Brixy and Grotz 2007; Fritsch et al. 2006; Tamásy 2006). At the same time, scholars have begun to indicate that urban environments can also undermine entrepreneurial interests and activities due to ‘congesting factors’ (Naudé et al. 2008: 120), such as intense competition, high barriers to entry and less room for innovation-based differentiation (Bosma et al. 2008; Naudé et al. 2008).

The literature has further suggested the regional supply of well-educated labor—often associated with agglomerated areas (Tödtling and Wanzenböck 2003)—supports local entrepreneurship (Armington and Acs 2002; Bosma et al. 2008; Naudé et al. 2008), for instance, due to higher levels of creativity and innovation (Davelaar and Nijkamp 1997; Ritsilä 1999; Gregerson and Johnson 1997) and more established social, professional networks (Maillat 1995), thus, enhancing the recognition and exploitation of entrepreneurial opportunities (Lundström and Stevenson 2005; Nyström 2005; Reynolds et al. 2004). Mueller (2006) has further shown that nascent entrepreneurial activity across German regions is positively related to education, while Naudé et al. (2008) have demonstrated that firm birth rates in South African regions are higher when nascent entrepreneurs are better educated than the average person. Armington and Acs (2002) have illustrated that the presence of universities in U.S. regions and a higher degree of knowledge transfer to the private sector encourage higher entrepreneurial activity levels and provide support for firms to succeed.

Moreover, research has suggested that regions with higher financial wealth levels can support entrepreneurial processes through an increased spending capacity (Bergmann 2005), higher demand for products (Bosma et al. 2008; Reynolds et al. 1994), and a greater supply of resources for business capitalization and lower borrowing costs (Bates 1995; Kangasharju 2000; Naudé et al. 2008; Stam 2010). On the other hand, prior literature has argued that higher wage levels in a region increase the labor costs for (new) firms (Nyström 2005), and raise the comparative attractiveness of paid employment (Bosma et al. 2008). Audretsch and Fritsch (1994a,b) have further indicated that a perception that there are few employment prospects in a region can force individuals to become entrepreneurs, while other studies have shown that high unemployment reflects a weak regional economic situation, indicating a relatively low demand and correspondingly weak prospects of successful company formation (Bosma et al. 2008; Carree 2002; Reynolds et al. 1994). Scholars have further suggested that the local government and its policy actions affect the level of nascent entrepreneurship (Acs and Stough 2008; Bosma et al. 2008; Keeble and Walker 1994; Lundström and Stevenson 2005; Reynolds et al. 1994), where, for instance, the dominant political ethos in regions reflects in different support and spending policies towards entrepreneurship (Garofoli 1994; Johnson and Parker 1996; Reynolds et al. 1994; Rotefoss and Kolvereid 2005; Kangasharju 2000).

Academics have further discussed how the regional culture reflects an important indicator in the supply side of entrepreneurship, co-determining the preference structures for entrepreneurial activity (Bosma and Schutjens 2011; Stam 2009, 2010; Sternberg 2009). For instance, the presence of entrepre-

neurial role models in a regional community has been found to influence the individual's perceptions of desirability of entrepreneurship and, thus, their potential to start up in business (Fornahl 2003; Lafuente et al. 2007; Vaillant and Lafuente 2007). In this context, previous studies have explored whether positive entrepreneurial examples and a high number of entrepreneurs within a regional and socially tight context can foster the local acceptance of entrepreneurial activity (Gibson 2004; Lafuente et al. 2007; Lundström and Stevenson 2005; Reynolds et al. 2000). Alongside the number of entrepreneurs, high density of small enterprises in a region has often been singled out as a factor that enhances entrepreneurial aspirations (Reynolds 1994; Rotefoss and Kolvereid 2005) by providing business ideas for potential entrepreneurs as well as opportunities for them to familiarize themselves with the management of a small business (Kangasharju 2000; Rotefoss and Kolvereid 2005).

Mueller (2006) has further illustrated that the local entrepreneurial environment tends to exert particular influence on the early phase of an individual's decision process on whether to start a business, while this impact decreases once an entrepreneurial desire has been established. Here, Liñán et al. (2011) have recently shown that an individual's perceived valuation of an entrepreneur, in a broader societal and closer social context, has an impact on their entrepreneurial intention level, and that this influence significantly varies between regions. Vaillant and Lafuente (2007) have also argued that, especially in European regions, entrepreneurial failure is socially stigmatized, which increases the perceived obstacles to engaging in entrepreneurial activities. Other studies have explored whether a higher regional start-up rate in the past serves as an ongoing conduit for higher entrepreneurial activity, for example by increasing innovation activity, knowledge spillovers, competition and firm diversity (Audretsch and Keilbach 2004; Bosma et al. 2008; Fritsch and Mueller 2007; Ritsilä 1999). Taken together, these empirical examples are all indications of the need for the inclusion of spatially orientated—both theoretical and empirical—research when investigating the emergence of entrepreneurship.

The role of spatial contexts, at the regional and local scale, for new firm formation processes has become even more pronounced in light of studies that have underlined the stylized fact (Stam 2009; 2010) that entrepreneurs establish their businesses near where they live (Cooper and Folta 2000; Sorensen and Audia 2000; Sorenson 2003; Stam 2007). For instance, Stam's (2007, 2009, 2010) work has suggested that most entrepreneurs base their business in their home region because of personal motives and support from personal networks (e.g., family, friends, work colleagues) who live in the surrounding environment. Further, the author has argued that 'entrepreneurs [tend to] discover opportunities in markets with which they are familiar, most

likely in or near their former working and living environments' (Stam 2007: 12). Supporting this line of argument, the study of Dahl and Sorenson (2009) has shown that it is emotionally important for entrepreneurs to locate their business close to the area where their family and friends live, while Figueiredo et al. (2002) have emphasized the role of personal relationships by showing that entrepreneurs tend to accept far higher labor costs to operate their new business where they live.

Moreover, Malecki (2009) has suggested that most of the (nascent) entrepreneur's contacts are in fact local, which, in turn, enables them to accumulate extensive knowledge about the local industry and to gain competitive advantage in the resident region. Michelacci and Silva (2007) have illustrated that entrepreneurs are more likely to stay in the area where they were born than are dependent workers. Their study has further concluded that local entrepreneurs are better at exploiting entrepreneurial opportunities in the region than non-locals, as they are able to use more capital-intensive technologies and generally to develop more profitable and larger businesses. Besides that, it has to be noted that entrepreneurs often consider local or home-based locations because they have limited financial resources (Stam 2007) and/or run their new business on a part-time basis, delaying their decision to become a full-time entrepreneur until the new business starts to prosper (Stam 2010). Subsequently, 'for nascent entrepreneurs the focal choice is [often] what kind of firm to start given their location, not so much choosing a location for a given firm (Stam 2007, 2010: 142). This, in turn, emphasizes the important role of considering the "environment for entrepreneurship" in a region or locale [as] a critical part of the entrepreneurial process itself, as well as of the chances for local economic development' (Malecki 2009: 176).

'The process of becoming entrepreneur
is highly conditioned by the formal
and informal institutions'
(Veciana and Urbano 2008: 373)

3.4 Institutional context

While scholars have long been exploring the role of broader cultural, economic and political contexts for economic activity (Cochran 1960; Hodgson 1988; Polanyi 1957; North 1990; Veblen 1919; Weber 1904, 1905), more recent research has begun to explicitly explore the influence of culture and society and also political and economic systems on entrepreneurship (Welter 2011). Such research often, whether directly or indirectly, refers to

informal institutions (e.g., culture, values, norms, traditions) and/or formal institutions (e.g., laws, property rights, economic regulations), as were introduced by the work of North (1991). Accordingly, a number of studies have emerged particularly since the 1990s, that draw attention to the various forms of entrepreneurship embedded in different institutional environments (Ahlstrom and Bruton 2002; Aidis et al. 2008; Kalantaridis 2007; Freytag and Thurik 2007; Lim et al. 2010; Nee 1992; Stephen et al. 2005; Stenholm et al. 2013; Welter and Smallbone 2008, 2011), increasingly suggesting that '[t]he process of becoming (an) entrepreneur is highly conditioned by the formal and informal institutions' (Veciana and Urbano 2008).

It has also come to be widely acknowledged that informal institutional contexts need to be combined in order to understand the influence of each pillar on entrepreneurial activity as well as the interaction between institutions and entrepreneurship more generally (Acs and Karlsson 2002; Davidsson et al. 2006; Li and Zahra 2012; Welter and Smallbone 2011). However, while several theoretical conceptions of (the different forms of) institutions strongly consider the interactive elements between formal and informal institutions (or even neglect this simplified, binary distinction (see Section 4, and particular Hodgson (2006) for a critical overview), the existing empirical research that tackles relationships between institutions and entrepreneurship is often characterized by focusing either on formal or on informal structures for entrepreneurial activity (Welter 2011). To this, Bruton et al.'s (2010) literature review has underlined that only a small body of the institutional research on entrepreneurship explicitly engages in institutional theoretical work, apart from using established classifications of institutional pillars (North 1991; Scott 1995). Accordingly, North's (1991) binary distinction of formal and informal institutions is used to structure the following literature review.

Formal institutional context

Scholars have increasingly sought to understand formal institutional structures for entrepreneurial activity by investigating regulatory frameworks of both a political and an economic nature. For instance, Smallbone and Welter (2009) have researched the initial reforms of legal systems in Central and Eastern European countries showing how changes in formal institutional frameworks can profoundly determine entrepreneurial activity by permitting private businesses to exist. These authors have also uncovered different ways in which the governments of Estonia and Belarus influence the nature and pace of business development, thus emphasizing the role of institutionalized behaviors in this emerging process (Smallbone and Welter 2010). In addition, Ireland et al. (2008: 124) have suggested that in the transition economies of Central and Eastern Europe 'social movement activity by groups with different political

identities [can] influence the rules that support or constrain entrepreneurship.’ Meanwhile Shane (2003) has argued that political forces, technological change and business regulations are decisive factors in the existence and number of new entrepreneurial opportunities.

The recent multi-country research by Stenholm et al. (2013) has suggested that regulatory frameworks tend to have a stronger effect on entrepreneurial activity than informal institutions, while Stephen et al.’s (2005) cross-country study has demonstrated that legal institutions have an impact on the countries’ level of entrepreneurship. In particular, Stephen et al. (2005) have shown that nations with legal systems akin to the English common law system exhibit significantly higher entrepreneurial activity rates than countries with any of the four other legal system types referred to. The implication is that regulatory frameworks based on English common law tend to offer stronger protection of property, investor and creditor rights. Acs and Karlsson (2002: 184) have further emphasized the role of government expenditure and taxation in entrepreneurship, concluding that ‘it appears as if there is a negative correlation between entrepreneurship and the total taxes as a share of GDP, the public spending as a share of GDP, [and] the average corporate tax level.’ Klapper et al.’s (2009) study, based on the World Bank Group Entrepreneurship Survey data, has further shown that entrepreneurially-friendly countries tend to have high business start-up rates matched with a stable political environment, modern business registration systems, reduced bureaucratic requirements, and simplified business laws. Nyström (2009) supports this line of argument with a cross-country study that found that a smaller government sector, well-developed legal structure and security of property rights, and less strict regulations of credit, labor and business are positively related to entrepreneurial activity.

Moreover, Grilo and Thurik (2005) have demonstrated that the majority of the population of the 15 EU member states of the time and the USA perceives administrative and bureaucratic complexities as a formal start-up barrier, exerting a negative impact on nascent and actual entrepreneurship levels. Lim et al.’s (2010) research on formal institutional influences in entrepreneurial cognitive and decision-making processes has shown that individuals in countries with less complex regulatory regimes and more property rights protection generally show higher levels of venture arrangements and willingness scripts. They define venture arrangement scripts as the knowledge individuals have about the utilization of specific arrangements (e.g., tools, networks, resources) that are needed to found a new business; while willingness scripts are the knowledge that reflects an individual’s commitment to become an entrepreneur. To this, the study of Bosma and Schutjens (2011: 737) has added that the identified ‘positive relation between strong entrepreneurial attitudes and subsequent entrepreneurial activity is not straightforward.

There are national formal institutional [...] forces at play, which at the individual level reinforce or deter the decision to indeed start a business.'

Klapper et al. (2006) have further reported that cost intensive market regulations hinder the formation of new limited liability firms and the growth of incumbent firms, even when controlling for other formal structures, such as protection of property rights and labor regulations, particularly in industries with presumed high entry rates. Furthermore, the study of Spencer and Gómez (2004), based on data from 23 countries, has suggested that the regulative institutional environment relates to the success of new ventures by showing that government policies have a strong effect on the percentage of firms listed on the stock market. Earlier studies underline these arguments by showing that the potential of business creation and development can be undermined as a result of the entrepreneur's awareness of a broader range of rules and procedural requirements, and obligation to report to many institutions (Dana 1987, 1990; Young and Welsch 1993; Gnyawali and Fogel 1994). For instance, Dana's (1990) comparative study of two national environments located on the same Caribbean island—Saint Martin, under French administration and Saint Maarten, which is a Dutch territory—has revealed entrepreneurship levels were higher in Saint Maarten, which supported new ventures by providing low taxes, essential duties and direct support programs as well as eliminating exchange controls and complex bureaucratic procedures. On the contrary entrepreneurial activity faltered in Saint Martin, where entrepreneurs faced barriers resulting from regulatory restrictions and extensive bureaucracy.

However, Van Stel et al.'s study (2007), across 39 countries, found that while capital requirement is negatively related to entrepreneurship levels, administrative burdens, such as time, cost and the number of procedural requirements, do not relate to birth rates of nascent or young ventures. Accordingly, they have suggested that formal regulatory efforts by the governments may not in themselves support entrepreneurship. Similarly, Begley et al.'s (2005) study, across 13 Anglo-Saxon, East Asian, and South Asian countries, has demonstrated that government regulatory efforts to support entrepreneurship can have a reverse effect by decreasing the attraction of the potential entrepreneur's start-up. In line with Little's (1987) work, they have concluded that the increasing regulatory support by governments of entrepreneurship, may reflect greater support for larger businesses, thus indirectly hindering the emergence of small businesses by increasing the attractiveness of a career in larger companies.

While Aidis et al. (2008) have suggested that in the Russian case, institutional voids have a negative effect on new venture creation, Puffer et al.'s (2010) study has highlighted that formal institutional voids in Russia and China can give rise to high risk and uncertainty for entrepreneurs, but that the

challenging entrepreneurial environments in transition economies can also stimulate creative entrepreneurship. Underlining this argumentation, Kalantaridis (2007) has illustrated that in post-socialist countries entrepreneurs have developed their own way of dealing with ongoing formal institutional changes and deficiencies, which, in turn, often spawn institutional change. This is in line with the early work of Nee (1992), which has explained institutional and market transitions in China by investigating the relationship between the role of government, enterprises and market regulations. Referring to the case of service businesses in Ukraine, Welter and Smallbone (2011) have further argued that '[b]y commercially exploiting institutional holes, these entrepreneurs might trigger change in the formal institutions aimed at leveling out the institutional deficiencies that created the opportunities.' Brautigam's (1997) case analysis on local industrialists in one part of Nigeria has also uncovered similar patterns in the relationship between holes in formal institutional practices and entrepreneurship by showing how entrepreneurs 'have substituted for the absence of a developmental state by themselves filling in the gaps left by market failures, particularly of information, and of public goods.'

Lee et al.'s (2010) cross-country research has found a negative relationship between the risk involved in filing bankruptcy and new firm formation rates, suggesting that more entrepreneurship-friendly (i.e., there is less time/cost associated with the bankruptcy procedure) can lower start-up barriers by encouraging entrepreneurs to risk more and establish more new businesses. Li and Zahra's (2012: 106) analysis of venture capital (VC) activity for 68 countries has provided evidence that 'the formal institutional development has a positive and significant impact on the level of VC activity, but [that] the effects of formal institutions further depend on informal cultural constraints such as uncertainty avoidance and collectivism.' Accordingly, their study has concluded that countries with a well-developed formal institutional framework (mainly referring to European and OECD countries) are able to institute and enact venture capital programs and policies (e.g., lower taxes and liberal bankruptcy laws) that essentially support VC activity and, thereby, entrepreneurship. At the same time, for countries without a strong formal institutional framework (mainly referring to emerging and transition economies), it is very difficult to sustain VC programs and to attract VC investments.

Informal institutional context

Scholars have long emphasized that culture and the informal institutional environment influence economic activity and development (see e.g., McClelland 1961; North 1990; North 2005; Shane 1993), while increasingly acknowledging that cultural norms and values shape entrepreneurial behavior

(see e.g., Ahlstrom and Bruton 2002; Baumol and Strom 2007; Freytag and Thurik, 2007; Hayton et al. 2002; Sternberg 2009; Thornton et al. 2011) through both the demand and supply side of entrepreneurship (Verheul et al. 2002). While formal institutional and regulatory contexts have been relatively well-researched (Welter 2011), empirical research on informal institutions and culture in the context of entrepreneurship is still in an early phase (Hayton et al. 2002; Freytag and Thurik 2007). Nevertheless, a range of empirical studies have emerged, particularly in the past two decades, that provide useful insights into the cultural and informal institutional contexts for entrepreneurship, across and within countries.

For instance, Wilken's (1979) often cited comparative and historical study of the industrial development of six societies (England, France, Prussia-Germany, Japan, the USA, and Russia) during the eighteenth and nineteenth centuries has already explored how the more social legitimacy was accorded to entrepreneurship in a society the higher the subsequent level of entrepreneurship. More recently, Shane (2003) stated that the interest in engaging in entrepreneurial activities is higher when the level of social acceptance of entrepreneurship in a society is high too. Further, the study of Begley and Tan (2001) has found how socio-cultural values shape the individual interest in entrepreneurship, and can hinder or support an individual's decision to prepare for and start a business. For example, they have shown that cultural perceptions of the entrepreneur's social status and shame stemming from a business failure were better indicators of entrepreneurial motivations in East Asian than in Anglo-Saxon countries.

Mueller and Thomas (2000) found, in their study based on a student sample across nine countries, a positive relationship between individualistic cultures and an internal locus of control orientation, while particularly demonstrating that internal locus of control, combined with innovativeness, tends to relate to (Hofstede's³ (1998, 2001) operationalization of individualistic, low uncertainty avoidance cultures than collectivistic and high uncertainty avoidance cultural environments. Mitchell et al.'s (2000) research, across seven Pacific Rim countries, has found that cultural values shape entrepreneurial cognitions and their relationship with the actual decision to start a business. In particular, they have shown that an individual's perception of their competence to become an entrepreneur (ability scripts) and their willingness to do so is altered by Hofstede's (1998, 2001) individualism and power distance cultural attributes, 'suggesting [...] cultural permeability in the enactment (doing) portion of the venture creation script' (Mitchell et al. 2000: 986). Mitchell et

³ For an overview of Hofstede's national culture dimensions see <http://geert-hofstede.com/dimensions.html>.

al. (2002b) has further supported these findings by identifying significant cross-country variations in willingness and ability cognitions among 990 entrepreneurs from 11 countries, while further exploring that a set of cognitive entrepreneurial archetypes do indeed vary among countries.

Moreover, while the study by Langowitz and Minniti (2007: 356), across 17 countries, has concluded that 'women tend to perceive themselves and their business environment in a less favorable light compared to men,' the recent research by Shinnar et al. (2012) has particularly emphasized the role of culture and gender in entrepreneurial cognitions and intentions. The latter study has demonstrated that—based on a sample of 761 university students—women in the United States and Belgium perceived lack of competency and fear of failure a greater barrier than men, while this gender effect did not appear in China, suggesting that the 'Chinese culture somehow acts to shape individual perceptions of these two barriers in a way that eliminates gender differences' (Shinnar et al. 2012: 22). Underlining the role of culture and gender in the formation of entrepreneurial intention, the study by Veciana et al. (2005) has found that in Catalonia a student's gender relates to their desire and intention to create a new firm, while in Puerto Rico a student's gender plays no role in these processes. Moreover, Welter and Smallbone (2008), among others, have explored a number of specific institutional aspects involved in women's enterprising activities in transition economies. For instance, based on case studies in Uzbekistan they have shown that formal institutional voids, such as tax regulations and access to finance, almost equally hinder the creation of new businesses for both female and male entrepreneurs. However, it is the informal institutional environment (in Uzbekistan) with its cultural norms and behavioral codes that most affects the nature of female entrepreneurship, 'a large part of which involve[s] home-based or subsistence activities in an attempt to combine family responsibilities with the need to generate income for the household' (Welter and Smallbone 2008: 517). Underlining how cultural norms can affect entrepreneurship, a case study by Takyi-Asiedu (1993) had already illustrated that 'Entrepreneurial action, in [sub-Saharan Africa] [...] has been viewed as being relatively static, because a religious commitment to tradition has led to the suppression of flexibility and adaptability to change religious commitments to traditional values.'

Wennekers et al. (2007) have further examined the role of uncertainty avoidance culture in an individual's occupational choice (employment vs. self-employment), using longitudinal-data across 21 OECD countries for the years 1976, 1990 and 2004. In opposition to the study findings presented above (e.g., Mueller and Thomas 2000), their research found a positive relationship between uncertainty avoidance (as defined by Hofstede 1998, 2001) and the

prevalence of business ownership, suggesting that a restrictive environment of large businesses in high uncertainty avoidance countries tends to push individuals seeking for autonomy towards self-employment. Feyrtag and Thurik (2007) have further shown that cultural elements (across 25 EU member states and the USA) particularly influence the individual preference for entrepreneurship, whereas hard economic factors, such as tax rates and direct regulatory burden, shape the actual business start-up levels. According to the study by Stephen et al. (2005), higher levels of entrepreneurship and business ownership can in turn enhance higher entrepreneurial potential levels in an economy, emphasizing potential role model effects on entrepreneurial motivations. Applying Inglehart's post-materialism index, the study of Uhlaner and Thurik (2007), based on data from 27 countries, has shown that a society in which non-materialistic values are dominant tends to have lower (early-stage and total) entrepreneurial activity levels (according to the GEM classifications), even when controlling for a set of demographic, economic and social indicators.

Introducing a measurement of country institutional profile for entrepreneurship, Busenitz et al.'s (2000) research, based on student samples across six countries (Germany, Italy, Norway, Spain, Sweden, and the USA), has demonstrated that social normative contexts that approve of entrepreneurship encourage individuals to start a new venture, whereas formal institutional environments become essential for established firms to make initial public offerings and to gain resources and external investors. Supporting this finding, Spencer and Gómez's (2004) study, across 23 countries, has shown that informal institutional contexts (i.e., the society's attitudes towards entrepreneurs) has an effect on self-employment rates, but not on more advanced forms of entrepreneurship (i.e., new businesses with 20–100 employees and new companies listed on a country's stock exchange). In addition, the recent study by Li and Zahra (2012: 107) has provided new insights into informal institutional influences on venture capital activity by demonstrating that 'even though a strong formal institutional framework stimulates VC [venture capital] investment, both uncertainty avoidance and collectivism seem to reduce the sensitivity of VC funding to the incentives provided by formal institutions.' Thus, in line with North (1990), they have concluded that similar formal institutional frameworks in different societies (can) lead to different economic outputs.

Other scholars have explored how popular metaphors, discourses or narratives are generated, particularly by the media, and promote certain enterprise beliefs and norms within societies, portraying who business owners are and how they should be (Ainsworth and Hardy 2009; Anderson and Warren 2011; Down and Warren 2008; Nicholson and Anderson 2005). For

instance, the work and publications of Schmölders (1971, 1973, 1978) indicated how images and understandings of the entrepreneur can become institutionalized within different societies (mainly referring to Germany and other Western countries), through influences from different bodies, such as trades unionists, intellectuals and educators. More recently, the study by Nichol森 and Anderson (2005) has provided strong evidence of how media texts present ideal types of entrepreneurship by portraying the entrepreneur as heroic, a near mythical figure supporting the economy and society. Based on a sample of 480 newspaper articles, their study has shown that print media discourses tend to describe the entrepreneur in heroic terms, akin to masters of time, as a lovable rogue or as a type of polite rebel, arguing that these created images shape how people think and learn about the role of the entrepreneur. A range of other studies of the media discourse back up the findings, emphasizing a variety of similar metaphors used to portray the entrepreneur, ranging from warrior and superman to pioneer, thus again underlining the entrepreneur's individual hero status (see e.g., De Koning and Drakopoulou-Dodd 2002; Hyrsky 1998; Koironen 1995; Pitt 1998). Here, the recent work by Anderson and Warren (2011: 603) has further concluded that this entrepreneurial discourse particularly as (re)enforced by the media 'presents an assembly of entrepreneurial virtues[and that] these qualities, characteristics and actions are valorized as constituents of the enterprise culture to invent and fashion an entrepreneurial ideal type.'

In this context, previous research has also uncovered how these stereotypical images and norms reproduce informal institutional structures that can have (negative) consequences for entrepreneurial groups that do not conform to those established constructs. In line with the presented quantitative studies on culture and gender, the case studies of Hamilton and colleagues (Hamilton and Larty 2009; Hamilton 2006; Hamilton and Smith 2003) among others, have highlighted how the dominant masculine nature of these institutionalized discourses and ideal types of the entrepreneur can discriminate against female entrepreneurs. In particular, Hamilton (2006) has found how established images of the entrepreneur within society are reproduced within family firms in 'the construct/discourse of the "heroic male" owner-manager and the "invisible women" embedded in the patriarchal/paternal discourses and practices' (Hamilton 2006: 267). Moreover, scholars have begun to uncover informal institutional structures emerging from discourses that praise a younger enterprising culture, which can create barriers for older individuals who (intend to) engage in entrepreneurial activities (see e.g., Ainsworth and Hardy 2008, 2009; Down and Revelly 2004; Down and Warren 2008). For instance, Ainsworth and Hardy (2008, 2009) have stated that entrepreneurship and age are independent constructs that do not complement each other, and

that older entrepreneurs find it difficult to conform to a younger, dominant enterprising culture. As such, they deviate from popular norms of enterprise, within discourse, which reflect social reality, where negative stereotypes can prevent the intentions of nascent entrepreneurs and discriminate against older (potential) entrepreneurs (Ainsworth and Hardy 2008, 2009).

3.5 Contextualizing the emergence of new ventures: challenges for the present study

The dissertation will now offer a summary of the main insights drawn from the literature reviews presented above regarding the social, spatial and institutional contexts, and to discuss the specific research gaps that the current study and particularly its four research papers aim to address. In the following *Section 4*, the author will then introduce and propose a multi-layered institutional framework as a potential way of theorizing the role of different contexts in economic and particularly entrepreneurial activity.

Social context

The previous research has suggested that the emergence of entrepreneurship can be better understood when considering an individual's embeddedness in their various social contexts. This reasoning is justified, for instance, in the important role of social capital in gaining access to the tangible and intangible resources needed for preparing and founding a new venture. Social capital, in turn, emerges through the active building of strong and weaker relationships with(in) social networks, whereas networks with entrepreneurial backgrounds are particular relevant to these processes. The social environment can further provide important social and emotional support for potential entrepreneurs, which encourages them to believe themselves able to become an entrepreneur, and to form the intention to become one, while supporting their willingness to progress in the nascent entrepreneurship phase. Since potential entrepreneurs are often faced with limited resources, especially in the very early start-up phase, close social networks, such as family and friends, play an essential role in influencing their entrepreneurial motivation and the process involved in forming a firm. Moreover, nascent entrepreneurs often need to proactively gain (social) approval and support from their resource gatekeepers, in order to be able to transform their nascent organization into an operational business. This is in line with the emerging literature that suggests that potential entrepreneurs can create entrepreneurial opportunities and capital through actively forming, engaging with, and developing trust and trustfulness in new or existing social networks.

Even though scholars have increasingly recognized the role of norms in social networks, the previous research on social networks has merely focused on the exchange of resources and information, thus limiting our understanding of the social norms provided by the network actors (Krueger 2000; Autio and Wennberg 2010). Scholars have also increasingly begun to argue that these social contexts within which the potential entrepreneur operates are, in turn, embedded in a broader environment, drawing attention to the relationship between the social networks and cultural contexts. For instance, Welter (2011) and Thornton et al. (2011) have recently emphasized the importance of, and major challenge involved in, exploring social-cultural links; the social norms and values they create both theoretically and empirically, and how they influence entrepreneurial aspirations and behaviors. Underlining this view, Thornton et al. (2011) have further argued that the processes of exploitation of social capital are normative and cultural in nature, potentially implying social rules that emerge within networks that can label people winners and losers (Anderson and Jack 2002) or exclude outsiders (Portes and Landolt 2000). Linan et al.'s (2011) study argued that both norms and values within the closer social environment and society at large have an impact on the formation of entrepreneurial intentions. Autio's and Wennberg's (2010: 23-24) recent multilevel study offers a first empirical insight into how 'norms and attitudes of entrepreneurship are spread in [social] "reference groups"', suggesting that 'the cues of entrepreneurial behavior propagated by external institutions are modified [...] through social interaction' and networks. In addition, the case study by Hamilton (2006) has highlighted how institutionalized images of the typical entrepreneur within society are reproduced within family firms, where it is generally men who adopt the role of owner-manager.

The above leads to calls for further multilevel research and concepts that explore the emergence of entrepreneurship in light of the relationship between social and cultural contexts and, particularly, the related social norms and sanction mechanisms emerging within the potential entrepreneur's social networks. Here, Welter (2011) has also highlighted the need for further studies and concepts that incorporate the recursive (bottom-up) links in contextualizing the emergence of entrepreneurship, drawing attention to the ability of potential entrepreneurs to shape social norms and their social, and institutional, contexts. We still know little of how social norms emerge from the potential entrepreneur's social networks; how they are co-determined by the institutional environment; and how potential entrepreneurs are able to resist and change prevalent social norms during their business start-up process. These are the recent debates and emerging research gaps to which this dissertation, *paper 2* and particularly *paper 4* contributes.

Spatial context

Academics are increasingly highlighting the role of spatial contexts in entrepreneurial activity. Spatial research on larger geographical scales has become widely established, providing useful insights into national variations of entrepreneurship levels (e.g., nascent entrepreneurship, start-up activity). That has spurred scholars to emphasize the regional and local dimension of entrepreneurship, in light of studies that have found the national framework, and other, conditions for (pre-/nascent) entrepreneurship to vary within a country, across larger and smaller regional units. As noted previously, a number of regional conditions have been identified, ranging from demographic, social, economic, to industry features of the region (Sternberg 2009). Moreover, besides the processes of globalization and the related increasing importance of regional markets (Bosma et al. 2008), scholars have turned their attention to the locational inertia of entrepreneurs (Stam 2007). This has added further impetus to the calls to include the local and regional context in research on new venture creation. This body of research has indicated that entrepreneurs usually start new businesses in their area of residence, owing, for instance to personal motives, personal relationships, established local contacts and knowledge, and / or financial issues.

However, while spatially orientated research has been growing significantly, over the past decade, research on the local and regional nature of the emerging process of entrepreneurship remains undeveloped. Malecki (2009: 176) has underlined that ‘relatively little research on entrepreneurship has examined the critical nature of the [potential] entrepreneur’s local context in which he/she operates’, while Sternberg (2009) has suggested that despite the increasing recognition of contextual aspects, entrepreneurship research still largely neglects spatial implications. In line with these arguments, the literature research by Trettin and Welter (2011) revealed that only a small body of spatial research is conceptual in nature and pointed out the lack of studies explicitly addressing socio-spatial contexts. As indicated above, the emerging process of new ventures is strongly affected by the potential entrepreneur’s local environment (Stam 2007; 2010), where, for instance, role models, social networks, and prevalent social sanctioning mechanisms can influence entrepreneurial intentions (Liñán et al. 2011) and (nascent) entrepreneurial activities (Mueller 2006; Bosma et al. 2011). Thus, spatial contexts can also be understood by reference to the social boundaries of the local communities, reflecting cognitive and culture-based norms and shared meanings (Thornton and Flynn 2003). It is a finding that calls for further research exploring the links between local context and socio-cultural elements, and their implications for the emergence of new ventures (Anderson 2000; Liñán et al. 2011; Welter 2011). Moreover, previous research on regional conditions

for entrepreneurship has mainly focused either on new firm formation rates or the nascent entrepreneurship level as the dependent variable. Thus, we know very little of how regional contexts influence the early pre-action phases of new venture creation (for exceptions see e.g., Bosma et al. 2009; Bosma and Schutjens 2011; Liñán et al. 2011). Accordingly, further multilevel research is needed that seeks to develop our understanding of the role of regional environments in entrepreneurial cognition processes (Mitchell et al. 2007) and the formation of entrepreneurial intentions (Liñán et al. 2011), providing new insights into the pre-conditions of venture creation (see also Section 2). These are the research gaps in the spatially orientated entrepreneurship research to which this dissertation and particularly *paper 2* and *paper 3* theoretically and empirically seek to narrow.

Institutional context

Scholars have shown increasing interest in examining the role of formal and informal institutions—usually at the national level—in the emergence of entrepreneurship. One such stream of research has demonstrated that formal institutional frameworks, both political and economic in nature, can influence entrepreneurial motivations, nascent entrepreneurial activities, new firm formation rates, firm growth and VC activity. These studies have suggested that a supportive formal institutional context for these different forms of entrepreneurship in a country features a stable political environment, well-developed legal structure, secure property rights, reduced bureaucratic requirements, less complex and more liberal business regulations, less regulation of credit and labor and reduced time/cost associated with bankruptcy procedures. While such well-developed formal institutional frameworks have usually been found to support entrepreneurship, several studies have also explored how formal support initiatives and regulatory efforts by the government can also undermine entrepreneurship. Previous research has further suggested that formal institutional voids yield high risk and uncertainty for entrepreneurs and new businesses, but that these challenging environments (often exemplified in the transition economies of eastern Europe) can also stimulate innovation and (creative) entrepreneurship. Scholars have also found that formal institutions in different cultures and societies can result in different economic outcomes, which leads to the body of research that has focused primarily on informal institutional contexts.

Several single- and multi-country studies have emerged that provide useful insights into cultural and informal institutional influences on entrepreneurial cognitions and motivations as well as nascent entrepreneurship and business start-up levels. In summary, these studies have suggested that social normative contexts favoring entrepreneurship (for instance, societies with a larger

number of entrepreneurial role models or where entrepreneurs enjoy high social status or are not frowned upon if their business fails) also enhance higher entrepreneurial engagement levels. While scholars have further indicated that individualistic, high uncertainty avoidance, and power distance cultures tend to positively relate to an individual's motivation and perceived ability to run their own business, a few studies have also noted that informal institutional contexts seem to play a stronger role in the pre-firm formation phase than for (the development of) established enterprises. The dissertation particularly draws attention to this research stream, and identifies several research gaps that need to be addressed to develop our understanding of cultural and informal institutional contexts for entrepreneurship.

Generally speaking, the existing cross-country research on culture and entrepreneurship has mainly followed Hofstede's (2001) seminal work (Hayton et al. 2002) or an aggregated psychological trait approach (Freytag and Thurik 2007). A comprehensive review by Hayton et al. (2002) of 21 empirical studies that investigate the association between national cultural attributes and entrepreneurship has underlined that the lion's share of these studies is based on Hofstede's concepts of national culture and that other approaches have been neglected or underdeveloped. Stemming from such research, uncertainty avoidance, among others, has become probably one of the most prominent cultural indicators used to investigate the relationship between culture and entrepreneurship, mainly suggesting that the greater the uncertainty avoidance, the less entrepreneurial a society tends to be. Furthermore, 'uncertainty avoidance is a cultural trait closely linked to attitudes of risk and uncertainty and, consequently, to the entrepreneurial propensity within a country according to the aggregate psychological traits approach,' which suggests that, 'for a given country, the more individuals with entrepreneurial values there are in a society, the more individuals will display entrepreneurial behavior' (Thurik and Dejardin 2011b: 57-58).

Accordingly, previous research has to a large extent focused on cultural aspects of entrepreneurship from a highly individualistic view of culture, using aggregated psychological measures to capture cultural differences in entrepreneurship. In addition, previous empirical research has tended to examine only broad cultural values and their relationship with different forms of entrepreneurship, neglecting 'measures of normative institutional environments that are specific to a particular domain, such as a society's attitudes about entrepreneurship, [which] appear to hold greater predictive power' (Spencer and Gómez 2004: 7). This is reflected in the current debates on institutions and entrepreneurship, calling for further research that addresses effects of specific institutional and cultural contexts on entrepreneurship (Schendel and Hitt 2007: 3) and thereby adds to the literature aimed at contextualizing entrepre-

neurship, and particularly at conceptualizing and measuring specific socio-cultural influences on entrepreneurial behavior (Thornton et al. 2011; Welter and Smallbone 2011).

Now further research is needed that applies and develops approaches that enable the capture and measurement (more directly and holistically) of cultural and societal values towards entrepreneurship. In this regard, the *social and moral legitimation* (approach) of entrepreneurship in a society (Etzioni, 1987) has been discussed as potentially offering a way of capturing such specific informal institutional settings for entrepreneurship (Freitag and Thurik 2007), suggesting that the more entrepreneurship is socially legitimized in a society, the higher the level of entrepreneurial activity should be (Etzioni 1987; Shane 2003; Wilken 1979). However, to date, very little cross-country research exists that seeks to theorize and empirically uncover the various entrepreneurial legitimation processes in society and their impact on entrepreneurship. Moreover, Bruton et al. (2010: 433) have emphasized that ‘unfortunately, unless larger samples can be identified, the interdependencies between values and entrepreneurship may remain difficult to discern. Furthermore, [future research] requires a more cogent conceptualization of anticipated interactions among culture, institutional context, and behaviors than has been presented to date’. Taken together, these are the main debates to which this dissertation and particularly *paper 1* theoretically and empirically contributes.

Moreover, the previous cross-country studies on culture and entrepreneurship have largely chosen as their explanatory variable either entrepreneurial motivation, nascent activity or business start-up levels. In so doing they neglect a dynamic perspective on the emergence of new ventures, as discussed in Section 2. While, for instance, a significant relationship can be found between certain informal institutional contexts and entrepreneurial intentions, this does not imply that this impact endures when the individual progresses from the pre-action phase to nascent entrepreneurship or early firm operation phase. As a result, the conclusions of such research may not be sufficiently specific to develop our knowledge of the influence of cultural environments on entrepreneurial behavior. This dissertation and particularly *paper 1* seek to add to this knowledge gap by analyzing the impact of specific informal institutional contexts in the different phases of the new venture creation process, applying the concept introduced in section 2, that of the entrepreneurial ladder (Van der Zwan et al. 2010).

Reviewing the previous discussions on the need to research socio-spatial contexts for entrepreneurship, particularly the recent work of Bosma and Schutjens (2011) has provided useful insights into how informal institutional contexts and specific social values at the regional level can play a stronger role in shaping entrepreneurial attitudes and action than can national institutional

environments. Similarly, referring to the discussion on the social contexts for entrepreneurship, we know that cultural values towards entrepreneurship are often reflected and modified in the (prospective) entrepreneur's interaction with his or her social environment, potentially influencing entrepreneurial thoughts, intention or actions. Underlining this argumentation are studies that have emphasized the role of institutionalized discourses and narratives in society (e.g., those created through the media), which at the same time mirrors norms and beliefs guiding and affecting social interactions at the micro-level. Thus, in order to understand the relationship between informal institutional contexts and new venture creation processes it is important to explore socio-cultural and institutional effects not only at the society level, but also—and probably even more importantly—at the regional, local and social level (Bosma and Schutjens 2011; Stenholm et al. 2013; Thornton et al. 2011; Trettin and Welter 2011; Welter 2011). These are emerging research gaps, which this dissertation and particularly *papers 2, 3 and 4* seek to narrow by contributing new insights.

4 A MULTI-LAYERED INSTITUTIONAL APPROACH TO NEW VENTURE CREATION

‘Actor and institutional structure,
although distinct, are [...] connected in a circle
of mutual interaction and interdependence’
(Hodgson 2006: 8)

4.1 Towards a theorizing context for new venture creation

As presented in the previous section, scholars have increasingly highlighted the importance of developing our understanding of the multiplicity of contextual influences in entrepreneurial processes, and have also demonstrated an awareness of the challenges that brings. While this dissertation has explored three potential contexts (social, spatial and institutional) that play a role in shaping various forms and levels of entrepreneurship, it has also discussed some of the emerging knowledge gaps in the previous literature, calling for further theoretical and empirical research. On the one hand, the literature review indicates that even though the number of studies on contextual influences on entrepreneurship has significantly increased over the past two decades, we still know relatively little about specific social, spatial and institutional influences on entrepreneurial cognitions and intentions and the process of new venture creation.

On the other hand, it suggests that in order to improve our knowledge of the contextual embeddedness of (the early phases of) new venture creation, it is important to continue to uncover the linkages of the different contexts, such as certain socio-spatial or socio-institutional elements, and their influences on entrepreneurship. Taken together, this leads to a main challenge for future research, and that is finding ways to *theorize and empirically explore the context for venture creation*, by addressing the multiple nature and levels of both context and entrepreneurial processes (Bosma and Schutjens 2011; Thornton et al. 2011; Welter 2011).

This section proposes a theoretical framework to assist in conceptualizing and interpreting the complex relationships between the different contexts (Section 3), and their interaction with new venture creation processes (Section 2). This in turn sets the theoretical basis for the empirical work in this dissertation. Entrepreneurship scholars have suggested that such a theoretical

framework should be able to capture both the top-down influence of context on entrepreneurial behavior and the bottom-up effects produced by potential entrepreneurs on context. For instance, Welter (2011: 176) has recently argued that ‘Multi-layered embeddedness concepts that cut across levels of analysis can assist in theorizing top-down effects, while bottom-up effects can be theorized through considering individual adaptability, change, and co-evolutionary processes.’ Moreover, Thornton (1999) has pointed out that multilevel theories and models are valuable to combine individual- and environmental-level variables to capture the individual and contextual heterogeneity of entrepreneurship. Davidsson and Wiklund (2001) have further raised the question of multilevel analysis and theory building as one of the main issues in entrepreneurship research. In this regard, an increasing body of scholarly work has suggested that an institutional perspective can provide a foundation for a multi-layered framework for analyzing the different contexts interacting with entrepreneurial processes (Bruton et al. 2010; Thornton et al. 2011; Welter 2011; Welter and Smallbone 2011), while Veciana and Urbano (2008: 373) have suggested that the ‘process of becoming [an] entrepreneur can be explained through the institutional theory.’ Before discussing the developments of and different strands of institutional theory in greater detail, the dissertation’s main conceptual arguments for applying an institutional lens will be outlined below. The arguments are based on the recent discussion in entrepreneurship research that addresses the advantages and challenges of applying institutional perspectives.

4.1.1 Why adopt an institutional approach to entrepreneurship?

Generally speaking, an institutional perspective on entrepreneurship acknowledges that entrepreneurial behavior and firm formation processes depend on the individual’s relationship with the external environment, particularly the institutional environment (Garud et al. 2007; Thornton et al. 2011; Veciana and Urbano 2008; Welter and Smallbone 2011). Added to this, an institutional perspective has the advantage that ‘it does not have restrictive scope conditions with respect to the rationality of actors, historical time, and level of analysis. [...] This theoretical flexibility provides the ability to link the micro supply-side and macro demand-side perspectives’ (Thornton 1999: 35, referring to Scott 1995). In this context, scholars have also noted that institutional perspectives can incorporate both links of macro-institutional (culture) and micro-institutional mindsets (e.g., organizational or family mindsets) shaping individual entrepreneurial behavior (Bruton et al. 2010; Wicks 2001). Similarly, other scholars have argued that an institutional perspective

acknowledges the linkage of both social and cultural elements relating to entrepreneurship, potentially serving as a fruitful framework to explore the social and cultural influences on entrepreneurial decisions and the new venture creation process (Thornton et al. 2011; Welter 2011).

Moreover, it has been suggested that an institutional perspective allows consideration of the embeddedness of entrepreneurial processes not only in socio-cultural contexts, but also in different spatial contexts including the socio-spatial, and economic systems (Roxas et al. 2008; Veciana and Urbano 2008; Welter 2011). In this context, institutional theory has been viewed as providing a useful theoretical means to address many different contexts and factors, ranging from culture, legal structures, tradition and history of regions and industries to economic incentives that can influence entrepreneurial processes. Scholars have also increasingly emphasized that an institutional perspective can complement socio-psychological approaches to entrepreneurship, to theorize and explore environmental influences on entrepreneurial cognitions and intentions (Lim et al. 2010; Liñán et al. 2011) and also the actual venture creation decision (Lim et al. 2010).

Further, modified institutional theories have been suggested to offer an overarching approach to link the bottom-up and top-down processes in the emergence of entrepreneurship, by combining multi-layered embeddedness concepts with theoretical lenses of the individual change agent and co-evolutionary processes (Welter 2011; Welter and Smallbone 2011). Following these conceptual arguments by entrepreneurship scholars, this dissertation will now turn to providing a (critical) historical review of the evolution and thoughts of the old and new institutional economics (Hodgson 2004, 2006, 2007a,b,c, 2009; Rutherford 1995, 2000, 2001), while also exploring the developments of old and new sociological institutionalism, and their role in institutional economic research (Nee 2003; Rowan 2010; Scott 2004, 2010).

4.2 Early traditions in institutional economics

The nature and economic role of institutions has long been of interest. Both the 'German' historical school (1840–1930) and the 'old' American institutional economics (dominant in the interwar period) held varied theoretical, philosophical and political viewpoints, but they had already a common interest in adjusting economic theory to institutional, cultural and historical circumstances. While some members of the historical school developed a strong belief that data collection and analysis is the basis for theory development, others such as Schmoller (1900) and Sombart (1930) became firm advocates of the development of a systematic theory, especially after the Austrian

school's or in other words Carl Menger's attack on the historical school in the 'Methodenstreit' in the 1880s. Their theoretical work inspired many other scholars, such as Max Weber and Joseph Schumpeter; however, the tradition of German institutionalists disappeared with the beginning of the Second World War (Chavance 2008; Rutherford 2000, 2001; Hodgson 2004, 2007b).

The American institutional scholars, inspired by their founder, Thorstein Veblen (1899, 1919), recall his emphasis on both the central analytical role of institutions and institutional change as well as the rejection of hedonist psychology (Rutherford 2001). Accordingly, Veblen's view has been 'highly critical of the underlying economic assumptions regarding individual behavior and the "homo economicus"', suggesting that 'much behavior was governed by habit and convention' (Veciana and Urbano 2008: 370). Together with Veblen, who was instrumental in developing the intellectual foundations, Mitchell (1927, 1937) and Commons (1924, 1934) have been strongly involved in the early developments of institutional economics (Rutherford 2001, Hodgson 2007b). In the concepts they developed, markets themselves have been defined as institutions, and as partly constituted by the state's action. Another popular theme in their work referred to the notion of endogenous preferences, which approached individual preferences as not given, but as being shaped by institutional and cultural conditions. In addition, their scientific work was strongly empirically driven, with the aim of supporting the state in dealing with critical economic and societal issues, such as poverty and business recessions. (Rutherford 2000, 2001; Hodgson 2004, 2009)

The notion of endogenous preferences has been frequently criticized as a reduction to cultural and structural determinism. However, while some traditional institutionalists have strongly supported this perspective, these solely 'top-down' logics were not adopted by all institutional scholars (Hodgson 2004, 2009). Referring to the pioneering theoretical work of Veblen (1919) and Commons (1934), Hodgson (2009: 5) noted that 'there is both upward and downward causation; individuals create and change institutions, just as institutions mold and constrain individuals', suggesting that '[t]he old institutionalism is not necessarily confined to the cultural and institutional determinism with which it is sometimes associated.' Further, the pragmatist philosophy of Charles Sanders Peirce (1923), among others, as well as the instinct-habit psychology inspired by William James (1890) proved fundamental to the work of Veblen and Commons, while Veblen even called for an 'evolutionary science', following Darwinian principles⁴. Thus, the

⁴ 'In 'generalized Darwinism' the key concepts of variation, selection and continuity are assumed to apply to all domains including the social, but their meaning and underlying mechanisms may vary between domains (Hodgson 2002, in Rafiqui 2009: 330).

emergence of institutions was understood as an evolutionary process, within which routines and institutions were elements of selection, while their evolution was not perceived in reductionist biological terms. (Hodgson 2004, 2007b, 2009)

Nevertheless, the application of Darwinian and evolutionary ideas became very unpopular in social sciences, and the pragmatist philosophy and the instinct-habit psychology were replaced by forms of positivism and behaviorism (Hodgson 2009). Hodgson (2004, 2009) has further illustrated that the removal of these three intellectual elements of Veblen's economics led to a general theoretical crisis within American institutionalism, where leading theorists were unable to respond to important questions regarding the theoretical identity of institutionalism, for instance at the roundtable discussions published in the *American Economic Review* (1931/1932). John Commons' (1934) effort to offer a systematic theoretical framework for institutional economics was also undermined, while during and after the Second World War neoclassical paradigms of maximization (under constraint) and formal modeling became increasingly popular and established in social sciences. As a consequence institutionalism had become somewhat sidelined with the increasing popularity of "the neoclassical synthesis" of Walrasian general equilibrium analysis with a pseudo-Keynesian macroeconomics (Samuelson 1947, 1948). [...] However, despite its decline of influence after 1945, the old institutional economics survived[, ...] mainly promoted by leading postwar figures such as Clarence Ayres, John Kenneth Galbraith, Simon Kuznets, Gunnar Myrdal, and Karl Polanyi' (Hodgson 2009: 6). (Hodgson 2004, 2007b, 2009)

4.3 Evolution of new institutional economics

Williamson (1975) introduced the notion of *new institutional economics* in 1975, with the clear intention of distancing it from the old institutionalism. Even though the new institutional approach draws on much earlier ideas (see e.g., Menger 1871; Common 1924, 1934), Williamson sought to avoid links to any of the theoretical work stemming from the American institutionalism in his development of a new institutional economic approach. Drawing upon Williamson's pioneering work, the so-called new institutional economics have rapidly become a prominent theoretical approach used to explore existing legal, social or political institutions by referring to a view of given, individual preferences and action. Within this body of literature, 'institutions and institutional change have usually been analyzed as ways of reducing transactions costs, reducing uncertainty, internalizing externalities, and producing collec-

tive benefits from coordinated or cooperative behaviour' (Veciana and Urbano 2008: 372). Thus, 'the attempted explanatory movement is from individuals to institutions, ostensibly taking individuals as primary and given, in an initial institution-free "state of nature"' (Hodgson 2007b: 326). This emphasis on individuals as the main explanatory element has been originally underlined, for instance, in the early theoretical work of North (1981) on the emergence of capitalism and Coases's (1937) and Williamson's (1975, 1985) transaction cost analysis of the firm and the game theoretical investigations of institutions by Schotter (1981) (Rutherford 2000, 2001; Hodgson 2004, 2007b).

However, this emerging research program also rapidly came to be criticized by many scholars (see e.g., Field 1979, 1984; Hodgson 1988; Mantzavinos 2001; Sened 1997), particularly for largely neglecting the evolutionary nature of institutions, presuming given individuals behave in the context of governing rules and norms. Hodgson (2007a) has reviewed some specific examples of criticism of the developmental new institutional approach summarizing that, for instance, game theory needs to presume certain rules from the start; thus it is unable to explain the origin of elemental rules themselves. He has also critically addressed North's (1991) assumption of the spontaneous emergence of private property rights through individual interactions, by emphasizing the underestimated problems, for instance, those of radical uncertainty and the possibility of emerging property rights in a complex society without any role for the government. Moreover, referring to Williamson's (1975: 20) proposition 'in the beginning there were markets', within which individuals then go ahead and start economic activities if it involves lower transact costs, Hodgson (2007b) has critically reminded readers that the market itself is an institution, consisting of complex and changing rules, norms and social relations. Similarly, from a sociological point of view, Granovetter (1985: 489) has already argued that Williamson's 'state of nature' lens on markets neglects historical processes linked to social relations and networks, and so fails to capture 'the extent to which concrete personal relations and the obligations inherent in them discourage malfeasance, quite apart from institutional arrangements.'

4.4 (Synergetic) Developments of old and new institutionalism

MacKinnon et al. (2009) have recently stated that the new institutional economics may be seen as a reductionist approach, particularly in its early form, as it reduces individuals and social organizations to a rational calculus of transaction costs. Hodgson (2002) in turn sees strong roots in the methodo-

logical individualism⁵ and rational-choice approach. On the contrary, the old institutional economic approach has frequently been characterized by and criticized for its (over)emphasis on ‘reconciling the rational with the socially conditioned aspects of human behaviour’ (Veciana and Urbano 2008: 371), and particularly for highlighting the role of endogenous individual preferences (Hodgson 2007b, 2009). Thus, simply put, while the old institutionalism—in its original form—abandons the *homo economicus* by viewing economic behavior as merely shaped by the social world, the origins of new institutional economics is rooted in the attempt to extend and modify rational-choice models, but not in abandoning them (Rutherford 1995).

However, while considering these fundamental differences between old and new institutional economics, scholars have pointed out that both research programs share several important concerns. For instance, the emergence of both streams has been triggered by the limitations of conventional neoclassical economics, which has neglected context and institutions in its analysis (Rutherford 1995). Similarly, Nee (2003) has underlined that both the old and new institutional economic approach argue that the mathematical formalism of the neoclassical approach has added little to the knowledge of real world economic behavior. Further, Rutherford (1995, 2001) has suggested that a central aspect of both the old and new institutionalism is that institutional contexts influence economic activity, while also acknowledging that institutions change over time and react to certain economic influences. Apart from these similarities in their original foundations, more recent debates and developments in institutional economic research have also been dominated by the question of improving institutional knowledge by bridging (developed) ideas of old and new institutional economic strands and scholars (Rutherford 1995).

In this context, Hodgson (2009) has emphasized that in general the changing view of cognition in social sciences in the past two decades has also gradually affected institutional economic research. He has reminded us, for instance, that recent research in psychology and elsewhere has increasingly shifted away from the so-called deliberative thinking paradigm, as referred to by Maes (1991, as cited in Hodgson 2009). Accordingly, scholars now recognize that individual cognition ‘depends on its social and material environment and the cues provided by structured interactions with individuals and artefacts. Human cognitive capacities are thus not reducible to individuals alone: they also depend upon social interactions and structures’ (Hodgson 2009: 13). These emerging research programs developed concepts such as ‘situated

⁵ Generally speaking, ‘methodological individualists propose that social structures, institutions and other collective phenomena should be explained in terms of the individuals involved’ (Hodgson 2007c: 97). For a critical overview of methodological individualism (vs. collectivism) in economic research see e.g., Hodgson 2007c.

cognition' and 'communities of practice', emphasizing the standpoint that individual cognition and behavior cannot be separated from their context. (Hodgson 2009; Cohen and Bacdayan 1994)

Such developments in cognition research have undermined the neoclassical idea of the given, fully rational individual, and have supported the consideration of context-dependent, situated rationality and agent-structure interdependence in the new institutional economic research (Hodgson 2004, 2009). North (1990) has developed his original efficiency conceptions of institutional change by putting more emphasis on the role of ideological structures, norm-ruled action, and *mental models*, and as a result, the views on institutional economics held by North ('institutional economics of history') and Williamson (transaction costs economics) have also begun to diverge⁶ (Richter 2005). Accordingly, North (1990, 1993, 1994) has criticized the rational-choice model by raising the importance of context in cognition processes and particularly acknowledging that 'economics has largely 'ignored the informal constraints of conventions and norms of behavior' (North 1993: 12). In particular, he has suggested that a 'common cultural heritage provides a means of reducing the divergence in the mental models (...) and constitutes the means for the intergenerational transfer of unifying perceptions. (...) Belief structures get transformed into societal and economic structures by institutions—both formal rules and informal norms of behavior. The relationship between mental models and institutions is an intimate one. Mental models are the internal representations that individual cognitive systems create to interpret the environment; institutions are the external (...) mechanisms individuals create to structure and order the environment' (North 1994: 363, see also in Hodgson 2009: 14-15). This statement reflects the increasing recognition amongst scholars that social and institutional influences in individual cognitions and beliefs have brought North and the new institutional economics closer to the core ideas of the old institutionalists (Groenewegen et al. 1995; Rutherford 1995; Syll 1992; Vecianca and Urbano 2008, Hodgson 2004; 2007a, b, 2009). While the original idea of individualism of the new institutional economics is challenged, a rehabilitation of the notion of endogenous preferences, as suggested by the old institutionalists, has begun. In other words, there is an increasing overlap in the ongoing research areas between the old and new institutional strands (Dequech 2002; Hodgson 2007a, 2009).

Against this backdrop, Hodgson (2007a, 2007b, 2009) has argued that this movement brings institutional research back to, or at least closer to, the origins of institutional economics, while further suggesting that this trend should be

⁶ See e.g., Rafiqui (2009: 333–334), for a brief summary of several (emerging) differences between North's and Williamson's view.

revitalized by emphasizing aspects of cognition and meanings. Drawing upon his work and reviews (1988; 2007a, b, c, 2009) Hodgson asserts, ‘any form of rationality in a minimally complex environment relies on cognitive framing, selection and interpretation to make sense of its information inputs’ (Hodgson 2007a: 331, referring to the work of Hodgson 1988 and North 1994), while the interpretation rules and means have to be learned in a social context (Polanyi 1967, in Hodgson 2007a). Thus, individual cognition and human reasoning depend on the social and institutional structure and mechanisms, being placed in and operating via certain cues, impulses and constraints (Hodgson 2007a, 2009). ‘Among them are institutions that frame our cognitions [and] enable some behavioral options’ (Hodgson 2007a: 331; 2009). It should also be borne in mind that notions of endogenous and context-related preferences link to a broader evolutionary thinking as individual preferences can evolve and change through their dependency and interaction with broader (reinforced) belief structures and institutions (Hodgson and Knudsen 2004). As mentioned above, this evolutionary thinking harks back to the original work of Veblen (1919), which explored how contexts and constraints form habits, and how these habits, in turn, serve as a basis for changing beliefs and preferences.

In summary, we can see that the thinking of the leading scholars of the old and new institutional economics has converged again over the past two decades⁷, while some scholars even argue that ideas bridging both strands are needed to develop our institutional understanding of human cognition and action (Hodgson 2004, 2007a, b, 2009; Rafiqui 2009). In a similar vein, recent debates stemming from economic sociology (Nee 2003; Swedberg 2003) have underlined these new developments toward a more contextual interpretation of economic behavior within new institutional economics. While considering developments within economic sociological streams, the following sub-section gives a brief overview of the role of core ideas of sociological institutionalism (Durkheim 1901a,b; Weber 1904; Parsons and Smelser 1956; Parsons 1960) in institutional economics, and turns to explore the emergence and thoughts of the new sociological institutionalism, which has become widely used in business and organization research (see e.g., Meyer and Rowan 1977; DiMaggio and Powell 1983; Scott 1995).

⁷ See e.g., Hodgson (2006, Appendix: ‘Extracts from Correspondence between Douglass C. North and Geoffrey M. Hodgson) for an exemplary, and also amusing, intellectual discussion between recent ‘old and new’ institutional scholars.

4.4.1 *Sociological institutionalism and economic sociology*

Nee (2003) has illustrated that the new developments presented within institutional economic streams can also be described as a sociological turn in the new institutional economics. Already, at the end of the nineteenth century, Durkheim (1901a, 1901b) had formed the *Année sociologique*, which has represented sociology as a new discipline devoted on the comparative study of institutions, while Weber (1904, 1905) similarly introduced the interpretative lens of institutions through his comparative analysis of culture, economy and politics. Inspired by the classical work of Durkheim and Weber, as well as of Pareto and Tönnies, the American sociologist Parsons (1960) and his co-author Smelser (1956) sought to reinterpret these classical (European) ideas of institutions into a new structural-functionalist frame for sociology, emphasizing the idea of choice and strategic decision within institutional constraints. Similarly, Merton (1948) has developed a functionalist lens on institutions, where institutional structures are perceived as determining interests, opportunities and strategic behavior. For instance, inspired by Durkheim's (1901a) work on society, anomie, and suicide, Merton explored different types of behaviors and reactions (e.g., conforming vs. deviating behavior) in the context of established norms and rules in society.

This emerging body of European and, later, American sociological institutionalists has also been influential in the developments of the new institutional economics. For instance, Nee's (2003) review emphasized that the institutional conceptions in North's (1981) work *Structure and Change in Economic History* were strongly inspired by the classic thoughts of sociological institutionalism. Moreover, in the early 1990s new institutional economists began to engage in sociological debates (North 1991; Williamson 2000), such as those initiated by Granovetter (1985) who criticized the under-socialized view of economic behavior presented in Williamson's institutional economics. In this context, Williamson (1994: 85) came to acknowledge informal influences and trust relations in transaction cost analysis, also arguing that 'Transaction cost economics and embeddedness reasoning are evidently complementary in many respects.' Recent developments by game theory economists, such as Greif and his co-authors (Greif 2006; Greif and Laitin 2004) have also begun to add sociological variables to their models of economic behavior. Thus, generally speaking, leading scholars of the new institutional economic stream have been increasingly addressing sociological aspects of economic behavior (North 1991; 2005; Greif and Laitin 2004; Williamson 2000). This is also evident in the discussed revitalization of Veblen's old institutional economics, which has somewhat taken an economic sociological standpoint by grasping the impact of social and cultural change on economic aspects. Concluding with the words

of Nee (2003), new institutional economists ‘interested in studying social institutions have found that the more they come to understand the workings of institutions as endogenous to social processes in society, the more their work must address questions that lead them to turn to sociology for answers. New institutional economists apparently agree that advances in understanding institutions requires integrating sociological variables—shared beliefs, norms, and social relationships—to understand motivation to follow rules’ (Nee 2003: 21).

During the same period, a new form of sociological institutionalism—often called organizational institutionalism—has emerged, mainly at the instigation of the leading American organizational institutionalists, such as John Meyer, Richard Scott, Walter Powell and Paul DiMaggio (for an overview, see Rowan 2010). Drawing upon the pioneering work by Meyer and Rowan (1977) and Zucker (1977), organizational institutionalists have increasingly begun to address and develop the understanding of the diffusion of rules, models and scripts. Moreover, underlining the relatedness of old and new sociological institutionalism, Zucker (1977: 741) has concluded the new approaches ‘do not suggest rejection of the traditional approaches [referring to the work of Merton, Parson, and Berger and Luckmann, among others] but, rather, serve to conditionalize them by restricting the set of situations to which they apply. That is, it is not that these other approaches should be rejected but, rather, that the class of situations to which they apply should be more precisely specified.’ Inspired by Max Weber (‘bureaucracy’) and Herbert Simon’s ideas (‘bounded rationality’), DiMaggio and Powell (1983) have further developed the core ideas of organizational institutionalism, tackling questions of how and why organizational fields emerge and change, while also constraining individual behavior under conditions of uncertainty. Here, Nee (2003) has highlighted that by incorporating the idea of ‘bounded rationality’, DiMaggio and Powell (1983) have provided a basis to link ideas of new institutional economics, but also to institutional economic sociology (mainly represented by the leading scholars Neil Fligstein, Victor Nee and Richard Swedberg), which in general seeks to explore the relationship between institutions and social networks, and their influence on economic behavior.

Recently, since the publication of ‘Institutionalism in Organizational Analysis’, edited by Powell and DiMaggio (1991), a large body of institutional research has emerged that emphasizes the interactions between institutional environments and organizations. The research stream, inspired by the early work of sociologists, such as Selznick (1949) and Parsons (1960), explored regulative and normative contexts in particular, within which organizations need to gain legitimacy (see e.g., Scott (2004) for a useful overview). Briefly summarized by Heimer (1999: 20-21) thus, ‘among the “new institutionalists”

in sociology, institutions are conceived primarily as solutions to problems of legitimacy. By their argument, much of what transpires in organizations occurs not because it increases efficiency or reduces transaction costs, but because it confers legitimacy and smooths interactions among organizations.’ More recent organizational research has continued to recognize the cultural-cognitive elements of institutions, directing more attention to the role of symbolic aspects, such as cognitive schemas and scripts, which determine organizational structure and behavior (Scott 1995; 2001; see e.g., Rowan 2010 for a general overview of the emergence of organizational institutionalism).

Against this backdrop, this dissertation argues that these core ideas and developments of both the old and new institutional economics, and those emerging from (economic) sociological institutionalism, are important to help gain a contextualized understanding of the emergence of entrepreneurship. Thus, this work will seek to combine theoretical insights from the old and new economic (and sociological) institutionalism in conceptualizing institutions at the social, regional and society level and their interplay with entrepreneurial cognitions, intentions and activities. Before it does so, the following subsection will briefly summarize some of the classic definitions of institutions, developed by different institutional theorists; this will serve as a further basis on which to build the present dissertation’s institutional theoretical understanding.

4.4.2 *Emerging definitions of institutions*

As indicated above, the term *institution* has come to be widely used in social sciences, reflecting the rise in institutional economics and institutional sociology and the application of institutional approaches in many other disciplines. However, even though the term has a long history, ‘there is [still] no unanimity in the definition of this concept’ (Hodgson 2006: 1). In other words, a huge volume of conceptual definitions of institutions has emerged in the past, representing ideas of both old and new (economic and sociological) institutional theorists. Some of the main definitions are presented in the following.

Unsurprisingly, one of the most prominent definitions of institutions was developed by Veblen. Reflecting the core institutional thoughts of American (economic) institutionalism, he defined institutions in 1909 as ‘the settled habits of thought of the generality of men’ (Veblen 1919: 239). Representing the original ideas of the German historical school, Schmoller (1900: 150, cited in Chavance (2008: 5)) viewed the institution ‘a set of habits and rules of moral, custom and law, which have a common centre or goal, which are

consistent with each other and which constitute a system.’ North (1991: 3), as one of the most prominent new institutional economist, established another popular definition; describing institutions as ‘the rules of the game in a society,’ while distinguishing between formal (e.g., law, state policies, economic rules) as well as informal institutions (e.g., codes of conduct, organizational cultures and conventions).

Further, Hollingsworth (2000: 601) has defined institutions as ‘basic norms, rules, conventions, habits and values of a society,’ while Martin (2000:79) has similarly postulated that institutions are ‘systems of rules, procedures, and conventions.’ Burns and Scapens (2000: 5-6) viewed an institution as ‘a way of thought or action of some prevalence and permanence, which is embedded in the habits of a group or the customs of a people.’ Moreover, Hodgson (2006) formulated institutions as ‘systems of established and prevalent social rules that structure social interactions,’ while rules are ‘socially transmitted and customary normative injunctions or immanently dispositions,’ and ‘[c]onventions are particular instances of institutional rules’ (Hodgson 2006: 18).

Referring to the sociological streams of institutionalism, Durkheim (1901b: 45) has termed institutions ‘all the beliefs and modes of behavior instituted by the collectivity.’ Hughes (1936: 180) has postulated that ‘the only idea common to all usages of the term ‘institution’ is that of some sort of establishment of relative permanence of a distinctly social sort.’ Parson and Smelser (1956, cited in Nee 2003: 22) have perceived institutions as ‘organized systems of cultural beliefs, norms and values common to most individuals in a society, systems giving rise to socially structured interests which organize incentives for [and constrain the strategic choices of] individuals.’ Similarly, Merton (1948, cited in Nee 2003: 22) has viewed institutions as ‘structures of opportunity, shaping the interests and strategic action of individuals.’ Drawing upon these classics and the work of Berger and Luckmann, among others, the organizational institutionalists Zucker (1977) and Meyer and Rowan (1977) have suggested that ‘institutions are socially constructed templates for action, generated and maintained through ongoing interactions. From this perspective, actors create institutions through a history of negotiations that lead to “shared typifications” or generalized expectations and interpretations of behaviour’ (cited in Barley and Tolbert 1997: 96).

Following this view, Jepperson (1991: 149) has argued that ‘institutions are socially constructed, routine-reproduced (*ceteris paribus*) program or rule systems,’ while Barley and Tolbert (1997: 96) have defined institutions as ‘shared rules and typifications that identify categories of social actors and their appropriate activities or relationships [that] bears a strong resemblance to Giddens’ (1984) notion of “structure” and ...Sewell’s (1992) idea of a

“schema”.’ Moreover, the organizational sociologist Scott (1995: 33, 2001: 48) has developed a very prominent and widely used concept, viewing institutions as ‘social structures that have attained a high degree of resilience. [They] are composed of cultural-cognitive, normative, and regulative elements that, together with associated activities and resources, provide stability and meaning to social life. Institutions are transmitted by various types of carriers, including symbolic systems, relational systems, routines, and artifacts.’ Reflecting the approach of the new institutional economic sociology (see e.g., Fligstein 1996, 2001; Swedberg 2003), Nee (2003: 23) has defined an institution ‘as a system of interrelated informal and formal elements—custom, shared beliefs, conventions, norms, and rules—governing social relationships within which actors pursue and fix the limits of legitimate interests.’

Drawing upon the overviews presented of the different institutional strands in social science, and its various ideas and notions of institutions, the dissertation moves on to suggest that these approaches share important core elements in defining institutions, but that each of the approaches consists of a set of specific theoretical lenses, which are useful to address institutional elements across social, spatial and societal contexts for entrepreneurial processes, and particularly the informal or implicit variants. In doing so, the following section uses the pre-existing literature on institutionalism to outline a fitting understanding and use of institutional theories.

4.5 Building blocks of a multi-layered institutional approach

Reviewing the various institutional theoretical strands and their views of institutions, several important terms and logics emerge that merit more detailed exploration, in order to build up a narrow, congruent institutional theoretical understanding for the present dissertation. Generally speaking, this research suggests that the emergence of individual entrepreneurial behavior is somewhat structured (Giddens 1984) in terms of *formal or informal* (North 1990) or *overt or implicit rules* (Hodgson 2006), where an institution is a system of established and prevalent rules (Hodgson 2006; Jepperson 1991; Martin 2000) that enable and constrain individual cognitions, expectations and behavior (North 1990; 2005; Hodgson 2006; 2007b, 2009). Thus, the ‘existence of rules implies constraints. However, such a constraint can [also] open up possibilities: it may enable choices and actions that otherwise would not exist’ (Hodgson 2006: 2).

Viewing institutions as constraints devised by people has often been linked to the *regulative* elements of institutional rules, which are usually more explicit, more formalized and thus more easily subject to strategic planning

(Scott 2010). Here, particularly North (1990) and Williamson (1994) have stressed the need for and role of clear directives, configuration of incentives and the importance of control for economic activity. However, while the formal nature of institutions (e.g., property rights, laws, business regulations) has been widely acknowledged, scholars have increasingly suggested that formal rules and sanctions can only become explicit or superficial when they are supported by cultural norms and beliefs (Hodgson 2006; Roland 2004; Scott 2010). To this end, Sugden (2000) has emphasized how formal or external sanctions and laws can promote moral legitimacy, and how their violation can stir social disapproval. Scott (2010: 6) has further underlined that '[f]ormal and monetary incentives are tempered, if not superseded, by the reactions of others to one's choices as well as internalized commitments.' This is in line with Hodgson's (2006) broad conception of institutions, emphasizing the informal basis of institutions that structure behavior. This dissertation suggests that formal institutions and rules are also subject to social value (Sugden 2000) and 'social-rule systems' (Hodgson 2006).

Going further down this road, individuals' *cognitive* representations of rules, and their (shared) beliefs and attitudes accorded to them, play an important role in the constitution and codification of that rule, which thus involves *normative* rules of interpretation, evaluation and action (Searle 2005; Hodgson 2006). However, while the influence of institutions depends on the thoughts, evaluations and actions of and interactions between individuals (Berger and Luckmann 1967; Meyer and Rowan 1977; Scott 2010), they are not reducible to them, meaning that rules can be 'considered, acknowledged, or followed without much thought' (Hodgson 2006: 3; Weber 1907); thus potentially increasing the chance of their being taken-for-granted and their resilience (Scott 1995; Scott 2010; Suchman 1995). Jepperson (1991: 147) has underlined that being prone to being taken-for-granted 'is distinct from [normative] evaluation: one may subject a pattern to positive, negative, or no evaluation, and in each case (differently) take it for granted,' or as Zucker (1983: 25) puts it 'for things to be otherwise is *literally* unthinkable'. Similarly, Michael Polanyi (1967, cited in Hodgson 2006) has further argued that the impact of rules is never fully the subject of conscious deliberation, as there is always a tacit, unarticulated element of knowledge involved. Nonetheless, 'institutional rules are in principle codifiable' (Hodgson 2006: 4) and therefore usually subject to normative interpretations and discourse, which becomes particularly visible when rules are challenged (Hodgson 2006).

This is in line with what is called cognitive turn (DiMaggio and Powell 1991) in (organizational) institutional theory, which draws particular attention to the *cultural-cognitive* elements of institutions (see e.g., Meyer and Rowan 1977; Scott 1995; Scott 2010). According to Scott (2010), these elements are

socially constructed symbols, and so cultural (in Durkheim's terms); while they provide a vital frame for individual perceptions and decisions, and are therefore cognitive. Linking to Swidler's (1986) view of culture as tool-kit and Hofstede's (1991) notion of the soft-ware of the mind, Scott (2010: 7) has further argued that these beliefs and assumptions can be 'explicit and relatively superficial,' as well as 'deeply entrenched assumptions [...] of the way the world is.' These cultural-cognitive elements in turn relate or even form the basis of effects and the constitution of normative (and regulative) rules/pillars; while Scott (2010) reminds us that these rules are able to provide an institutional framework by themselves.

The *normative* institutional rules, in this context, reflect the social and cultural embeddedness of (economic) behavior (for instance, referring to Granovetter 1985), where individuals are primarily viewed as social actors who care about their informal relationships with and loyalty to others, which in turn is likely to have a role in tempering self-interest and utilitarian concerns in their decision-making process (Scott 2008, 2010; March and Olsen 1989). Accordingly, individuals are embedded in normative systems consisting of (implicit and informal) rules and logics of what is perceived as "appropriate" or "proper" behavior or a way of thinking (Scott 2008). Following these ideas, institutional scholars, particularly in organizational research, have developed a conceptual idea of *social legitimacy* (Aldrich and Fiol, 1994; DiMaggio and Powell 1983; Meyer and Rowan, 1977; Suchman, 1995; see Bitektine 2011 for an overview), which is widely seen as 'a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate' (Suchman, 1995: 574). Accordingly, '[i]nstitutions guide behavior by defining what is appropriate or expected in various social and commercial situations' (Bruton et al. 2010). In summary, institutional rules can be seen as 'norms of behavior and social conventions as well as legal rules, [where individuals] share tacit or explicit knowledge of these rules' (Hodgson 2006: 3).

This leads to another conceptual aspect of importance to the present research, namely that of *intentionality*. Referencing Hans Joas (1996), Hodgson (2006) has argued that conscious prefiguration and self-reflexive thinking are the foundation of the conceptual idea of intentionality, while unintended behaviors lack such conscious processes. Moreover, Hodgson (2009) has noted that recent research in psychology and elsewhere has increasingly shifted away from the so-called 'deliberative thinking paradigm', as referred to by Maes (1991, cited in Hodgson 2009). Accordingly, scholars have recognized that individual cognition 'depends on its social and material environment and the cues provided by structured interactions with individuals and artefacts' (Hodgson 2009: 13). Building upon these thoughts, and as

introduced in Section 2, this dissertation postulates that an individual's new venture creation process, with its different initial phases and activities, represents a form of long-term behavior which may involve unconscious cognitive processes, but demands a certain degree of self-reflexive, conscious evaluations of the surrounding environment and individual preferences and abilities to actually prepare and start a business. In other words, the present work argues that conscious thoughts, beliefs and desires are the immediate basis of the formation of entrepreneurial intention (Ajzen 1991), but that these cognitive elements are social and cultural in origin (Veciana and Urbano 2008), and can therefore be directly and indirectly affected by tacit or explicit knowledge of the external, institutional environment. Such a view of the embeddedness of entrepreneurial thoughts, intentions and behavior within the external, institutional environment implies that institutional structures have top-down effects on the individual, calling for further philosophical and ontological clarification. While, generally speaking, institutional perspectives always address top-down (constraining and enabling) effects to some extent, this dissertation particularly applies Hodgson's (2006) view and philosophical standpoint. This is because the author views it as providing a suitable macro-lens on the top-down influence of institutions, while allowing room for conceptualizing interactive and bottom-up effects, addressing the role of the individual in shaping context. Accordingly, the present research endorses the view that:

By structuring, constraining, and enabling individual behaviors, institutions [can] mold the capacities and behavior of [individuals] in fundamental ways: they have a capacity to change aspirations instead of merely enabling or constraining them. [...] The existence of reconstitutive downward causation does not mean that institutions directly, entirely, or uniformly determine individual aspirations, merely that there can be significant downward effects. [...] [Moreover,] institutions [do not] stand separately from the group of individuals involved; institutions depend for their existence on individuals, their interactions, and particular shared patterns of thought. Nevertheless, any single individual is born into a pre-existing institutional world which confronts him or her with its rules and norms. The institutions that we face reside in the dispositions of other individuals but also depend on the structured interactions between them, often also involving material artefacts or instruments. [...] Accordingly, institutions are simultaneously both objective structures "out there" and subjective springs of human agency "in the human head." Institutions are in this respect like Klein bottles: the subjective "inside" is simultaneously the objective "outside." [...] Actor and institutional structure, although distinct, are thus connected in a circle of mutual interaction and interdependence. (Hodgson 2006: 7–8)

Drawing upon Hodgson's (2006) lens, this dissertation argues in line with North (1990) that it is useful to conceptually distinguish between the institutional rules and players, but also to acknowledge their interdependence that decrees that structure relies on the agent and vice versa (Hodgson 2006). When referring to an agent or a player, I use the term in the restricted sense of an individual—the potential entrepreneur—and not to refer to an established organization. It is not within the scope of this research to engage in the discussion of whether organizations are players or institutions themselves (see, for instance, Hodgson 2006, Appendix, for a discussion on this subject between North and Hodgson) although the author acknowledges North's (1990, 2005) point that organizations can also be players in society. In fact, as indicated in Sections 2 and 3, the present research explores the individual venture creation process embedded within the external (social, spatial and cultural) environment, based on an integrative institutional perspective. Thus, besides acknowledging the interrelationship between the individual and institutions, it explores the social, spatial and cultural context from an institutional perspective, adding to the theoretical basis of the empirical research papers included.

Institutional scholars, from different disciplines, have criticized prior research, the bulk of which applies institutional theory focused on higher level, macro-structures, so excluding the interrelated institutional mechanisms and forces on smaller social and spatial scales (Powell and Colyvas 2008; Gertler 2010; Nee 2003; Fligstein 1997; Scott 2010; Owen-Smith and Powell 2008; Welter and Smallbone 2011). In this context, particularly organizational institutionalists (Powell and Colyvas 2008; Scott 1995, 2010), institutional economic sociologists (Fligstein 1997, 2001; Nee 2003), and economic geographers (Gertler 2010; Martin 2000; Rafiqui 2009) provide useful theoretical insights into the multifaceted nature of lower-level institutions, and also into the role of individuals in shaping their contexts. Similarly, entrepreneurship researchers have increasingly emphasized the need to apply institutional theory at the social (Thornton et al. 2011) and local and regional levels (Welter 2011). This is also in line with Hodgson (2009: 19) who has stated that the strength of institutional economics, as compared to neoclassical economics is or should be its (universal) emphasis on 'scarcity in a relative and local sense, concerning immediate availability of capacities and resources for an agent.'

From an economic geography perspective, Rafiqui (2009: 336) has recently stated that 'the intent of North's conceptualization clearly is to capture a general structure, usually at the national level, that interacts with the activities of [agents or] organizations.' That intent limits institutional applications on different spatial scales. Here, Rafiqui (2009: 341) has particularly underlined

'that institutional solutions are non-homogenous across space; varying physical environments and historical experiences means that beliefs, institutions and organizations differ between places.' Similarly, Gertler (2010: 5) has raised the problematic issues of what he calls 'methodological nationalism', which follows the assumption that national-level institutions and rules supersede everything else. Following this argumentation, he has emphasized the need of approaches that are 'more sensitive to the documentation and understanding of institutional variegation at a number of different spatial scales.' Further, Hayter (2004) has highlighted that regional and local contexts consist of unique institutional functions by organizing 'global-local' dynamics within their boundaries, thus further arguing that local institutions reflect institutions at a higher level for theory. In addition, Regini (1995) emphasized the emerging 'local institutionalism' as a core element to address micro-socio-institutional regulations, shifting away from solely focusing on macroeconomic regulative elements. Underling the spatiality of institutions, Ostrom (2005) has described attributes of a local community (or 'arena') as the prevalent norms of behavior, the degree of homogenous preferences and common understandings about the local structure. He has further theorized how certain rules-in-use reflect the explicit and implicit rules the "do's and don'ts" (Ostrom 2005: 832) in a local community, that constrain choices and behavior of members of the community. Added to this, Strauss (2008) applying a human geography lens, has emphasized that individual cognition and preferences are shaped by the conditions of the real world, such as institutional, economic, demographic and physical features that constitute the regional environment viewed 'objectively'.

Moreover, organizational institutionalists have increasingly cited the importance of multilevel institutional research (Scott 2010) particularly by adding and exploring micro-foundations of (macro-) institutional theory (DiMaggio and Powell 1991; Powell and Colyvas 2008). For instance, in 1995 the sociologist Scott (1995: 33) theorized that '[i]nstitutions operate at different levels of jurisdiction, from the world system to localized interpersonal relationships', while recently highlighting the 'increased recognition of and research attention given to the ways in which higher-level systems both affect and are influenced by micro forces' (Scott 2010: 7). The recent work of Powell and Colyvas (2008) has further suggested how 'institutional research can benefit from complementary attention to the micro-order and the macro-level' (295), arguing that 'macro-framings or values can be 'pulled down' to the everyday level of practice' (278). Owen-Smith and Powell (2008) have provided further useful insights into how institutional forms can emerge from social networks, and how institutional rules shape the nature and effects of social networks; even calling for a 'network-institutional' approach.

Accordingly, they have further underlined the importance of addressing multiple levels of analysis, to uncover what they call co-evolutionary duality between social relationships (foundations of networks) and social categories (foundations of institutions).

From an economic sociology perspective, Nee (2003: 33) has also argued that interest-driven action and social norms within networks ‘cannot be understood apart from the institutional framework within which incentives—including legitimacy—are structured.’ Moreover, Fligstein (1997; 2001) has highlighted how the exploration of the emergence of ‘local social orders’ contributes to institutional theory. Rooting his work in symbolic interactionism (Becker 1963; Mead 1934; Goffman 1959), he has particularly emphasized the important role of individuals –or, what he calls, institutional entrepreneurs (Fligstein 1997) in constructing and reproducing local institutional orders, while arguing that an individual’s ability to shape social orders depends on their social skills to motivate others to collaborate. In addition, other scholars such as Dennis and Martin (2005), have discussed how interactionists explore the development, reinforcement, renegotiation and rejection of particular norms and labels developed and projected by particular social groups. For instance, Ford et al. (2008) have argued that social networks can have the ability to label individuals as ‘deviant’ even when they have not subverted the shared norms of a social group. Moreover, in line with Fligstein (1997, 2001), Rose’s (1990) idea of the enterprise of the self suggests that individuals, in turn, can also reshape their given labels, bringing the norms of the reference group in line with their own behavior, which illustrates how norms and labels are not necessarily fixed.

This dissertation suggests that these sociological considerations of the various interactive mechanisms involved in the relationship between (external and subjective) institutional contexts and the individual, profoundly add to a multilevel institutional understanding of entrepreneurship, complementing the rather macro-institutional economic perspectives (see e.g. Hodgson 2006, 2009). Accordingly, the dissertation’s theoretical lens highlights the usefulness of multiple streams of institutional theory, to improve our understanding of contextual influences on new venture creation and entrepreneurial behavior. In line with Bruton et al. (2010), this allows it to address the role of institutional settings on entrepreneurship, legitimacy issues and entrepreneurial behavior, and institutional entrepreneurship, while the presented framework also enables it to address institutional and external influences on entrepreneurial cognitive processes. Similarly, as discussed by Welter (2011), using such a multi-layered theoretical lens is intended to capture top-down and bottom-up effects, reflecting the institutional embeddedness of the (potential) entrepreneurs on the one hand, and the important role of (potential) entrepreneurs as

institutional change agents on the other. In addition, the dissertation's framework can serve as a useful way to capture the relationships between and multiple effects of social, spatial and the broader institutional contexts, particularly by theorizing and investigating the informal institutional nature of these contexts for entrepreneurship. Thus, an extended multi-layered institutional approach can be seen as a holistic framework, addressing not only institutional factors that interact with entrepreneurship, but also other contextual factors, such as economic, educational systems (Veciana and Urbano 2008), social networks or geographical contexts at different spatial scales.

5 SUMMARY OF THE RESEARCH PAPERS

This section provides brief summaries of the four empirical research papers that form the present dissertation's research segment. Following a description of each paper's empirical research, their aims, theoretical basis and main insight are briefly outlined. The main contributions of the papers and the dissertation as a whole are presented in the section 'Discussions and Conclusions' that follows.

5.1 Research methodologies

As summarized in table 2, the empirical work of the dissertation is based on different sets of data (across different countries) and uses quantitative and qualitative research methods to analyze the main research questions.

Table 2 Research methodologies in the four research papers

	Paper 1	Paper 2	Paper 3	Paper 4
Research methodology	Quantitative	Quantitative	Quantitative	Qualitative
Research design	Survey	Survey	Survey	Case study
Methods of data collection	Secondary survey data and official statistics	Self-administered questionnaire and official statistics	Self-administered questionnaire and official statistics	In-depth, semi-structured interviews
Source(s) of data	11,002 individuals aged 15 and over from 27 countries ('Eurobarometer Survey 2009')	834 Finnish working-age individuals (combined with regional data from 'Statistics Finland')	496 Finnish individual aged 45–64 (combined with regional data from 'Statistics Finland')	22 British entrepreneurs who started a business aged 50 and above
Research context	24 European countries, China, Japan and the United States	Finland (Central Ostrobothnia, Ostrobothnia and South Ostrobothnia)	Finland (Central Ostrobothnia, Ostrobothnia and South Ostrobothnia)	UK, London
Method(s) of data analysis	Multilevel binominal logistic regression analysis	Multilevel regression analysis	Structural equation modeling (Partial least squares (PLS))	Thematically open-coded content analysis

Research papers 1–3 apply quantitative methodology, whereas paper 4 applies qualitative methodology. By combining quantitative and qualitative studies, the present research particularly responds to Welter's (2011) recent work on 'Contextualizing Entrepreneurship', which suggests 'that the gap in multi-context analysis partly results from the neglect of [...] combined methods, which allow capturing the richness and diversity of the context'. While the bundle of four research papers (with their individual context focus) reflects the multilevel lens applied in the dissertation, paper 1 and paper 2 in particular aim to address the need for more quantitative multilevel empirical research and techniques (see e.g., Hox 2010) in order to account for the different levels involved in the analysis of the relationships between context and individual entrepreneurial behavior (Autio and Acs 2010). Accordingly, a multilevel empirical approach is taken in these papers to be technically able to analyze 'top-down processes', mainly including the observed downward influences of regional- and national-level variables on individual-level variables (Kozlowski and Klein 2000). Addressing the research question in this way, the research papers reduce the risk of generating interpretations and conclusions

harmful by ecological fallacies (Bosma et al. 2009), which can result from the disaggregation of the included regional-level data down to the individual level.

The analysis in paper 3, which is based on the PLS approach to structural equation modeling, is limited in this context as multilevel modeling is not available for PLS. However, using the PLS method enabled the analysis to incorporate (continuous) latent variables and to improve the interpretations of the complex (indirect) relations (Jacoby 1978; Churchill 1979) between the perceived social norm constructs and the TPB variables. Complementing this quantitative research, a qualitative research approach is applied in paper 4. In particular, the research paper follows an interpretative qualitative approach (Gephart 2004), and undertakes an inductive study through a series of different case studies (Yin 2009), to provide an in-depth examination into the behavior of (potential) entrepreneurs, particularly in facing and interacting with social barriers. As such, the study gains exploratory insight into the 'meanings and concepts' (Gephart 2004: 457) used in the different social settings in which entrepreneurs create and operate their businesses (Jack 2010; Welter 2011).

5.2 Paper 1

The first paper focuses on the role of social normative contexts within society on an individual's new venture creation process. In particular, the study seeks to conceptualize and analyze the perceived moral legitimacy accorded to entrepreneurs in society and its influence on an individual's progress across different start-up stages. Embedded in institutional perspectives (Hodgson 2009; Scott 1995) and a social legitimacy approach (Suchman 1995), moral legitimacy is defined as a moral evaluation of the benefits of the entrepreneurs' actions for society as a whole. A multilevel analysis based on data across 27 countries shows that the perceived moral legitimacy of entrepreneurship positively influences an individual's likelihood to engage in the firm formation process, even when controlling for the level of entrepreneurial activity and economic performance at the country level. In particular, the results demonstrate that moral legitimacy has a significant impact only in the early phases of the firm formation process: it increases the probability of an individual progressing from not even thinking about starting a business to considering it and thereby to nascent activities. Moral legitimacy, however, does not influence an individual's decision on whether to move from preparing to actually starting and running a business. Thus, the study suggests that the emergence of entrepreneurial aspirations and nascent entrepreneurial activity are not independent of the perceived moral norms in society.

5.3 Paper 2

The second paper aims to provide new insight into the regional dimension of the very early phase of new venture creation. In particular, the study seeks to examine how the ‘objective’ regional environment impacts on entrepreneurial cognitions and the formation of entrepreneurial intentions. By complementing the TPB (Ajzen 1991) with a regional perspective on entrepreneurship (Bosma and Schutjens 2011; Sternberg 2009; Stam 2010), this study shows that different regional factors moderate the influence of the three TPB cognitions of attitude, subjective norm and perceived behavioral control on the entrepreneurial intent. More specifically, a multilevel analysis based on survey data and regional statistics across 53 Finnish municipalities finds that higher household income (growth) and wealth levels in a region strengthen the positive impact of entrepreneurial attitude on intention. A higher population density and education level is found to weaken the positive influence of the perceived entrepreneurial ability and intention to start a business. A higher public and manufacturing sector employment level is found to weaken the positive impact of both the perceived entrepreneurial capability and social support from family and friends. Taken together, these findings imply that the regional environment can both support and hinder the formation of entrepreneurial intentions by shaping the relationships between intentions and their cognitive antecedents in different ways. This encourages further development of the theoretical understanding of the formation of entrepreneurial intentions by examining external regional conditions as moderating variables in the TPB framework.

5.4 Paper 3

The third paper seeks to uncover the influence of social normative contexts within a regional community on the formation of entrepreneurial intentions. In particular, the study illustrates that if an ‘older age’ individual perceives their local community to socially legitimize entrepreneurial activity at their age, such a perception strengthens their intent to go ahead and actually start a business. Based on a sample of 496 Finish individuals aged 45–64, the study further shows that this influence is partially mediated by the three theoretical antecedents of intentions put forward in the TPB: attitude, subjective norm and perceived behavioral control. This means that the perceived social acceptability of entrepreneurship at an older age not only affects entrepreneurial intentions directly, but also indirectly via how entrepreneurship-friendly the individual’s attitudes toward work are, how the individual perceives the extent and

importance of support from their family and friends, and how the individual perceives their ability to start and run a business. Accordingly, this paper suggests that perceived age norms within a regional community shape the formation of entrepreneurial intentions; arguing that the potential for entrepreneurship amongst older individuals is socially and institutionally situated.

5.5 Paper 4

The fourth paper aims to explore the normative role of social networks in new venture creation and development. Drawing on a micro-sociological lens of deviance, this study provides new insight into how normative evaluations from social networks can affect individuals aged 50 and over during the process of founding a new firm. Based on 22 in-depth interviews in London, UK, this paper suggests that older entrepreneurs are affected by a range of positive and negative perceptions of 'deviance', and their abilities to negotiate negative perceptions vary, across and within three different networks: family, friends and client networks. In line with an interactionist approach to deviance, the paper demonstrates that social norms are inherently unstable, and may be negotiated by an older entrepreneur's actions. Consequently, the findings contribute to a micro-sociological understanding of how older entrepreneurs face, react to and potentially change normative perceptions within different social environments. This further suggests that in order to add to the understanding of the institutional embeddedness of entrepreneurship, further research is needed that considers the micro-foundations of institutional theory (Powell and Colyvas 2008) and the normative role of social networks (Fligstein 2001; Owen-Smith and Powell 2008) in entrepreneurial behavior.

6 DISCUSSIONS AND CONCLUSIONS

Entrepreneurship research has increasingly highlighted the importance of developing the understanding of contextual influences on entrepreneurship, while particularly emphasizing the need for research that adds to the knowledge of the role of social, spatial and institutional contexts on new venture creation processes. In a similar vein, scholars have recently called for the development of a multi-layered approach to entrepreneurial behavior, to theoretically and empirically capture the multiplicity of contexts and their role in shaping the emergence of entrepreneurship, while also addressing the role of (potential) entrepreneurs in changing their contexts. Following on from this, an increasing body of scholars is suggesting that an institutional perspective might provide a useful framework with which to theorize and interpret these complex interactions between various contexts and entrepreneurship, helping to advance theoretical understandings of the varying effects of different contexts, at macro- and micro-levels. Against this backdrop, this dissertation sought to address these recent debates and emerging research gaps by providing new theoretical and empirical insight into the research question:

- *What role do social, spatial and institutional contexts play in the formation of entrepreneurial intentions and the subsequent venture creation process, and in how potential entrepreneurs are able to resist and shape their surrounding contexts?*

In so doing, the dissertation has introduced a multi-layered institutional lens, using insights from different streams of institutional theory, to develop a holistic theoretical base for the empirical research papers that in turn apply qualitative and quantitative methodologies to analyze specific elements of the social, spatial and institutional contexts. The present discussion and conclusion section attempts to draw on the main empirical and theoretical insights and implications of the four individual papers. It also discusses their relation to each other, and how they add to the dissertation's main aims (see Section 1.2), identified research gaps (see Section 3.4) and the theoretical framework (see Section 4.5). More detailed discussions and conclusions of the individual papers' insights and their specific contributions and limitations can be found in the papers themselves (see Part II).

6.1 Key empirical findings

This dissertation finds empirical support for the suggestion that a variety of social, regional and societal contexts influence the process of new venture creation. It demonstrates that an individual's initial consideration of becoming an entrepreneur and the actual decision to start preparing their business (the entrepreneurial ladder) significantly depends on their perceived moral legitimacy of entrepreneurial activity in society (Paper 1). Paper 1 particularly shows that the more positive the perception held by an individual that entrepreneurship is legitimized morally in their society, the higher the probability that they will view entrepreneurship as a potential career path. A positive perception of the societal legitimacy of entrepreneurship is also likely to progress their movement from the 'consideration' and 'intention' phases towards nascent entrepreneurial activity. Once an individual has made the decision to start preparing their own business, the perceived moral legitimacy no longer plays a role in shaping the venture creation process. This further emphasizes that the impact of socio-cultural factors can vary during the different stages of the firm formation process, which supports the use of the 'entrepreneurial ladder' as an analytical tool to capture different facets of the entrepreneurial process even in a cross-sectional setting (Van der Zwan et. al. 2010).

Supporting this finding, research paper 3 shows how perceived social norms within a regional context influence the very early phase of the venture creation process by shaping entrepreneurial cognitions and intentions. It demonstrates that an individual's perceived social acceptance of entrepreneurship within a regional context directly shapes the intention to start their own business, but also does so indirectly through influencing their entrepreneurial attitudes, perceived social acceptance within the immediate social environment, and perceived entrepreneurial ability (TPB). Accordingly, the dissertation underlines that the more positively an individual perceives entrepreneurship as socially accepted in the broader regional environment the more likely they are to have positive entrepreneurial attitudes and self-efficacy beliefs, as well as to perceive that entrepreneurship will be accepted in their close social networks. These positive relationships between perceived social norms and entrepreneurial cognitions in turn enhance the formation of entrepreneurial intentions, while social norms also directly and positively relate to entrepreneurial intentions.

Moreover, the current research shows that entrepreneurial cognitions and the formation of entrepreneurial intentions are also affected by the 'objective' regional environment. Research paper 2 demonstrates that an individual's entrepreneurial attitude, perceived entrepreneurial ability and, thus, the formation of entrepreneurial intention (TPB) are significantly and indirectly

influenced by 'external' regional conditions. In particular, it illustrates that higher regional levels of income and wealth strengthen the positive effect of entrepreneurial attitudes on entrepreneurial intentions. A higher regional level of public sector and manufacturing sector employment is found to weaken the positive impact of an individual's perceived social acceptance of entrepreneurship within the immediate social environment on intentions, while these regional factors together with a higher population density and a higher than average level of education weaken the influence of an individual's perceived ability to successfully run a business on their intent to actually start a business. Adding to these findings, research paper 1 finds empirical support for the suggestion that 'objective' economic conditions across nations influence the early phases of the venture creation process, but also more advanced phases. It shows that the factual positive relationship between entrepreneurial activity and economic growth in a country increases the probability that an individual will consider becoming an entrepreneur, decide to start preparing their business, and commence doing business.

Further, while paper 2 and paper 3 support the large body of TPB studies that show that an individual's perceived social acceptance of entrepreneurship within their immediate social environment (family, friends and work associates) impacts on their entrepreneurial intentions, research paper 4 demonstrates that social approvals of entrepreneurship and the related level of social support do vary within and across different social networks. Paper 4 further shows that an older individual's (nascent) entrepreneurial activity is profoundly influenced by the social judgments of family, friend and client networks as they can enhance or undermine their entrepreneurial motivations and self-efficacy as well as their development of a customer base. Moreover, these normative perceptions often reflect whether social networks are willing to provide tangible and/or intangible resources and support for the entrepreneur to develop their (nascent and young) business. The variations of positive and negative social perceptions within networks and the reactions of entrepreneurs are in turn found to strongly relate to the entrepreneur's and social network's professional background. It is shown that, for instance, serial entrepreneurs are more able to resist and modify negative perceptions than their counterparts (novice entrepreneurs), while generally perceiving fewer negative sanctions in the different social networks within which they are embedded. In addition, if an entrepreneur's new venture is in a similar sector to that they used to work in, they are less likely to face judgments of negative deviance within their various social networks, as the gap between the established norms of their current work and previous work will be narrow.

Generally, the four empirical research papers highlight that perceived social norms prevalent in the social, local and societal contexts particularly

influence the early stages of the venture creation process. However, approval perceived from close social networks remains important, or may even increase in importance, in the nascent and early firm phases, reflecting the level of support and resources (both tangible and intangible) such approval contributes to new venture creation and development. Moreover, the empirical sections demonstrate that both the 'objective' measures of the environment, such as the demographic and economic structure of a region or nation, and the subjective perceptions of the external environment have a significant effect on entrepreneurial cognitions and intentions (paper 2, paper 3 and paper 4) and the subsequent venture creation process (paper 1).

6.2 Theoretical contributions

The dissertation suggests that the theoretical foundations formed relying on different institutional lenses can help develop a multi-layered institutional approach to context in new venture creation. By combining different theories and ideas emerging largely from old and new institutional economics and (economic) sociological institutionalism, this dissertation argues that is necessary to apply insights derived from different disciplines to be able to capture the various contextual, individual and interactive elements influencing economic activity, from an institutional perspective. In so doing, it adds to the recent entrepreneurship literature that proposes institutional perspectives, and the use of insights from different disciplines, as a way forward to develop our contextualized understanding of entrepreneurial behavior (Bruton et al. 2010; Thornton 1999; Thornton et al. 2011; Welter 2011; for an overview see sections 1 and 4.1).

In particular, the present conceptual work contributes to the body of entrepreneurship research that has suggested that institutional approaches can be useful to address relevant micro supply-side and macro demand-side perspectives (Thornton 1999); contextual top-down and bottom-up effects (Welter 2011; Welter and Smallbone 2011); effects of the relationships between social and cultural environments (Thornton et al. 2011); the role of normative contexts and legitimacy (Bruton et al. 2010); contextual influences on entrepreneurial cognitive processes (Lim et. al 2010; Mitchell et al. 2007) and intentions (Liñán et al. 2011); as well as the role of individuals in shaping contexts, often referred to as institutional entrepreneurship (Bruton et al. 2010; Garud et al. 2007; Welter 2011). These are the various issues raised recently in entrepreneurship research on the institutional perspective; and it is to these that the multidisciplinary theoretical framing presented here seeks to add. I believe it can strengthen the multilayered, institutional understanding of

entrepreneurship; particularly by suggesting social normative elements to be capable of bridging the different levels of contexts.

Building upon these debates, the dissertation illustrates that moral legitimacy of entrepreneurship, operationalized as a conceptual source of social legitimacy (Suchman 1995), is a potential informal institution influencing the early phases of the formation of a new venture (paper 1). By introducing and applying a specific legitimacy type of Suchman's concept in the context of entrepreneurship, the dissertation contributes the important challenge of finding ways to conceptualize and measure specific socio-cultural influences on the emergence of entrepreneurship (Bosma and Schutjens 2011; Schendel and Hitt 2007; Thornton et al. 2011; Welter and Smallbone 2011). Accordingly, this research also concurs with entrepreneurship researchers who emphasize that an institutional perspective can give rise to a framework of use for conceptualizing and interpreting specific relationships between (potential) entrepreneurs and their socio-cultural environment. Underlining the need for such developments, entrepreneurship scholars have argued that our knowledge of cultural influences on new venture creation and entrepreneurship is still in a very early phase (Bosma and Schutjens 2011; Freytag and Thurik 2007).

In developing an institutional and moral legitimacy lens (in paper 1) as a means to add to and contextualize new venture creation processes, the present dissertation further contributes to the debate on the different approaches applied in studies of socio-cultural influences on entrepreneurship. By demonstrating how moral legitimacy influences organizational emergence, this research suggests further theoretical development based on the social legitimacy or moral approval approach (Etzioni 1987; Suchman 1995; Zafirovski 1999), to complement the current dominant approaches, such as Hofstede's (2001) seminal work (Hayton et al. 2002) and the aggregated psychological trait approach (Freytag and Thurik 2007). Moreover, a moral legitimacy approach can provide new insights into 'pull' explanations of entrepreneurial behavior, thus enriching 'push' explanations based on recent developments in what is called the dissatisfaction approach (Noorderhaven et al., 2004). As such, the social and moral legitimacy approach can add to the knowledge of how an individual's entrepreneurial interest and choice is the outcome of an anticipated social appraisal of being an entrepreneur (the pull element). In contrast, the dissatisfaction approach can enhance understandings of how conflicting values between the population and potential entrepreneurs—particularly in non-entrepreneurial culture—can drive (or push) potential entrepreneurs toward actual entrepreneurship (Thurik and Dejardin 2011a,b; Freytag and Thurik 2007).

The identified effects of moral legitimacy further add to the debates on the role of a legitimacy approach in understanding the early and nascent phase of

new venture creation, as particularly addressed by the work of Tornikoski and Newbert (2007) on organizational emergence based on a pragmatic legitimacy approach. Building upon the dissertation's insights and those from the above work, it seems that while the perceived moral legitimacy of entrepreneurs in society only influences initial entrepreneurial thoughts and the decision to take the first steps to prepare the business, the pragmatic legitimacy (and particularly the exchange with the potential, immediate business audience) plays a key role in the transition from the nascent entrepreneurship phase to the actual creation of a new venture. This also aligns with Suchman (1995) who argues that moral legitimation implies larger socio-cultural rules and norms, whereas pragmatic legitimation is based on self-regarding utility calculations by the audience. Thus, this dissertation suggests that the influence of perceived societal rules, such as that of moral legitimacy, diminish with an individual's progress in the venture creation process owing to the increasing importance of boosting legitimacy in the business environment.

The dissertation further underlines the role of broader social norms in the very early phase of new venture creation by adding knowledge on the social normative embeddedness of the TPB in explaining the formation of entrepreneurial intentions (paper 3). While the TPB concept considers social approval from the immediate social environment to be important to understanding the emergence of intentions, the present work suggests that entrepreneurial cognitions and approval from within the immediate social environment are in turn affected by social norms at the broader regional and societal level. Accordingly, the dissertation suggests that adding a broader social normative, or in other words, institutional lens to the TPB, a social psychological theory, enhances the contextualized knowledge of the formation of entrepreneurial intentions. This supports the recent development of the TPB concept particularly in the study of Liñán et al. (2011), which argues that social valuations of entrepreneurship at a regional and societal level add to the appraisals within the closer social environment included in the TPB.

Moving further beyond these contributions, the dissertation illustrates how entrepreneurs at an older age seek to gain social approval and legitimacy and emotional and professional support from their social networks, which might aid their progress and the development of their nascent business. These processes are in turn affected by different normative perceptions prevalent in the various social networks, which can vary between positive and negative judgments, resulting in greater or reduced support. While Tornikoski and Newbert (2007) identify the importance of gaining acceptance from the business audience during the new firm formation process, the dissertation adds that it is also important to perceive that informal networks, such as family and friends confer legitimacy too. Moreover, the role of normative judgments in

these networks and also in business environments, like (potential) client networks, should be considered; as that could help us understand what constitutes successful acquisition of tangible and intangible resources and support mechanisms for an individual working through the nascent entrepreneurship and early firm phase.

Accordingly, the dissertation also implies that while perceived social rules and norms at the regional and society level seem to particularly influence the early phase of new venture formation, social normative contexts within an entrepreneur's networks continue to affect the creation of a new venture beyond the consideration and intention phase. These normative judgments can determine the level of emotional support and advice provided by the various social networks to the entrepreneur, while positively and/or negatively influencing entrepreneurial self-efficacy. In the context of client networks, negative normative judgments can particularly undermine the entrepreneur's potential to develop a market. Negative norms on the part of a potential client are also relatively stable owing to relatively infrequent interactions; therefore there are fewer opportunities for an entrepreneur to change unfavorable perceptions of their business. The increased frequency of the interactions with family and friend networks and the closer emotional ties mean an entrepreneur can improve the prospects of gaining legitimacy and thus the support needed to develop their business.

Following on from this, the dissertation uncovers some strategies an entrepreneur can apply to acquire legitimacy within social and business networks, and so improve the level of support provided by those groups. Paper 4 identifies four ways an older entrepreneur might manage the positive and negative normative appraisal of themselves and their business. The four strategies involve active negotiation of social norms within networks, suggesting that entrepreneurs are able to change and modify negative and unfavorable perceptions through active interventions over time. Secondly, social norms can change through passive negotiation, suggesting that social networks can begin to understand and approve an entrepreneur's business activities by simply gathering more information and observing the entrepreneur's activities. Subsequently, their unfavorable perception can become more positive without intervention by the entrepreneur. The entrepreneur may then benefit from enhanced levels of emotional and professional support. Another strategy involves network modification, suggesting that entrepreneurs do not directly or indirectly modify social appraisals of their businesses, but that they rather move from negative networks to other more positive networks. A fourth way may be called network avoidance, implying that (potential) entrepreneurs can find ways to hide or mask certain markers that provoke negative judgments, such as those based on age, appearance or other characteristics, particularly

within client networks. These strategies have been ascribed to a particular age group of prospective entrepreneurs, however this dissertation suggests that these ways to manage negative normative influences in immediate social networks can serve as a new conceptual base to understand strategies and practices available to prospective and established entrepreneurs at a micro-institutional level to act as change agents. Developing new insight into network approaches to the emergent phase of new ventures is particularly important, for as Newbert and Tornikoski (2012) have suggested, while a nascent entrepreneur might have a large number of ties with contacts, that does not necessarily mean that those contacts can or wish to support the creation of their venture.

It is further argued that the ‘institutional-network’ approach developed by Owen-Smith (2008) and, more generally, the new conceptualizations of the micro-foundations of institutional theory by Powell and Colyvas (2008) can be a fruitful way to develop theoretical understanding of the normative contexts of entrepreneurs within social and business networks. Drawing upon the theoretical ideas of Owen-Smith (2008) in the context of entrepreneurship, the dissertation provides new insight into how entrepreneurs are embedded in different social relationships (networks), which are in turn affected by various social categories and norms (institutions). Moreover, the application of an interactionist approach (Becker 1963) in research paper 4, reveals the importance of examining the social rules prevalent in an entrepreneur’s immediate social environment, which are subject to dynamic processes and change through social interaction and indirect or direct intervention by the entrepreneur. Adopting the viewpoint of Powell and Colyvas (2008), it is suggested that developing an institutional understanding of new venture creation should be complemented by drawing attention to both micro-orders and broader levels, where social norms and values prevalent in society can be ‘pulled-down to the everyday level of practice’ (Powell and Colyvas 2008). This is of particular importance as paper 4 shows that social norms are not stable constructs and that these varying normative perceptions are affected, while not in themselves reflecting, shared meanings at the society level. It follows that different groups of entrepreneurs are embedded in different normative social settings, creating both favorable and/or unfavorable entrepreneurial environments on the micro-scale. Thus, while the dissertation argues that social norms, such as moral legitimacy at the society level, play an important role in shaping entrepreneurial interests and intentions, it also suggests that social norms in the immediate social environment have a strong effect during the nascent and early phases of a business’s development. This concurs with Welter (2011) who calls for developing understandings of

entrepreneurship as part of everyday life to enhance our knowledge of the link between society and entrepreneurial activity.

Further, the dissertation suggests that the insight into the normative role of social networks may link to recent developments on the knowledge of the local aspect of new venture creation. Stam (2007; 2010) in particular provides a comprehensive set of arguments for why entrepreneurs tend to start and operate their businesses in their home region. One main reason proposed is the importance of the entrepreneur's attachment to and support received from personal networks which live in their surrounding environment. While this dissertation concurs with this argumentation, there is evidence that some networks of friends and family exert a negative influence and that some (potential) entrepreneurs may leave their home areas before starting their businesses to avoid such negative sanctions and to seek out important emotional and professional support elsewhere. Accordingly, this underlines why entrepreneurs can be subject to a local inertia based on personal motives, while also potentially adding to the knowledge of why some (potential) entrepreneurs may decide to leave their home area during the early phases of venture creation and development.

In a regional context, research paper 2 also implies that 'objective' regional and institutional factors play an important role in the very early phase of venture creation by influencing individual cognitions and the formation of entrepreneurial intentions. While the dissertation's findings are mainly based on individual perceptions of the external environment, paper 2 emphasizes that factual structures of a location also indirectly impact on an individual's cognitive processes, which in turn stimulate or undermine their entrepreneurial intentions. This supports the assumptions of Hodgson (2006: 8), suggesting that the institutional environments are 'simultaneously both 'objective' structures "out there" and subjective springs of human agency "in the human head".' As such, the dissertation also concurs with Sternberg (2009) who points out that individuals filter signals received from their regional environments, while it particularly adds new insight to the knowledge of how the regional environment is influencing cognition processes that set the basis of the formation of entrepreneurial intentions. Accordingly, it also contributes to the recent work of Lim et al. (2010) that suggests that 'objective' socio-economic and institutional factors significantly influence entrepreneurial cognitions relevant to the decision to become an entrepreneur. While Lim et al. (2010) call for further research on entrepreneurial cognitions at the country level, through use of 'objective' measures of the external (particularly the formal) institutional environment, the current study proposes that such factors need to be considered at the regional and local level too. Regional and local

consideration will produce fine-grained understanding of how the external environment shapes entrepreneurial cognitions.

Moreover, the dissertation demonstrates that Ajzen's theory of planned behavior (TPB) can better explain the formation of entrepreneurial intentions when it is complemented with both 'objective' (paper 2) and subjective measures (paper 3) of the external spatial and institutional environments. While paper 3 largely supports the main rationale of the TPB in suggesting that external influences are mediated by three antecedents (attitude, subjective norm and perceived behavioral control); paper 2 provides substantial and empirically-supported arguments that external factors can also moderate the influence of the three entrepreneurial cognitions on intentions. Thus, it might well be that the subjective measures used in paper 3 are manifested in a more conscious filtering process and reception of environmental signals, which in turn more directly influences entrepreneurial attitudes or self-efficacy beliefs, serving as the basis for the formation of entrepreneurial intentions. On the other hand, the use of 'objective' measures to capture the external environment in paper 2 may result in more unconscious filtering of external factors. That filtering suggests a more implicit influence on entrepreneurial cognitive processes in moderating the relationship between cognitions and intentions. In addition, one further explanation developed in paper 2 for the external influence on cognitions is anchored in the assumption that environmental signals can induce uncertainties or increase the certainty of entrepreneurial beliefs, which, according to the social-psychologists Cooke and Sheeran (2004), could strengthen or weaken (in other words, moderate) the impact of the three TPB antecedents on entrepreneurial intentions. In the spirit of Hodgson (2006), an individual's filtering of 'objective' environmental elements may also indirectly involve normative evaluations by an individual, which thus may further add to the understanding of how external conditions result in (un)certain entrepreneurial cognitions relevant to the formation of entrepreneurial intention.

In summary, the dissertation shows that a variety of contextual elements influence different phases of new venture creation, while (potential) entrepreneurs are also able to resist and change their environment. As such, it argues that multi-layered frameworks are needed to conceptualize and interpret the variety of contexts, such as social, spatial and cultural elements, that interact with entrepreneurship. Based on the conceptual and empirical insights drawn from this dissertation, I believe that a combination of old and new economic and sociological institutional theories can offer a way forward that enhances our understanding of the interdependency between 'objective' and subjective contexts and entrepreneurship. In particular, I suggest that the social normative institutions and (implicit normative) evaluations attached to the different

contexts are core features that might link different contextual influences on entrepreneurship, and build a multi-layered institutional approach to new venture creation. I suggest that the development of a multi-layered institutional approach can improve our knowledge of downward and upward causations between context and entrepreneurship, by acknowledging that institutions in different contexts constrain and enable entrepreneurial behavior, while (potential) entrepreneurs can also create and change institutions and context.

6.3 Practical implications

While each research paper presents its specific implications for policy and practitioners (Part II), the dissertation concludes that developing environments that favor entrepreneurship is a far too complex task to be addressed simply by legislative and regulative intervention. The dissertation argues that when informal institutions and social normative contexts are explored in greater depth, we can enhance understandings of environments that enable and/or constrain the emergence of new ventures. This concurs with policymakers and enterprise support communities expressing an increasing interest in the environmental drivers of entrepreneurship (Thornton et al. 2011), while international organizations, such as the Organization for Economic Co-operation and Development (OECD) and European Union (EU), specifically raise the importance of social and cultural indicators (European Commission 2006; OECD 2000). As such, governments and support agencies need to be aware that the creation of regulatory environments intended to support entrepreneurship can only be successful when the social norms and cultural embeddedness of entrepreneurial behavior is considered as well. Supporting this suggestion, the present work highlights that implications of formal institutional rules are also subject of normative evaluations (Scott 2010; Hodgson 2006), which in turn increases the importance of considering normative elements attached to different spatial contexts when designing initiatives to support business venturing.

Moreover, the dissertation suggests that policy-makers and practitioners that seek to support entrepreneurship need to consider the different environments within which potential entrepreneurs are embedded. Drawing upon the insight gained into social, regional and societal influences of new venture creation, for instance regional governments could improve their support for local entrepreneurship by customizing initiatives that, in addition to local formal and informal conditions, consider the deeper structural and normative elements of society (e.g., moral legitimacy) as well as specific characteristics

of the potential entrepreneur embedded in unique social networks. As such, the present findings particularly suggest that in order to enhance the formation of entrepreneurial interests and intentions, national and local policy and enterprise support organizations should jointly seek to facilitate a socio-cultural environment at society and regional levels that increases the social acceptance of entrepreneurship. This is particularly important, since establishing new grounds for social legitimacy is very challenging and often only possible due to pressure applied by a group of established organizations over a longer period of time (Suchman 1995).

In addition, if the aim is to develop support structures to help entrepreneurs prepare and operate their business, I suggest an increased focus on the normative judgments and social barriers within the entrepreneurs' immediate social environment would be advisable. It is important to offer individual support for entrepreneurs to help them to cope with negative social perceptions in, and lack of support from, their social networks, and also to receive the emotional support needed. The strategies identified to manage negative social norms towards enterprising activity at an 'older age' may offer more generally a productive way to increase awareness of how to receive more emotional and professional support from social networks through changing the normative views of the entrepreneurs themselves. As such, it is suggested that in order to enhance understandings of what type of support potential entrepreneurs require their (social networks') particular backgrounds and aims need to be taken into account. Thus, it can be argued that national and regional policy interventions towards entrepreneurship also need to develop and provide a case-by-case support which treats each (potential) entrepreneur's social backgrounds and networks individually, in order to fundamentally support entrepreneurial activity through social processes as a whole.

Finally, such initiatives need to be adjusted for the economic, demographic and industry structures found in specific places, as they are found to affect individual entrepreneurial beliefs and intentions (see paper 2). However, the dissertation also emphasizes the complexity in fully understanding whether certain regional indicators positively or negatively influence the way how individuals value entrepreneurship (attitude), how they perceive the social pressure and support within closer social environments (subjective norm) or how they think that they are able to become a successful entrepreneur (perceived behavioral control). Accordingly, drawing conclusions for practice can become even more challenging. Nevertheless, the present research may imply that, if the aim is to support local entrepreneurial activity, regions with high levels of public sector and manufacturing employment need to pay particular attention to the perceived social acceptance of entrepreneurship and entrepreneurial capabilities amongst local members. In other words, it is

advisable to design support initiatives which are able to co-create collective beliefs amongst local members that are favorable towards entrepreneurship, even in a public and manufacturing dominant regional environment. This could enable individuals who perceive entrepreneurship as a valuable career option (attitude) to feel also confident in starting their own business, while perceiving less social sanctions when doing so; accordingly, the region could potentially support regional economic development in addition to the dominant industry structures. Another possible conclusion links to the role of densely populated regions together with relatively higher education levels. The present findings emphasize that in such regions it is of particular importance to offer appropriate support for potential entrepreneurs which can help them to build up the confidence in being able to start a successful business in a competitive landscape. One way to do so might be to assist potential entrepreneurs in enhancing their specific understandings of how to benefit from running a business in dense regions with a large pool of well-educated people, in order to minimize the fear of competition.

6.4 Limitations and Future Directions

While each research paper discusses its specific limitations, I further acknowledge that the dissertation's limitations refer to at least six interrelated themes and offer the following suggestions for improvements that future research might incorporate.

Context. The dissertation focused on the role of social, spatial and institutional contexts in new venture creation processes, and mainly concentrates on informal institutional and social normative elements of the different contexts. While paper 2 provides new insight into the role of regional economic, policy and industry structures in the formation of entrepreneurial intentions, that does imply a neglect of the impact of specific business and market systems/clusters and formal and regulative institutional elements that potentially affect the emergence of new ventures. In line with Veciana and Urbano (2008), I recommend future institutional research on entrepreneurship that develops a more holistic institutional view of contexts for entrepreneurship. It might do that by also addressing the specific interactions between market, economic and industry specific elements with emerging entrepreneurial activities. Following this, scholars could enrich multi-layered institutional thinking by incorporating thoughts from evolutionary economic geography, particularly as emphasized in the work of Stam, which concludes that an institutional infrastructure supportive of entrepreneurship is often the outcome of a critical mass of

enterprising activity in a certain industry or a group of closely connected industries (Stam 2010).

Another context issue that has not been addressed in the dissertation is a comprehensive analysis of the geographical context in which entrepreneurship is studied. While the dissertation sought to provide rather holistic insight, both conceptual and empirical, into social, spatial and institutional embeddedness of the early phase of new venture creation and development, it was not able to offer further contextual insight by adjusting the analysis and discussion by linking to specific characteristics of the areas, such as London, three provinces in Western Finland, or the countries involved in the cross-country research in paper 1. Accordingly, in order to add more nuanced geographical interpretations of the institutional environments of entrepreneurship, future research is warranted that includes a more comprehensive/detailed place-based analysis on new venture creation. One potential way to address this issue theoretically and empirically from an institutional perspective could be to point to the specific place-based institutions, and the meanings actors attach to the place within which they are embedded; an approach taken in recent studies (e.g., Fink et al. 2011, 2012; González and Healey 2005; Johnstone and Lionais 2004; Lang and Roessl 2011).

Study samples. In relation to the context limitations, I acknowledge that the coherence of the overall contribution of the dissertation might be limited due to the different sample characteristics of the four individual studies. While paper 1 and 2 address the role of contexts for entrepreneurship across the working-age population, paper 3 and 4 solely focused on potential entrepreneurs at an 'older' age (45 years and above). Paper 3 and 4 has emphasized differences between 'younger' and 'older' age groups amongst older potential entrepreneurs; however, future research is needed that investigates the influence of different contexts— particularly age-related norms, as addressed in paper 3 and 4—on new venture creation based on samples representing a broader range of age-groups. This would allow controlling for potential differences in push and pull motivations across younger and older age groups, while addressing the stylized fact that an individual's chronological age can influence their age perceptions and thus behavioral beliefs (Teuscher 2009).

Emotions. The dissertation's main theoretical rationale applied at the individual level is based on the theory of planned behavior (Ajzen 1991), i.e. it was assumed that particular cognitive processes determine whether an individual intends to become an entrepreneur or not, while intention is suggested to be the pre-condition of actual behavior. Such a cognitive approach clearly neglects affective processes, thus overlooking emotional elements that might be crucial to understand why an individual wishes to create a new venture, or not. Further, emotional motives, ties and reactions can

be particularly important to enhance our knowledge of how (potential) entrepreneurs react differently to social and institutional contexts. For instance, the work of Goss (2005) emphasizes how strong emotional ties with particular social groups can strengthen the effect of social norms and sanctions within those groups, thus shaping the way how entrepreneurial intention and action can emerge. Institutional scholars, particularly in organization and management studies, have also begun to stress the role of emotions (Voronov and Vince, 2012), calling for ‘a better understanding of embedded actors’ lived, emotional experiences of and responses to institutional structures’ (Creed et al., 2010: 1359). In a similar vein, Scott (2008) has underlined that emotions can serve as a fruitful way to develop his influential concept of the three institutional pillars - regulative, normative and cultural-cognitive, for instance by theorizing and investigating emotions as a fourth pillar or as a potential moderator of the relationship between institutions and behavior. Subsequently, further research could clearly enrich the dissertation’s findings by explicitly addressing the emotional elements that may influence new firm formation behaviors in different environments.

Entrepreneurship types. The dissertation’s interpretations are further limited in that it cannot provide insight into how the influence of certain contexts differs in relation to various types of entrepreneurship, and different types of ventures individuals intend to create, be that in the short or medium term. Stam (2010) for instance, has criticized the large body of empirical research that uses the foundation of a firm or self-employment as indicators of entrepreneurship. Stam argues that such an approach overlooks the different forms of entrepreneurship, exemplified by two extremes: ‘the entrepreneur who is self-employed out of necessity, and the ambitious and technologically innovative high-growth start-up’ (Stam 2010: 150). This leads him to conclude that ‘different types of entrepreneurship require different types of explanations’ (Stam 2010: 150), and to call for further entrepreneurship studies that ‘specify the type of entrepreneurship that is of importance for the research question at hand, so we can match it with the related theoretical framework and empirical indicators’ (Stam 2010: 151). Supportive of this argumentation, the recent cross-country study by Stenholm et al. (2013: 1) emphasizes that different institutional arrangements influence entrepreneurial activity rates and types differently. For instance, they show that ‘[f]or high-impact entrepreneurship an institutional environment filled with new opportunities created by knowledge spillovers and the capital necessary for high impact entrepreneurship matter most’. Thus, while the dissertation has addressed different phases of new venture creation in various contexts (e.g., intention, nascent and early firm phase), further research is needed that add to this knowledge by

theorizing and examining how the identified contextual influences vary according to different entrepreneurial ambitions and types of entrepreneurship.

This concurs with Kautonen et al. (2011), whose work calls for further research specifically addressing a common limitation in studies of entrepreneurial intentions—the dependent variable simply reflecting the individual's intention to create a venture, without taking into account the different types of entrepreneurship. Accordingly, it is suggested that future entrepreneurial intention studies (within different contexts) could differentiate, for example, 'between full-time and part-time entrepreneurship, sole proprietorships and businesses with employees, opportunity and necessity driven entrepreneurship, for-profit and social enterprises, and "quasi self-employed" subcontracting (Kautonen et al. 2011: 597). In addition, the recent study of Bosma et al. (2009) offers a useful knowledge base and tool which could be used to further develop nuanced understandings of environmental effects on different types of early-stage entrepreneurship. For instance, they suggest the value of differentiating between 'low, modest and high growth-oriented entrepreneurship and innovation oriented entrepreneurship' in analyzing the influence of different regional and national factors on entrepreneurship.

History. In the spirit of Welter (2011), the dissertation has emphasized the importance of contextualizing new venture creation processes within different social, spatial and institutional environments. While providing a comprehensive framework and empirical analysis that addresses the different contextual influences on different phases of venture creation, the dissertation—particularly empirically—largely neglects the history of contexts and their varying impact on new venture creations over time, by basing the research solely on cross-sectional data. Paper 4 adjusts for this limitation to a certain extent, basing the analysis on individual storytelling (the *retrospective lens*), while paper 2 and 3 also include regional indicators that capture past developments; however, the main body of the empirical analysis of this dissertation is cross-sectional and quantitative, which restricts interpretations of varying contextual influences on venture creation over time. This becomes also critical for the included studies applying the theory of planned behavior (Ajzen 1991), as they only examine the formation of intentions, thus neglecting to test whether intention translates into action and how external factors shape this relationship. Thus, generally speaking, this calls for future research that adds to the contextual knowledge of new venture creation by using longitudinal quantitative and qualitative data, emphasizing the time horizon of the social, spatial and institutional embeddedness of firm formation processes.

Emergence of institutions. Following the discussion regarding the history of contexts, the dissertation also raises the importance of future institutional research that focuses on the emergence of entrepreneurship-relevant

institutions at the social, regional and society level. While paper 4 provides preliminary insights into how normative institutional elements are reflected in social networks and how entrepreneurs are able to change social norms, the dissertation does not add much on the origins and production of institutions in different contexts, which could profoundly enhance our contextualized understanding of new venture creation in the present (and future). For instance, Jepperson (1991) has posited that the core of institutional theories should be the focus on how institutions and social rules come into being through interactions, how they remain stable and can be modified; these are issues research paper 4 addresses in the context of family, friends and client networks. However, how social normative contexts for entrepreneurship, particularly at the local, regional or society level (as discussed in articles 1–3) are produced and change over time remains unknown. As such, I suggest that further entrepreneurship research is needed that theoretically and empirically addresses institutionalization as a ‘process and property variable’ (Zucker 1977: 728). This would complement the dissertation’s findings and the large number of cross-sectional studies that examine (stable forms or measures of) institutional structures on entrepreneurship variations with particular knowledge of institutional emergence and change within different spatial contexts. This could provide essential and additional insight into the question of how institutions emerge in particular contexts (Scott 2010), and create, and are created by, different forms of entrepreneurship.

Evolutionary thinking. Continuing the argumentation above, I further suggest that an institutional perspective could be more explicitly enriched and combined with an evolutionary economic thinking. For instance, the institutional lens of Hodgson (2006, 2009), used as a broad theoretical basis for combining different streams of institutional theories, emphasizes the importance of evolutionary thoughts in institutional research, rooted in the origins of old (American) institutional economic theory (Veblen’s 1919), in order to understand how social rules, habits and routines emerge and are sustained. Thus, in the spirit of Hodgson (2006), a multi-layered institutional perspective to entrepreneurship could, or rather needs to be, more explicitly complemented by evolutionary ideas. In this context, Welter (2011: 176) also proposes that evolutionary thoughts can complement an institutional approach by adding an ‘individual perspective that takes into account the adaptability and learning behavior of entrepreneurs, thus drawing attention to the process dimension of entrepreneurship where individual action impacts context and contributes to changing a context.’ Here, particularly Stam’s (2007, 2010) development of an evolutionary economic geography approach could help develop a more dynamic orientation of institutional understandings of new venture creation in different spatial contexts. By complementing the proposed

multi-layered institutional lens with an evolutionary approach, future institutional research might be more able to explicitly consider that '[e]ntrepreneurs are agents who are conditioned by, and sometimes change or even initiate, complex adaptive systems [recognizing that these] systems are situated in particular geographic contexts, and emerge, grow and decline over time' (Stam 2010: 151). Such integrative research could further improve our conceptual knowledge of the different contexts *and* dynamics involved in an individual's new venture creation process.

From creating to developing a venture. While this dissertation adds new insight to the limited contextualized understanding of the pre-venture phase, we still know very little of how the pre-emergent or early firm phases in different environments is linked with the prospect of growth. There is extensive evidence on the central role of high-growth firms for the economy (Acs 2008), and an increasing number of studies that explore the different configurations of firm growth (Autio and Acs 2010; Wiklund and Davidsson 2003). However, this body of research has so far neglected the potential decisive configurations of firms' growth that have been established and institutionalized during the nascent entrepreneurship phase. Subsequently, while we might increasingly know what kind of nascent entrepreneurial strategies and activities lead to successful firm formation (Newbert and Tornikoski 2011, 2012), or which elements and configurations are required for a firm to grow (Wiklund and Shepherd 2005), there is limited knowledge of how nascent entrepreneurs' strategies applied when establishing their firms in a particular place can set the foundations and also the boundaries of future development. Developing such insight can be of particular importance, given that decisions made by nascent entrepreneurs at the formative stage of a venture have lasting effects on its operations (Bamford et al. 1999). Here, for instance, the recent work by Newbert et al. (2012) provides already an important base for further research on the evolution of decisive network configurations in the emergence of new ventures, which in turn may influence firm growth in the future. Accordingly, the dissertation suggests the more research is needed that develops a contextualized knowledge base of early-stage and nascent entrepreneurship and its link to future growth. This can arguably further develop the foundations for academics, (nascent) entrepreneurs, enterprise support communities and business angels to evaluate (non-)successful business operations, in relation to different environments, before a firm is established.

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PART II: RESEARCH PAPERS

Paper 1: Kibler, E. (2012). Moral legitimacy of entrepreneurship and its impact on the firm formation process.

Moral Legitimacy of Entrepreneurship and Its Impact on the Firm Formation Process¹

Abstract

Scholars and policymakers increasingly seek to identify the environmental drivers of entrepreneurship, but contemporary cross-country studies have largely neglected the role of socio-cultural norms on entrepreneurial behavior. Based on an institutional economic perspective and a social legitimacy approach, this study is a first attempt to conceptualize and examine the influence of the perceived moral legitimacy of entrepreneurship in a society on an individual's progress across different stages of the firm formation process. A multilevel analysis across 27 countries demonstrates that the moral legitimacy accorded to entrepreneurs has a significant positive impact in the early firm formation phases. In particular, the findings show that the higher the degree of moral legitimacy accorded to entrepreneurs, the higher the probability that an individual will consider becoming an entrepreneur and actually start preparing their business. Thus, the study suggests that entrepreneurial decisions and behavior are not independent of the perceived moral norms in society. Moreover, a policy aiming to increase the potential of individuals becoming entrepreneurs should facilitate socio-cultural norms that legitimize entrepreneurial activity as moral and beneficial to society as a whole.

Keywords: Social norms, moral legitimacy, entrepreneurship, firm formation

1. Introduction

Different nations reveal different pre-nascent, nascent and established entrepreneurship levels (Bosma *et al.*, 2009; Bosma and Levie, 2010; Minniti, 2006), whilst research emphasizes a relatively strong relationship between (nascent) entrepreneurial activity and economic development (e.g., Reynolds, 1994; Wennekers and Thurik, 1999; Wennekers *et al.*, 2005), even if the relationship is not always straightforward (e.g., Carree *et al.*, 2007). Subsequently, cross-country analyses have increased the focus on the environmental drivers of entrepreneurial motivation (e.g., Begley, Tan, and Schoch, 2005; Hessels, Gelderen, and Thurik, 2008), nascent entrepreneurial activity (e.g., Suddle, Beugelsdijk, and Wennekers, 2010; Wennekers *et al.*, 2005) and business start-up activity (e.g., Blanchflower, 2000; Reynolds,

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Storey, and Westhead, 1994). While a range of influencing factors, including economic, institutional or demographic indicators, have been identified (Blanchflower, 2000), there is only limited (multi-country) research on the impact of the socio-cultural environments on entrepreneurial behavior (Freytag and Thurik, 2007; Schendel and Hitt, 2007; Thornton, Ribeiro-Soriano, and Urbano, 2011).

Prior research argues that national culture and institutions influence economic activity (e.g., North, 1990; Shane, 1993) and development (e.g., Beugelsdijk, 2007; McClelland, 1961; North, 2005). Entrepreneurship literature also suggests that the national environment with its socio-cultural norms and values shapes entrepreneurial behavior (e.g., Baumol and Strom, 2007; Freytag and Thurik, 2007; Hayton, George, and Zahra, 2002; Sternberg, 2009) through both the demand and supply side of entrepreneurship (Verheul *et al.*, 2002). Thornton *et al.* (2011) conclude that an institutional perspective can serve as an appropriate framework to analyze socio-cultural contexts that influence decisions to found new firms. In this regard, the degree of social and moral legitimation of entrepreneurship in a society (Etzioni, 1987) has been discussed as one potential way of capturing such informal institutional settings for entrepreneurship (Bruton, Ahlstrom, and Li, 2010; Freytag and Thurik, 2007), suggesting that the more entrepreneurship is socially legitimized in a society the higher the entrepreneurial activity should be (Etzioni, 1987; Shane, 2003; Wilken, 1979). However, existing (cross-country) studies on socio-cultural values and entrepreneurship have mainly followed Hofstede's (2001) seminal work (Hayton, George, and Zahra, 2002) or an aggregated psychological trait approach (Freytag and Thurik, 2007), thus largely neglecting conceptualizations of the social and moral legitimacy of entrepreneurship. In addition, many of the studies on the influence of culture on entrepreneurship do not consider that 'entrepreneurship is a process of emergence' (Sternberg, 2009: 15) as they focus either on entrepreneurial motivation, nascent activity or business start-up rates as the dependent variables. In summary, little is yet known about the informal institutional environment, particularly the social and moral legitimacy of entrepreneurship in society, and the influence of that level of legitimacy on the individual's progress through the different stages of the firm formation process.

Against this backdrop, this study addresses the impact of the *moral legitimacy of entrepreneurship* in a society on an individual's entrepreneurial engagement, as operationalized with the concept of the entrepreneurial ladder (Van der Zwan, Grilo, and Thurik, 2010) and its sequential start-up stages: 'never considered starting a business', 'thinking about starting a business', 'taking steps to start a business', and 'running a business for less than three years'. The theoretical foundation is based on an institutional perspective

(Scott 1995) on entrepreneurship (Busenitz, Gómez, and Spencer 2000; Bruton *et al.*, 2010; Thornton *et al.*, 2011; Veciana and Urbano, 2008; Welter and Smallbone, 2011), within which ‘legitimacy’ is seen as an informal institution, a common perception of social acceptance (Scott, 1995; Suchman, 1995). The moral legitimacy accorded to entrepreneurs, in particular, is operationalized in the spirit of Suchman (1995), and broadly defined ‘as shared value premises that structure collective assessments of the good and the bad’ (Deephouse and Suchman, 2008: 53) as they relate to entrepreneurs and their actions.

This study makes the following contributions to the knowledge. First, it contributes to the entrepreneurship literature by conceptualizing and analyzing the moral legitimacy of entrepreneurship and its impact on the individual’s progress through the different phases of the firm formation process. Second, the study adds to the important challenge of theorizing and measuring the influence of socio-cultural contexts on entrepreneurial behavior (Brutone *et al.*, 2010; Schendel and Hitt 2007; Thornton *et al.* 2011), also addressing the need for multilevel research designs (Autio and Acs 2010) and more extensive and internationally comparable empirical studies (Verheul *et al.*, 2002). Third, the study provides implications for policy and entrepreneurship practitioners, offering detailed insights into how levels of moral approval of entrepreneurship either support or undermine an individual’s progress in the firm formation process.

The paper is organized as follows. The first section describes the theoretical framework underlying the analysis and derives hypotheses for empirical examination. The subsequent section introduces the methodological design of the empirical work. The third section presents the results of the empirical analysis, while the final section discusses the findings and their implications for policy and further research

2. Theoretical Framework and Hypotheses

2.1 Institutional Theory and Legitimacy

Institutional (economic and sociological) theories broadly share the assumption that individual behaviour is structured (Giddens 1984) by rules and norms of the institutional environment (Meyer and Rowan 1977; North 1990; Scott 1995; Hodgson 2006). ‘*Institutions*’, in this context, often refer to formal rule sets (e.g., laws, regulatory frameworks) (North 1990) and implicit rules (Hodgson 2006), where the latter involves less formal shared expectations and interactions (Jepperson 1991) as well as ‘taken-for-granted’ assumptions

(Meyer and Rowan 1977; Scott 1995). Following this, institutional scholars also suggest that institutional rules can enable and constraint behaviours of individuals, but also depend upon them (Hodgson 2006; North 2005; Scott 2010).

This study particularly follows the theoretical work of Scott (1995: 33), which views institutions as ‘social structures that have attained a high degree of resilience. [They] are composed of [three institutional pillars:] *cultural-cognitive, normative, and regulative elements* that, together with associated activities and resources, provide stability and meaning to social life’. Scott’s concept, briefly summarized by Garud, Hardy, and Maquire (2007: 958), suggests that ‘the regulative [pillar] guides action through coercion and threat of formal sanction; the normative [...] guides action through norms of acceptability, morality and ethics; and the cognitive guides action through the very categories and frames by which actors know and interpret their world’.

Drawing upon these ideas, institutional scholars, especially in organizational research, strongly emphasized the (bipartite or tripartite) constructs of *social legitimacy* (e.g., Aldrich and Fiol, 1994; DiMaggio and Powell, 1983; Meyer and Rowan, 1977; Suchman, 1995; see Bitektine, 2011 for an overview), also acknowledging a strong cultural dimension in their analysis of legitimating processes (Deephouse and Suchman, 2008; Nicholls, 2010). Social legitimacy, in this context, is widely seen as ‘a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate’ (Suchman, 1995: 574). Reflecting the work of Scott (1995), Suchman (1995) suggests three conceptual dimensions of social legitimacy – *pragmatic* (‘regulative’), *moral* (‘normative’) and *cognitive legitimacy* (‘cognitive’) –, whereas he refined this framework with two temporal dimensions (episodic versus continual) and two substantive foci (actions versus essences), resulting in twelve distinct types of legitimacy (for an overview of the typology, see Suchman, 1995: 384).

This study addresses moral legitimacy, with a particular focus on one of Suchman’s (1995) conceptualized sub-types of moral legitimacy, *consequential moral legitimacy* (the episodic dimension and action focus of moral legitimacy) (Deephouse and Suchman, 2008; Suchman, 1995). Generally speaking, moral legitimacy refers to collective normative approvals and judgments of good and bad, whereas consequential legitimacy is particularly concerned with the moral evaluation of the outcomes and benefits of actions for the whole of society (Bitektine, 2011; Suchman, 1995). The focus on this specific form of moral legitimacy is reasoned in the theoretical work of Anderson and Smith (2007) on the moral imperative in entrepreneurship. They argue that the legitimation of entrepreneurship is the result of a congruent interplay between entrepreneurial actions, outcomes and social beliefs, while

specifying that moral legitimacy is particularly based on normative appraisals of the social benefits for the public domain. In line with North's concept, which intends to frame and measure a general structure at the national level (Rafiqui, 2009), the moral legitimacy conferred by society is here also understood as an informal institution in a national context. The following section discusses the potential influence of the moral legitimacy accorded to entrepreneurs on the entrepreneurial behavior and firm formation process, and derives hypotheses for empirical testing.

2.2 An Institutional Approach to Entrepreneurship and the Moral Legitimacy Accorded to It

A growing number of scholars argue that an institutional approach shows great promise for analyzing entrepreneurial behavior (e.g., Busenitz *et al.*, 2000; Bruton *et al.*, 2010; Thornton *et al.*, 2011; Urbano and Veciana 2008; Welter 2011; Welter and Smallbone, 2008, 2011). The main premise of an institutional perspective on entrepreneurship is that entrepreneurial behavior and firm formation processes depend on the individual's relationship with the 'external' environment, particularly the institutional environment (Garud *et al.*, 2007; Veciana and Urbano, 2008; Welter and Smallbone, 2011). Veciana and Urbano (2008) contend that the process of becoming an entrepreneur is highly conditioned by institutions, further arguing that human beliefs and interest in entrepreneurship are social and cultural in origin, and thus mirror the characteristics of the institutional environment. Thornton *et al.* (2011) and Welter and Smallbone (2011) underline the important role of institutional contexts for entrepreneurial behavior by suggesting that institutions promote entrepreneurship, while also constraining it. Baumol and Strom (2007: 236) briefly summarize enterprising activity 'as much affected by individual values as it is by established institutions and social norms'. In other words, 'it isn't just something that entrepreneurs 'do', it is also a social phenomenon that emerges within the context of a broader society' (Lundström and Stevenson, 2005: 44).

Highlighting the need for future research on the role of institutions in entrepreneurship culture studies, Beugelsdijk (2007) states that entrepreneurial activity is determined by the interplay of informal and formal rules of the game; whereas it should be noted that informal institutions are embedded in society, and are thus more stable than formal institutions (Welter and Smallbone, 2011). Welter and Smallbone (2008) further specify that while formal institutional forces condition the actual level of entrepreneurial opportunities, it is the informal institutions that shape the collective and individual perception of entrepreneurship. Shane (2003: 160) concludes that the informal

institutional environment co-determines the exploitation of entrepreneurial opportunities in society by 'influencing the degree to which entrepreneurial activity is considered desirable' and 'through specific cultural beliefs that encourage or discourage entrepreneurial activity'.

Scholars have discussed the social acceptance of entrepreneurship as an informal institution by suggesting that higher levels of acceptance increase the entrepreneurial activity level in a given society (Etzioni, 1987; Shane, 2003; Wilken, 1979). In other words, the more entrepreneurship is socially accepted as an essential part of people's well-being, the more it is culturally embedded, and, subsequently, creates an environment with less negative informal sanctioning mechanisms for entrepreneurial behavior (Welter and Smallbone, 2011). This study addresses the moral legitimacy of entrepreneurship as a source of social acceptance (or legitimacy) (Suchman, 1995) of entrepreneurs in society, which, in turn, is part of the broader informal institutional environment (Bruton *et al.*, 2010; Shane, 2003; Thornton *et al.*, 2011). According to the theoretical framework above, the moral legitimacy of entrepreneurship is seen as a normative approval of most members of society of the 'good and bad' of entrepreneurship and the actions of entrepreneurs. More specifically, the consequential moral legitimacy accorded to entrepreneurs is understood as a collective normative evaluation of the actions entrepreneurs as being beneficial to the whole society, which, in turn, is argued to influence an individual's propensity to engage in the processes required to form a firm. Research indicates that moral norms influence an individual's decision to perform certain behavior (Kaiser, 2006; Raats, Shepherd, and Sparks, 1995). Zafirovski (1999) suggests that moral concerns influence and constrain entrepreneurship, whilst Anderson and Smith (2007) argue that moral legitimacy shapes individual enterprising perceptions and practices. Following this rationale, this study assumes that if the entrepreneurs' activities in a country are commonly valued as more beneficial to the whole society, potential entrepreneurs enjoy higher levels of moral acceptance; subsequently this may augment their motivation to engage in entrepreneurial activities and to progress the firm formation process. Hence, it is proposed that: *The moral legitimacy of entrepreneurship has a positive impact on the individual's progress in the venture creation process* (Hypothesis 1).

An opposing viewpoint might hold that the influence of the moral legitimacy accorded to entrepreneurs in society varies in the different stages of forming a firm. Baumol and Strom (2007) suggest that entrepreneurial incentive structures are particularly guided by social and cultural norms. Rafiqui (2009) specifies that institutions form motivational structures that shape the feasibility and profitability of engaging in economic activity, such as

starting a business. Freytag and Thurik (2007) argue that cultural elements influence the individual preference for entrepreneurship, whereas hard economic factors shape the actual start-up levels. Moreover, Sternberg (2009) proposes that the national environment with its socio-cultural norms and values influence individual perceptions and beliefs towards entrepreneurship, subsequently shaping an individual's general interest in engaging in entrepreneurial activity. Hence, it might well be that the moral legitimacy of entrepreneurship in society plays a stronger role in the earlier start-up stages than in phases in which individuals are just embarking on or already running a business.

Previous empirical research in this context tells us that perceived environmental conditions across nations exert different effects on various stages of the firm formation process (Van der Zwan *et al.* 2009; Van der Zwan, Verheul, and Thurik 2011). For instance, Van der Zwan *et al.* (2009) finds that a country's risk tolerance towards entrepreneurship has a positive impact on the fact that people even start thinking about becoming an entrepreneur, while it has no effect on subsequent business start-up or early firm operation phases. Further, the study of Begley and Tan (2001) shows that socio-cultural values shape individual interest in entrepreneurship, and can hinder or support an individual's decision to prepare for and start a business. Mueller and Thomas (2001) illustrate that culture influences an individual's perceived ability to run a successful business, whilst Begley *et al.* (2005) underline that different cultural contexts relate to different levels of start-up feasibility and desirability.

Moreover, Shane (2003) indicates that the interest in engaging in entrepreneurial activities is higher when the level of social acceptance of entrepreneurship in a society is high too. On the sub-national scale, Kautonen, Tornikoski, and Kibler (2011) and Liñán *et al.* (2011) show that socio-cultural norms that are favorable to entrepreneurship positively influence the formation of entrepreneurial intentions, for instance, by shaping an individual's entrepreneurial attitude and the self-esteem required to start (preparing) a business. To this, Kaiser (2006) adds that moral norms particularly influence peoples' attitude towards certain behavior, and in turn, shape their intention and initial decision to perform the behavior.

In addition, a lower effect of moral legitimacy in the later phases of the firm formation process may be deduced from the findings of Tornikoski and Newbert (2007). Investigating the transition from a nascent organization to a new firm based on a legitimacy approach, with a specific focus on 'exchange legitimacy', a conceptual sub-type of 'pragmatic legitimacy' (see Suchman, 1995), they conclude that 'the key to gaining legitimacy seems to be a function of a nascent organization's ability to convince resource gatekeepers that it is operational' (Tornikoski and Newbert, 2007: 329). Consequently, nascent

organizations tend to be more influenced by the perceptions of their immediate audiences rather than those from their broader socio-cultural environment. This is due to the importance to them of becoming legitimized in the eyes of their potential resource gatekeepers (Tornikoski and Newbert, 2007).

In summary, the present research argues that the moral legitimacy accorded to entrepreneurs in society has a stronger impact in the early stages of the firm formation process than in the later phases closer to the actual business start-up. Hence, it is proposed that: *The moral legitimacy of entrepreneurship has a stronger influence on the early stages in the venture creation process* (Hypothesis 2).

3. Data and Variables

This study uses data from the 2009 Flash Eurobarometer Survey on Entrepreneurship (European Commission, 2009) for the individual-level variables, and data from the Eurostat Statistics Database in the period, 2005-2009 (European Commission, 2011), complemented by statistics from the Global Entrepreneurship Monitor (GEM) in the period 2005-2009, for the country-level covariates. The Eurobarometer data were collected in 2009 based on a telephone survey. The national sample sizes vary from 500-1017 and are representative of the population aged 15 and above in each country. Since the aim of this study is to examine different firm formation stages rather than long-term business ownership, respondents who had been running a business for more than three years were excluded from the analysis. Hence, the final sample for this analysis amounts to 11,002 individuals from 24 European countries as well as China, Japan and the United States.

Dependent variable. The operationalization of the dependent variable follows the conception of the entrepreneurial ladder (Van der Zwan *et al.*, 2010). The entrepreneurial ladder recognizes the *firm formation process* as a series of sequentially ordered stages where each stage indicates an increasing engagement in the start-up process. The level of engagement of the respondents refers to the following question 'How would you describe your situation?' Respondents were offered the following four response options: 1) 'It has never entered your mind to start up a business', 2) 'You are thinking about starting up a business', 3) 'You are currently taking steps to start a new business', and 4) 'You have started or taken over a business in the last three years which is still active today'. The remainder of this article abbreviates these stages as 'Never thought', 'Thinking', 'Taking steps' and 'Running a young business'. The ordinal dependent variable in this analysis therefore captures three thresh-

olds in the firm formation process: a) from *never thought to thinking*, b) from *thinking to taking steps* and c) from *taking steps to running a young business*.

Explanatory variable. The explanatory variable captures the perceived level of the *moral legitimacy of entrepreneurship*. In the spirit of Kaiser's (2006) global measure of perceived moral norms in a broader social context (as against one's own moral obligations), this analysis examines the perceived moral legitimacy with the following global question in the Eurobarometer survey: 'Please tell me, do you agree or disagree with [the following statement:] 'Entrepreneurs create new products and services and benefit us all' (on a scale from '4' = strongly agree to '1' = strongly disagree). Because of non-normality, this variable is treated as an ordered categorical one in this analysis with 'strongly disagree', indicating low moral legitimacy, as the base category.

Control variables. This analysis includes the respondent's sex, age, and income as control variables at the individual-level. Utilizing the same dataset Van der Zwan, Verheul, and Thurik (forthcoming) found sex and age to be significant determinants of an individual's progress through the sequential stages of the firm formation process. Prior research further underlines that women are generally less likely to engage in entrepreneurial behavior than men (e.g., Bosma *et al.*, 2009), whilst age is seen as among the most relevant influencing factors of entrepreneurial activity (Parker, 2009). Moreover, previous research has highlighted that an individual's income plays a role in firm formation, even if the effect is not always straight forward. For instance, while higher income levels increase the supply of resources to capitalize businesses (Evans and Jovanovic, 1989), it can lead to higher opportunity costs of becoming an entrepreneur (Amit, Muller, and Cockburn, 1995). Individuals with lower incomes often tend to be more interested in starting a business due to the potential to increase income (Mueller, 2006). *Sex* is included as a dummy variable with the value 1 assigned to female respondents. In order to account for the curvilinear effects of *age*, the model specification includes both linear and squared terms for age in years. *Income* is measured by four response categories referring to the person's feelings about their current income, so that they either 1) live comfortably, 2) get by, 3) find it difficult to manage, or 4) find it very hard to manage. Due to violation of normality, this ordinal scaled variable was dummy coded with 'live comfortably' as the base category.

A country-level control variable captures the 'objective' relationship between *entrepreneurial activity and economic development* in the past, in order to further adjust the model so as to uncover the effect of the perceived moral legitimacy. This variable serves as an indicator of whether new business formations are 'objectively' beneficial to a country's economic growth, and is

developed by correlating two country measures: the average new business owner growth rate (GEM reports 2005-2009) and the average growth rate of the real GDP per capita (European Commission, 2011), both in the period 2005–2009. Hence, this variable denotes each country's correlation coefficient between these two measures and consists of values between '-1' and '+1'. According to GEM, the new business owner rate is defined as the proportion of individuals in the country that have started a business and have been running it for no longer than three years (Bosma and Levie, 2010).

The descriptive statistics of the model variables are displayed in the appendix.

4. Analysis

The analysis by Van der Zwan *et al.* (2009) demonstrates that different covariates have varying effects in different stages of firm formation. Further, hypothesis 2 requires that this analysis differentiates between various thresholds in the individual firm formation process. Therefore, following Van der Zwan *et al.* (2009), this analysis estimates a separate binary regression model for each of the three thresholds. In so doing, the model examines the impact of the moral legitimacy of entrepreneurs (*explanatory variable*) on the odds of being beyond a certain firm formation stage in relation to being at that stage. In other words, the respondents who are at a particular stage of firm formation (e.g. 'thinking') are compared with all individuals that reached higher stages (e.g. 'taking steps' and 'running a young business'). Hence, an individual's engagement in the firm formation process is considered as a sequence of binary transitions. As a result, the original ordinal response variable consisting of four values is recoded into three binary measures (for an overview of this procedure see Van der Zwan *et al.*, 2009). Since the response variables are binary and the data are clustered at the country level, this analysis fits a series of hierarchical binominal logistic models using the maximum-likelihood estimator with numerical integration (30 quadrature points) to test the research hypotheses. The analysis strategy follows the recommendations in Hox (2010) and estimates each threshold in five steps. The relevant test statistics for each threshold are summarized in table 1.

Table 1 Test-statistics for the five model estimations

Estimation step	<i>New venture creation process</i>		
	<i>Threshold a</i>	<i>Threshold b</i>	<i>Threshold c</i>
	Never thought to thinking about it and beyond	Thinking to taking steps and beyond	Taking steps to running a young business
(1) Random intercept only ^a	750.76***	163.55***	40.53***
(2) Individual-level control variables added ^a	1181.33***	145.43***	80.38***
(3) Explanatory variable added ^a	59.86***	39.80***	4.35
(4) Random coefficient added ^b	5.32***	4.06***	2.57**
(5) Country-level covariate added ^a	11.94***	9.41**	5.48**

Notes: * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$ (one-tailed test). ^a Likelihood-ratio test. ^b Wald-test.

First, this analysis estimates intercept-only models (1) to examine whether there is a significant amount of variance at the country level to justify a multilevel analysis in the first place. The chi-square test comparing multilevel model to simple logistic regression is highly significant ($p < 0.001$) for all three models, indicating that a multilevel design is necessary for these data. The country-level variances of the intercept term are significant in each of the three thresholds in the firm formation process ($p < 0.001$). The intraclass correlation coefficients indicate that 11% and 9% of the variance in the model is explained by the grouping structure of the sample at the country level for the first two steps in the firm formation process, respectively. The role of country-level differences, however, is lower in the third step (5%) of moving from the nascent activity phase to actually running a young business. The likelihood-ratio test comparing the model including all the individual-level control variables (2) (female, age, age square and income) to the previous intercept-only models indicates a significant improvement of the model fit in all three thresholds.

Next, the two research hypotheses are examined. A likelihood-ratio test comparing specifications including the explanatory variable (3) with the previous specification (including the control variables) shows that the fit of the thresholds a and b improves significantly through the addition of the explanatory variable 'moral legitimacy of entrepreneurs'; while it is not significant in the final threshold. This result supports *hypothesis 1* and *hypothesis 2*. In other words, the moral legitimacy of entrepreneurship is found to positively relate to the firm formation process, particularly influencing the early business start-up phases over and above the control variables. The final two steps in the estimation process add a further control measure to ensure the finding is robust.

Table 2 Final random-coefficient logistic regression estimates

	<i>New venture creation process</i>		
	<i>Threshold a</i>	<i>Threshold b</i>	<i>Threshold b</i>
	Never thought to thinking and beyond	Thinking to taking steps and beyond	Taking steps to running a young business
	OR (SE)	OR (SE)	OR (SE)
<i>Moral legitimacy of entrepreneurship</i>			
High	2.190 (0.499)***	2.627 (0.961)**	1.726 (1.018)
High-medium	1.571 (0.352)**	1.756 (0.632)	1.470 (0.856)
Low-medium	1.201 (0.280)	1.391 (0.526)	1.008 (0.615)
<i>Control variables at the individual-level</i>			
Female	0.519 (0.025)***	0.747 (0.061)***	0.746 (0.093)**
Age	1.048 (0.009)***	1.162 (0.019)***	1.180 (0.033)***
Age squared	0.999 (0.009)***	0.998 (0.000)***	0.998 (0.000)***
Income: get by	0.986 (0.060)	0.822 (0.085)*	0.993 (0.150)
Income: difficult	1.122 (0.086)	0.678 (0.088)***	0.597 (0.119)**
Income: very hard	1.286 (0.125)**	0.566 (0.092)***	0.557 (0.141)*
<i>Control variable at the country-level</i>			
Entrepreneurship & economic growth	3.364 (1.137)***	3.411 (1.312)***	0.409 (0.141)**
Observations	11002	2936	1237
Intraclass correlation ^a	0.1075	0.0938	0.0516
SD of residual error for moral legitimacy	0.516	0.554	0.373
Log likelihood	-5417.59	-1.841.48	-785.41
Wald chi ²	964.23	147.48	85.13

Notes: * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$ (one-tailed Wald test). OR = odds ratio ($\exp(\beta)$); SE = standard error. ^a Based on the intercept-only model.

5. Discussion and Conclusions

This study conceptualized and analyzed the moral legitimacy accorded to entrepreneurs in society and its influence on an individual's progress across different stages in the firm formation process. Embedded in an institutional perspective of entrepreneurial behavior and a social legitimacy approach, (consequential) moral legitimacy is defined as a moral evaluation of the benefits of the entrepreneurs' actions for society as a whole. The study argued that the moral legitimacy accorded to entrepreneurs, as a specific source of social legitimacy in the informal institutional environment, influences and constrains firm formation behavior. A multilevel analysis based on data across 27 countries shows that the perceived moral legitimacy of entrepreneurship

positively influences an individual's likelihood to engage in the firm formation process, even when controlling for the level of entrepreneurial activity and economic performance at the country level. The results further demonstrate that moral legitimacy has a significant impact only in the early phases of the firm formation process: it increases the probability of an individual progressing from not even thinking about starting a business to considering it and to nascent activities, but moral legitimacy does not influence an individual's decision whether to move from preparing to actually starting and running a business.

5.1 Implications for Research

The current research responds to the call for 'research that contributes to better understanding of the unique effects of specific institutional and cultural contexts' on entrepreneurship (Schendel and Hitt 2007: 3) and thereby contributes to the body of literature aimed at contextualizing entrepreneurship, particularly conceptualizing and measuring social and cultural influences on entrepreneurial behavior (Busenitz *et al.*, 2000; Bruton *et al.*, 2010; Thornton *et al.*, 2011; Welter and Smallbone, 2011). In particular, this study shows that moral legitimacy, as a conceptual source of social legitimacy (Suchman, 1995) and the broader institutional environment (Shane, 2003), is a potential informal institution that influences the early phases of the formation of a firm. Entrepreneurship researchers (e.g., Thornton *et al.*, 2011; Welter and Smallbone, 2011; Veciana and Urbano, 2008) have emphasized that an institutional perspective provides a fruitful framework for conceptualizing and interpreting the relationship between (potential) entrepreneurs and their socio-cultural environment, and this study concurs.

The identified effects of moral legitimacy further add to the study by Tornikoski and Newbert (2007) on organizational emergence based on a practical legitimacy approach. Taking the findings together, it can be argued that while the perceived moral legitimacy of entrepreneurs in society only shapes an individual's initial entrepreneurial thoughts and first certain steps, the practical legitimacy, particularly the exchange with the potential, immediate business audience, plays a key role in the transition from the nascent activity phase to the actual emergence of the firm. In this context, Suchman (1995) argues that moral legitimation implies larger socio-cultural rules and norms, whereas practical legitimation is based on self-regarding utility calculations by the audience. As such, it might well be that the influence of perceived societal values, such as the moral legitimacy, diminish with an individual's progress in the firm formation process due to the increasing

importance of adjusting and strategically influencing perceptions in the closer business environment, like resource gatekeepers.

This analysis also emphasizes that the impact of socio-cultural factors can vary during the different stages of the firm formation process, which supports the use of the concept of the entrepreneurial ladder as an analytical tool to capture different facets of the entrepreneurial process even in a cross-sectional setting (Van der Zwan *et al.*, 2010). This finding also adds to the considerable number of prior studies on culture and entrepreneurship which focus either on entrepreneurial intention, nascent activity or business start-up levels as the dependent variable. While, for instance, a significant relationship can be found between certain cultural factors and entrepreneurial intentions, this does not imply that this effect remains when the individual progresses from intention to action. As a result, the conclusions of such studies may not be sufficiently specific to provide a detailed understanding of the effects of socio-cultural environments on entrepreneurial behavior.

In addition to indicating the relevance of measuring entrepreneurship as an emerging process, the present research contributes to the current debate on the different approaches applied in cross-country studies of socio-cultural influences on entrepreneurship (see e.g., Freytag and Thurik, 2007; Hayton *et al.*, 2002). By demonstrating how moral legitimacy influences organizational emergence, this research suggests further theoretical development and empirical research based on the social legitimacy or moral approval approach (Etzioni, 1987; Suchmann, 1995). Such research can complement the current dominant approaches, such as Hofstede's (2001) seminal work (Hayton *et al.*, 2002) and the so-called aggregated psychological trait approach (Freytag and Thurik, 2007). Moreover, in order to gain a broader and, at the same time, more specific understanding of the influence of socio-cultural environments on firm formation, future studies could adopt and compare multiple socio-cultural approaches, including the concept of social and moral legitimacy. For instance, (cross-country) studies that aim to provide new insights into 'push' and 'pull' explanations of entrepreneurial behavior, could apply both the social legitimacy concept and the more recently discussed 'dissatisfaction approach' (Noorderhaven *et al.*, 2004). While the social legitimacy approach generally suggests that the entrepreneurial choice of an individual is the outcome of their expected social appraisal of being an entrepreneur ('pull'), the dissatisfaction approach assumes rather the opposite, particularly that the conflicting values and expectations between the population and potential entrepreneurs drive the latter group into entrepreneurship ('push') (Freytag and Thurik, 2007).

5.2 *Implications for Practice*

Both public policymakers and enterprise support communities express an interest in the environmental drivers of entrepreneurship (Thornton *et al.*, 2011), while international organizations, such as the Organization for Economic Co-operation and Development (OECD) and European Union (EU), particularly refer to the importance of social and cultural indicators (European Commission, 2006; OECD, 2000). Based on the current challenge in entrepreneurship research of conceptualizing and measuring socio-cultural factors, it is no surprise that it is even more difficult to draw practical conclusions. Despite this difficulty, the present research has one practical implication to offer.

This analysis demonstrates that moral legitimacy ascribed to entrepreneurship in a society influences an individual's entrepreneurial aspiration and decision to take the first steps to start a business. That conclusion can assist governments and enterprise support communities by providing an understanding of the varying normative influences on an individual's progress in the firm formation process. Since establishing new grounds for moral legitimacy is challenging and often only possible due to a group of established organizations that actively exert major pressure on the moral order (Suchman, 1995), potential entrepreneurs are not able to influence and change their socio-cultural environment, and so rely more on external support initiatives. Therefore, if the policy aim is to increase the potential of a country's individuals to engage in entrepreneurial activities, national policy and enterprise support organizations should (jointly) seek to facilitate a socio-cultural environment that increases the moral legitimation of entrepreneurial activities. In order to gain increasing moral legitimacy for entrepreneurship, it is necessary to create a common awareness of the benefits to the economy and society of entrepreneurial activity. This might be accomplished through actively promoting the (long-term) societal and economic benefits of having entrepreneurs, maybe through conferences and local information events and in the media (Lundström and Stevenson, 2005). In addition, social policies directed at the equitable redistribution of the wealth of the most successful entrepreneurs through taxation may be required (Acs, 2006) before positive moral approval of entrepreneurship in society becomes institutionalized.

5.3 *Limitations*

As with most studies, this article is not without its limitations. This section identifies two principal limitations and offers recommendations for researchers who wish to develop the themes introduced here.

First, this analysis focuses solely on moral legitimacy and thus neglects other dimensions of social legitimacy that could potentially shape organizational emergence. In order to develop our understanding of social legitimacy and firm formation, future studies should seek to investigate further dimensions of social legitimacy, for example by including all three of Suchman's (1995) dimensions (practical, moral and cognitive legitimacy) in a single research design. Due to the contrasts among and interrelation of these three legitimacy dimensions, a simultaneous analysis of all three could further explain how the impact of moral legitimacy varies with an individual's progress through the different stages of the firm formation process.

Second, the measure of moral legitimacy is limited to a single item due to the limitations of the available dataset. Even though the applied measure of moral legitimacy is valid and the opportunity to analyze its impact across 27 countries has significant merit, future studies should seek to develop more elaborate psychometric measures and test them in order to validate the conclusions reached in the present analysis.

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Appendix

Descriptive statistics

	<i>Never thought</i>	<i>Thinking</i>	<i>Taking steps</i>	<i>Running a young business</i>	<i>Total %</i>	<i>Entrepreneurship & Economic growth</i>
<i>Age (mean and SD)</i>	49.04 (15.9)	36.28 (14.9)	36.62 (13.8)	42.15 (12.4)	45.97 (16.4)	
<i>Sex</i>						
Female	78.63	13.19	4.70	3.48	61.17	
Male	64.93	18.98	8.47	7.61	38.83	
<i>Income</i>						
Comfortable	73.11	14.75	5.96	6.18	24.70	
Get by	73.61	14.84	6.24	5.31	47.90	
Difficult	73.97	16.43	6.01	3.59	18.75	
Very hard	70.87	18.61	6.62	3.89	8.64	
<i>Moral legitimacy</i>						
High	66.15	16.32	9.38	8.16	21.61	
High-medium	74.06	15.55	5.61	4.79	59.98	
Low-medium	78.86	14.21	0.32	42.61	15.35	
Low	81.55	13.39	3.57	1.49	3.05	
<i>Countries</i>						
Austria	82.13	11.03	3.80	3.04	2.39	-0.0091
Belgium	91.98	4.63	0.71	2.67	5.10	-0.0094
China	37.45	24.91	28.28	9.36	4.85	0.8844
Croatia	81.54	10.77	5.00	2.69	2.36	-0.0052
Czech Republic	77.21	14.89	4.04	3.86	4.94	-0.1011
Denmark	68.40	26.69	0.92	3.99	2.96	0.0040
Finland	76.54	5.38	8.46	9.62	2.36	0.0011
France	76.72	16.92	3.02	3.35	5.43	-0.0030
Germany	81.72	11.13	2.70	4.45	5.72	-0.0012
Greece	59.66	27.73	4.83	7.77	4.33	0.0002
Hungary	75.77	18.09	2.56	3.58	5.33	0.0014
Iceland	55.42	25.42	8.33	10.83	2.18	-0.0139
Ireland	69.47	19.08	5.34	6.11	2.38	-0.0403
Italy	80.53	7.71	5.88	5.88	4.48	0.0174
Japan	88.01	5.99	2.91	3.08	5.31	0.0043
Latvia	65.41	28.62	2.83	3.14	2.89	0.0073
Netherlands	79.02	9.41	5.29	6.27	4.64	0.0000
Norway	74.81	12.79	5.81	6.59	2.35	-0.0247
Portugal	84.63	5.68	4.42	5.26	4.32	-0.0086
Romania	62.36	22.14	8.49	7.01	2.46	-0.0329
Slovenia	78.97	15.52	4.48	1.03	2.64	-0.0165
Spain	81.72	11.13	2.70	4.45	5.72	-0.0190
Sweden	59.92	25.19	9.92	4.96	2.38	0.0043
Switzerland	68.66	23.51	4.10	3.73	2.44	-0.0037

Turkey	57.10	21.94	14.52	6.45	2.82	0.0021
United Kingdom	80.57	11.04	4.29	4.09	4.44	-0.0015
United States	55.92	21.16	14.36	8.56	3.61	-0.0286
<i>Total, %</i>	73.31	15.44	6.16	5.08	<i>N=11,002</i>	

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Formation of entrepreneurial intentions in a regional context

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Research on the impact of the regional environment in the very early phase of the business start-up process is currently limited. This paper contributes to the literature by analysing the influence of regional factors on the formation of entrepreneurial intentions within the theory of planned behaviour (TPB) framework. The rationale is based on the previous literature which posits that regional conditions have implications for individual perceptions, which, in turn, constitute the foundation of the three antecedents of intention in the TPB model: attitudes, subjective norm and perceived behavioural control. A multilevel analysis based on a random sample of 834 Finnish working-age individuals, combined with the official national statistics at the municipality level supports the proposition that regional conditions have an indirect impact on the intent to become an entrepreneur. The population density, the level of education, income and wealth and the rate of public and manufacturing sector employment of a region are found to moderate the individual formation of entrepreneurial intentions. This study supports further development of the theoretical understanding of entrepreneurial intentions by demonstrating that regional characteristics are important moderating influences in the TPB model.

Keywords: entrepreneurial intentions; theory of planned behaviour; regional environment

1. Introduction

The regional dimension of entrepreneurship has become increasingly pronounced in light of recent studies, which find a significant effect of different regional factors on the (nascent) entrepreneurial activity and economic development (e.g. Armington and Acs 2002; Fritsch and Schmude 2006; Tamásy 2006; Brixy and Grotz 2007). Previous research on regional variations in entrepreneurship mainly focuses on new firm formation rates or the nascent entrepreneurship level as the dependent variable. Thus, few studies investigate the early pre-action phases of the entrepreneurial process from a regional perspective (for exceptions, see e.g. Rotefoss and Kolvereid 2005; Bosma and Schutjens 2011; Liñán, Urbano, and Guerrero 2011), even though Henley (2007, 276) notes that ‘there is a strong regional dimension to the distribution of entrepreneurial aspiration’. This paper adds to this literature by examining the impact of the regional context on the formation of entrepreneurial intentions.

A considerable body of literature deals with the concept of entrepreneurial intentions since the late 1980s (e.g. Krueger and Carsrud 1993; Kolvereid 1996; van Gelderen et al. 2008), considering the intention to start a business as the first step in the firm formation process (Lee and Wong 2004). Gaining an understanding of the

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formation of entrepreneurial behaviour before there is any observable action has important implications for policy. This is the case, for example, if the aim is to encourage enterprising activity by fostering a culture favourable to entrepreneurship (Beugelsdijk 2007; Liñán and Chen 2009; Kautonen, Tornikoski, and Kibler 2011). This study examines entrepreneurial intentions on the basis of the theory of planned behaviour (TPB; Ajzen 1991), which is a widely accepted tool for predicting intentions and behaviour across a wide variety of human behaviours (Armitage and Conner 2001), including entrepreneurial behaviour (e.g. Kolvereid 1996; Tkachev and Kolvereid 1999; van Gelderen et al. 2008). In the TPB framework, intention is a function of three antecedents: attitudes, subjective norms and perceived behavioural control. According to Ajzen and Fishbein (2004), the three theoretical antecedents should be sufficient to predict intentions, but their relative importance can vary from one context to another.

This paper addresses the contextual embeddedness of the TPB model by proposing that regional characteristics impact on the relative importance of attitudes, subjective norms and perceived behavioural control as determinants of entrepreneurial intentions. The theoretical foundation is based on the previous literature which posits that 'objective' regional conditions have implications for the perceptual domain (Davidsson 1991; Begley, Tan, and Schoch 2005; Sternberg 2009), and entrepreneurial preferences (Bosma, Schutjens, and Stam 2009), and, thus, may influence the formation of entrepreneurial intentions at the individual level. The focus on 'objective' regional factors based on the official national statistics at the municipal level complements the recent article by Liñán, Urbano, and Guerrero (2011) in this journal, which examines the influence of the regional environment on entrepreneurial intentions in the TPB with perceptual measures at the individual level.

This study makes the following contributions to existing knowledge. First, it adds to the literature by focusing on the currently under-researched regional dimension of the pre-action phase in the entrepreneurial process. Second, the study contributes to the discussion on the role of environments in entrepreneurial cognition processes (see, e.g. Mitchell et al. 2007), especially the emerging literature that examines the predictive validity of the TPB in different regional milieus. Third, implications for policy and the enterprise support communities could be derived by providing more detailed information on how different environmental characteristics shape perceptions and intentions towards enterprising activity.

This paper is organized as follows. The first section describes the theoretical framework underlying the analysis and derives propositions for empirical examination. The subsequent section introduces the methodological design of the empirical work based on primary survey data from a random sample of 834 working-age Finnish individuals, combined with secondary regional data derived from the public databases at Statistics Finland. The third section presents the results of a multilevel analysis, while the final section discusses the findings and their implications for policy and further research.

2. Theoretical background

2.1. *Entrepreneurial intentions and the TPB*

The TPB suggests that intention is the immediate antecedent of behaviour and, thus, the stronger the intention to engage in specific behaviour, the more likely should be

its actual performance (Ajzen 1991). In the entrepreneurial context, intentions are defined as an individual's conviction to intend to start a new venture, while consciously planning to open the business at some future point of time (Thompson 2009). The TPB proposes that intentions have three conceptually independent determinants: attitudes, subjective norms and perceived behavioural control (Ajzen 1991).

Attitudes emerge from the beliefs that individuals hold about the object of attitude, connecting it with either positive or negative outcomes. The more an individual perceives a beneficial outcome of starting a business, the more favourable their attitude towards entrepreneurial behaviour should be and, therefore, the stronger should be the individual's intention to found a business. *Subjective norms* refer to the perceptions concerning whether the closer social environment, such as family, friends and work colleagues, supports or does not support an individual in behaving in a certain way, and to what degree this appraisal matters to the individual. The more an individual cares about the opinion of an important reference group or individual and the more supportive the individual believes those people are of them establishing a business, the stronger should be the individual's intention to go ahead and start a business. Finally, *perceived behavioural control* is based on the individual's beliefs regarding the presence or absence of requisite capabilities and resources for performing a given behaviour. The more an individual believes in their ability to successfully start and run a business, the stronger the individual's intention of becoming an entrepreneur should be.

Since these three antecedents should be sufficient to predict intentions (Ajzen and Fishbein 2004), the regional environment exerts an exogenous influence in the TPB model. In other words, the regional environment provides the context within which the individual variables in the TPB model operate. The following section discusses and proposes how the regional environment may impact on the relative importance of the three antecedents in predicting entrepreneurial intentions, and introduces a range of specific regional influences for empirical testing.

2.2. Entrepreneurial intentions and the regional environment

The role of the local and regional context in entrepreneurial activities is widely acknowledged in entrepreneurship and economic geography (Malecki 2009; Trettin and Welter 2011), as prior studies have shown that entrepreneurs tend to establish their businesses near where they live (e.g. Stam 2007; Parwada 2008). Accordingly, many scholars share the view that entrepreneurship is the outcome of the interplay between individual attributes and the surrounding local environment (e.g. Lundström and Stevenson 2005; Tamásy 2006; Sternberg 2009; Stam 2010). Thurik, Uhlaner, and Wennekers (2002), argue that regional conditions, such as economic development and demographic characteristics, co-determine the opportunity structure (on the demand side) and the resources, capabilities and interests (on the supply side) that affect nascent entrepreneurial behaviour. The analysis of entrepreneurial intentions takes a step back from the nascent entrepreneurial activity stage by analysing intention as the antecedent of nascent behaviour. Ajzen and Fishbein (2005), assume that environmental conditions may influence the formation of intentions through shaping the beliefs and perceptions that individuals hold about

behaving in a certain way. In other words, the authors suggest that environmental conditions shape the three antecedents of intentions.

In the entrepreneurship context, prior research suggests that regional factors may also affect individuals at this early phase of the entrepreneurial process (e.g. Mueller 2006; Acs, Desai, and Hessels 2008; Bosma and Schutjens 2011). Davidsson (1991) argues that 'objective' characteristics of the regional environment have an impact on cognitive processes and, thus, on entrepreneurial motivations. Begley, Tan, and Schoch (2005) and Sternberg (2009) underline that 'objective' regional conditions have implications for the perceptual domain and, therefore, on the individual's interest in starting a business and decision to do so. Stam (2010) points out that the surrounding environment with its institutions, market opportunities, resources and demand for products conditions an individual's preference for entrepreneurship, which, in turn, motivates entrepreneurial behaviour. In other words, the formation of individual entrepreneurial aspirations is not only influenced by the individual's evaluation of their own capabilities, but is also shaped by the 'objective' local and regional attributes (Bosma, Schutjens, and Stam 2009), such as the 'munificence of opportunities and the availability of resources' (Stam, Thurik, and van der Zwan 2010, 1110). Underlying these arguments, the study of Rotefoss and Kolvereid (2005), implies that 'objective' measures of regional conditions can shape an individual's intention and attempt to start a business, while Bergmann (2005) indicates that regional factors influence the individual's beliefs regarding entrepreneurship, such as their awareness of entrepreneurial opportunities and risks, and their perception of their own ability to start and run a business.

In summary, this study is based on the assumption that individual cognition and preferences are shaped by the conditions of the 'real' world, such as institutional, economic, demographic and physical features that constitute the 'objective' regional environment (Strauss 2008). In terms of entrepreneurial intentions, this research proposes that the 'objective' regional environment affects individual perceptions and beliefs concerning entrepreneurship, which in turn form the basis of the three cognitive antecedents – attitude, subjective norm and perceived behavioural control – of entrepreneurial intentions in the TPB model.

Following the TPB, external factors, such as demographic or environmental characteristics, do not influence intentions directly, but they are *mediated* by the three antecedents of intentions (Ajzen 1991). However, one stream of research developed to add to the predictive validity of the TPB concerns factors that *moderate* the relationships between intentions and their three antecedents (Cooke and Sheeran 2004). A meta-analysis of 44 TPB-studies by Cooke and Sheeran (2004) supports the utility of including external moderator variables to enhance the explanatory power of the intentions model. They conclude that, for instance, an individual's certainty about their attitude, subjective norm and perceived behavioural control, moderates the influence of the three antecedents on intentions. As regions differ in their levels of entrepreneurial activity and the availability of entrepreneurial resources and opportunities, individuals encounter environments that are more or less benevolent and munificent when aiming to become a successful entrepreneur (Stam, Thurik, and van der Zwan 2010). Consequently, depending on the environmental conditions, individuals may feel more or less certain about their entrepreneurial beliefs, which, according to Cooke and Sheeran (2004), should moderate the formation of entrepreneurial intentions in the TPB. Moreover, Liñán, Urbano, and Guerrero (2011),

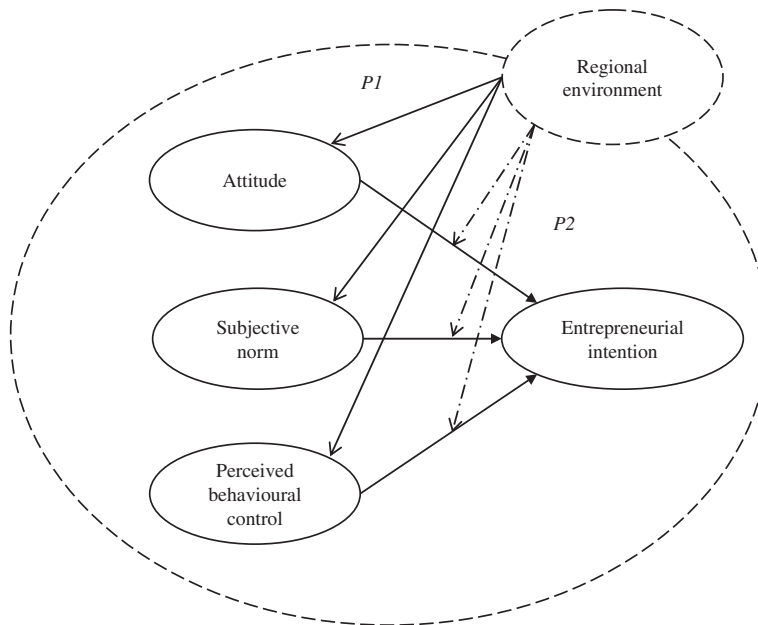


Figure 1. Conceptual model.

propose that further studies should examine those potential moderating effects of the environment that help to explain the direct effects on entrepreneurial intentions in the TPB model.

Against this backdrop, this study tests for both possible mediating and moderating effects of the regional environment on entrepreneurial intent assuming that individual beliefs and the formation of intentions are situated in a regional context. Accordingly, this research examines the following propositions (see also Figure 1).

Proposition 1: *The impact of regional conditions on entrepreneurial intentions is mediated by attitude, subjective norm and perceived behavioural control.*

Proposition 2: *Regional conditions moderate the impact of attitude, subjective norm and perceived behavioural control on entrepreneurial intentions.*

2.3. Identifying influential regional factors for empirical testing

In light of the limited knowledge of regional influences on the subjective domain in which entrepreneurial intentions emerge, the choice of specific regional factors in this research draws from five dimensions of regional characteristics applied in the extant entrepreneurship literature (e.g. Lundström and Stevenson 2005; Sternberg 2009; Stam 2010; Bosma and Schutjens 2011), which, in this study, are referred to as: (1) *demographic dimension*, (2) *economic dimension*, (3) *structural dimension*,

(4) *political dimension* and (5) *dimension of entrepreneurial dynamism*. Based on both theoretical considerations and the availability of data from the official national statistics in Finland, this analysis focuses on specific features from each of these five dimensions as potentially giving rise to regional conditions that influence the formation of entrepreneurial intentions in the TPB. The regional factors are: (1) *population density* (e.g. Tödtling and Wanzenböck 2003; Bosma, van Stel, and Suddle 2008; Naudé et al. 2008) and *education* (e.g. Garofoli 1994; Ritsilä 1999; Armington and Acs 2002; demographic dimension), (2) *income and wealth* (economic dimension; e.g. Reynolds, Storey, and Westhead 1994; Amit, Muller, and Cockburn 1995; Mueller 2006), (3) *industry structure* (e.g. Bates 1995; Fritsch, Brixy, and Falck 2006; Tamásy 2006) and *public (vs. private) sector employment* (e.g. Davis and Henreksson 1999; Delmar and Davidsson 2000; Lundström and Stevenson 2005; structural dimension), (4) *political ethos* (political dimension; e.g. Keeble and Walker 1994; Spilling 1996; Rotefoss and Kolvereid 2005) and (5) *entrepreneurial entry and exit rate* (dimension of entrepreneurial dynamism; e.g. Audretsch and Fritsch 2002; Audretsch and Keilbach 2004; Fritsch and Mueller 2007). Since there is little previous research on regional determinants of the formation of entrepreneurial intentions, this study does not offer formal hypotheses. Instead, the following discussion provides conceptual evidence to complement the two general propositions outlined above.

2.3.1. *Demographic dimension*

Research indicates that urban environments tend to support firm formation processes by providing more (accessible) local entrepreneurial opportunities and resources than rural, sparsely populated areas (e.g. Reynolds, Storey, and Westhead 1994; Armington and Acs 2002; Tödtling and Wanzenböck 2003). Opportune meetings are also more likely to occur in regions with a higher *population density* (Jacobs 1969), which fosters networking and collaborations and, so helps the meetings contribute to the emergence of new firms (Maillat 1995; Liao and Welsch 2005). However, in contrast to rural areas, an urban environment can also undermine entrepreneurial interests and activities due to ‘congesting factors’ (Naudé et al. 2008, 120), such as intense competition, high barriers to entry and less room for innovation-based differentiation (Bosma, van Stel, and Suddle 2008). Moreover, rural areas tend to exhibit higher agricultural activity levels accompanied by a smaller average business size, which may inflate the regional self-employment and entrepreneurship rates (Meccheri and Pelloni 2006). Accordingly, there are arguments for positive and negative influences of urban environments on entrepreneurship. To what extent these arguments apply in the context of entrepreneurial intentions is an empirical question in this study.

Scholars generally agree that a greater regional supply of well-educated labour – often associated with urban areas (Tödtling and Wanzenböck 2003) – supports entrepreneurial activity (e.g. Armington and Acs 2002; Bosma, van Stel, and Suddle 2008; Naudé et al. 2008), for instance, due to higher levels of creativity and innovation (Ritsilä 1999) and more established social, professional networks (Maillat 1995), thus, enhancing the recognition and exploitation of entrepreneurial opportunities (Reynolds, Bygrave, and Autio 2004; Lundström and Stevenson 2005; Nyström 2005). Blanchflower (2000) further indicates that the most highly educated have relatively strong entrepreneurial propensities, hence, potentially supporting an

entrepreneurship-friendly local environment. Mueller (2006) underlines that nascent entrepreneurship is positively related to education; while Naudé et al. (2008) suggest that start-up activity in a region is higher when nascent entrepreneurs are better educated than average. Against this backdrop, this study suggests that the regional participation level in *higher education* can also enhance the formation of entrepreneurial intentions.

2.3.2. *Economic dimension*

Regions with higher *income* and *wealth* levels can support entrepreneurial processes through an increased spending capacity (Bergmann 2005), higher demand for products (Reynolds, Storey, and Westhead 1994; Bosma, van Stel, and Suddle 2008) and a greater supply of resources for business capitalization and lower borrowing costs (Bates 1995; Kangasharju 2000; Stam 2010). Higher levels of savings and assets, for instance in terms of property ownership, also decrease the risks of insecure self-employment (Ashcroft, Love, and Malloy 1991; Kangasharju 2000), and serve as important collateral for bank loans (Black, de Meza, and Jeffreys 1996). However, higher wage levels in a region increase the labour costs for (new) firms (Nyström 2005), and make paid employment comparatively more attractive (Bosma, van Stel, and Suddle 2008). Householders with lower incomes tend to be more interested in finding a business owing to the expectation of increased earnings (Mueller 2006), and financial security (Henley 2007), while higher incomes lead to higher opportunity costs of becoming an entrepreneur (Ashcroft, Love, and Malloy 1991; Amit, Muller, and Cockburn 1995). In summary, this evidence suggests regional income and wealth levels have positive and negative implications for enterprising activity. Which arguments are appropriate in terms of entrepreneurial intentions is the subject of empirical examination in this study.

2.3.3. *Structural dimension*

Research suggests that even though the *public sector* can have a positive or negative impact depending on governmental entrepreneurship policies (Lundström and Stevenson 2005), an over-dominance of the public sector in a region contributes to institutional and structural conditions (Davis and Henreksson 1999; Delmar and Davidsson 2000), that tend to have adverse effects on the entrepreneurial opportunities and on a fair and open market competition (Lundström and Stevenson 2005). This, in turn, determines the scope for private enterprises (Torrini 2005) and can hinder the formation of new firms in a region (Sørensen 2004). Further, Özcan and Reichstein (2009), point out that public-sector employees exhibit very low transition rates to entrepreneurship because of the process of labour-market matching. In other words, they argue that public-sector workers are distinctly non-entrepreneurial types (Özcan and Reichstein 2009). Taking these factors together, this study suggests that a large proportion of public-sector employment undermines an entrepreneurship-friendly environment in a region that, in turn, may hinder the formation of entrepreneurial intentions.

Scholars widely acknowledge that the regional start-up activity level significantly differs across *industry sectors* (e.g. Bates 1995; Fritsch, Brix, and Falck 2006; Tamásy 2006), suggesting that, for instance, the threshold of starting a business is usually much lower in the service sector than in the manufacturing sector (Brix and

Grotz 2007). As compared to the manufacturing sector, higher service sector employment levels often reflect a smaller average firm size in a region, thus providing more room and opportunities for entrepreneurial activity (Acs, Desai, and Hessels 2008). While becoming an entrepreneur in the manufacturing sector often depends on financial capital and resources, advanced educational references are the key to entering the service sector (Bates 1995; Brixy and Grotz 2007); hence an expansion of the service sector in a region also contributes to lower average business founding costs (Fritsch 1997). Even though western democracies tend to have a small proportion of their population engaged in agriculture, the self-employment rates in the agricultural sector are generally high, mainly due to the influence of historical and cultural traditions of family ownership (Blanchflower 2000). Based on this evidence, this study assumes that higher regional participation levels in the service sector (and agriculture sector) support the emergence of entrepreneurial intentions, while higher participation levels in the manufacturing sector have an adverse effect.

2.3.4. *Political dimension*

Local government influences the level of entrepreneurship (Garofoli 1994; Reynolds, Storey, and Westhead 1994), for instance by co-determining the qualities and changes of the regional institutional conditions (Bosma, van Stel, and Suddle 2008). Previous studies suggest that the prevalent *political ethos* in a region reflects how entrepreneurship-friendly the local community is (e.g. Reynolds, Storey, and Westhead 1994; Johnson and Parker 1996; Rotefoss and Kolvereid 2005), whereas higher entrepreneurship levels are often associated with a conservative majority in the local council as compared to a left-wing majority (Keeble and Walker 1994; Spilling 1996). In this context, research indicates that a predominantly conservative local council often results in more generous subsidies to the small business sector (Garofoli 1994; Johnson and Parker 1996), while also fostering the outsourcing of local governmental services to private (small) businesses (Bhatti, Olsen, and Pedersen 2009). Left-wing governments, on the other hand, tend to emphasize the support of local social services (Rotefoss and Kolvereid 2005), while discouraging an outsourcing policy that addresses the private sector (Bhatti, Olsen, and Pedersen 2009). This, in turn, also reflects negative attitudes towards entrepreneurship among people in a regional community that vote for left-wing parties (Keeble and Walker 1994; Reynolds, Storey, and Westhead 1994). Against this backdrop, this study proposes that a relatively higher share of left-wing representatives in the local government represents an environment less favourable to entrepreneurial activities, which, in turn, undermines the individual formation of entrepreneurial intention.

2.3.5. *Dimension of entrepreneurial dynamism*

Prior studies suggest that higher regional start-up rates in the past serve as an ongoing conduit for higher entrepreneurial activity, for example, by increasing innovation activity, knowledge spillovers, competition and firm diversity (e.g. Ritsilä 1999; Audretsch and Keilbach 2004; Fritsch and Mueller 2007). Higher start-up rates can also enhance the social acceptance of enterprising activity in a region by providing more successful (home grown) role models and start-up stories for potential entrepreneurs (LaFuente, Vaillant, and Rialp 2007). Similarly, Bosma and Schutjens (2011) demonstrate that regions consisting of many people who know

start-up entrepreneurs are characterized by higher proportions of people with stronger entrepreneurial attitudes. This implies that high regional levels of entrepreneurial attitudes that contribute to the emergence of intentions should over time feed into a higher entry rate. However, new businesses tend to have high exit rates, and if the failure rate in a region is consistently high, it may communicate the risks of failure of starting up in business, and thus, undermine the potential for entrepreneurship (Pe'er and Vertinsky 2008). Vaillant and Lafuente (2007), argue that, especially in European regions, entrepreneurial failure is highly stigmatized, which increases the obstacles to engaging in entrepreneurial activities. This evidence suggests that a high *net entry rate* indicates a positive entrepreneurial climate in a region, which can support the formation of individual entrepreneurial intentions.

3. Methodology

3.1. Data collection and sample characteristics

The empirical analysis is based on primary survey data and regional data gained from the public databases of Statistics Finland. The survey data were collected in the provinces of Central Ostrobothnia, Ostrobothnia and South Ostrobothnia in Western Finland in late 2006. The Finnish Population Register Centre was used to obtain a random sample of 5600 individuals, from a sampling frame that included all individuals aged 15–75 years who were registered as resident in one of the Ostrobothnian provinces at the time the sample was drawn (October 2006). The resulting sampling frame comprised approximately 350,000 individuals. The mailing of 5600 questionnaires resulted in a total of 1301 responses, indicating a response rate of 23.2%. For this examination, only respondents aged between 18 and 64 years were included in order to focus on the working-age population. As the objective of this paper is to look at entrepreneurial intentions in a regional context, individuals who were either full- or part-time entrepreneurs or retired at the time the survey was conducted were excluded from the analysis.

The final sample employed in this analysis consists of 834 respondents. The gender distribution shows 65% female and 35% male respondents, compared to the original sample of individuals between 18 and 64 years (40% male). This suggests that the exclusion of entrepreneurs and retirees, who are predominantly male in the original sample, has further contributed to the gender imbalance in the final sample. Therefore, the gender bias in the final sample is caused by women having a higher response rate than men, which is common in survey studies in Finland according to the author's and his colleagues' experience. The educational background variable reveals that 34% of the respondents had a higher education degree (from a polytechnic or university). At the time the survey was conducted, 86% of the respondents were working full- or part-time, 10% were students and 4% unemployed. When asked to describe the central content of their careers to date, 87% of the respondents reported being in paid employment, 6% described themselves as self-employed, 3% as in paid and self-employment, 2% described themselves as homemakers and the remaining 2% as students.

The regional-level data from the year 2006 were derived from the public databases maintained by Statistics Finland, a government agency responsible for the official national statistics. The regional data were added to the survey data at the level of the 53 municipalities in the three Ostrobothnian provinces in Western Finland.

Table 1. Selected key characteristics of the sample provinces.

Characteristics	Central Ostrobothnia	Ostrobothnia	South Ostrobothnia
Population (total number)	269,636	174,211	193,585
Largest municipality	44,874 (Kokkola)	57,622 (Vaasa)	54,616 (Seinajoki)
Smallest municipality	942 (Lestijärvi)	1505 (Kaskinen)	1617 (Karijoki)
Population density (inhabitants/km ²)	13.5	22.7	14.5
Working-age population (20–64 years)	160,286 (59%)	100,011 (57%)	109,842 (56%)
Higher education (20–64 years, polytechnic/university)	10,947 (7%)	34,492 (34%)	32,195 (29%)
Household income (median)	29,273	28,677	27,077
Household income growth (median, 2000–2006)	14.1%	13.5%	12.2%
Proportion of entrepreneurs (20–64 years)	25%	22%	22%
Net entry rate (2000–2006)	0.025%	0.032%	0.027%

Notes: The data relate to the year 2006 (and before) and are drawn from the databases of Statistics Finland, http://www.stat.fi/index_en.html. Variable descriptions are provided in the body text.

An overview of selected key characteristics of the provinces is provided in Table 1. Municipalities have been chosen as the spatial level of the analysis, since Finnish entrepreneurship policy-making practically belongs to the municipality, in addition to the national government (Heinonen and Hytti 2008), while Finnish municipalities profoundly differ in their entrepreneurial activity rates (Statistics Finland 2011). The mean number of inhabitants in the 53 municipalities is 19,377, with the smallest municipality Lestijärvi having 942 inhabitants and the largest one Vaasa 57,622. According to the regional classification system of Statistics Finland (2009), 9% of the 53 municipalities are urban, 23% semi-urban and 68% rural.

3.2. Measures

3.2.1. Theory of planned behaviour

The survey operationalized the four constructs in the TPB with a set of (seven-point) Likert-scale-based items adapted from Kolvereid (1996). The Appendix contains the wordings of all scale items and Table 2 provides the descriptive statistics and correlations for all variables.

3.2.1.1. *Entrepreneurial intention.* The dependent variable entrepreneurial intention is measured with the following question: ‘How likely is it that you will start your own business?’ (very unlikely–very likely; Kolvereid 1996; Tkachev and Kolvereid 1999).

3.2.1.2. *Entrepreneurial attitude.* According to Kolvereid (1996), the measure of entrepreneurial attitude captures attitudes favouring firm ownership in contrast to attitudes favouring paid employment. Nine items were included that conceptually represent three components of the dimension (1) attitudes towards entrepreneurship

Table 2. Descriptive statistics.

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
<i>Dependent variable</i>																					
1. Entrepreneurial intention	2.5	1.8	1																		
<i>TPB antecedents</i>																					
2. Attitude	4.4	2	0.34*	1																	
3. Subjective norm	43.2	26.1	0.49*	0.24*	1																
4. PBC	12.4	4.4	0.45*	0.38*	0.47*	1															
<i>Regional environment</i>																					
5. Population density	72.9	102.2	-0.07*	-0.07*	-0.05	-0.08*	1														
6. Higher education	36%	6	-0.08*	-0.06	-0.05	-0.05	0.68*	1													
7. Household income	32,017	2508	-0.05	-0.02	0.01	0.03	-0.28*	0.10	1												
8. Household income growth	0.1314	0.0284	0.01	0.02	0.03	0.03	-0.28*	-0.02	0.50*	1											
9. Financial resources	444.9	444.9	-0.01	-0.03	-0.01	-0.02	0.06	-0.26*	-0.19*	-0.17*	1										
10. Financial assets	288.7	654.5	-0.00	0.03	-0.01	0.01	-0.05	-0.00	0.30*	0.23*	0.46*	1									
11. Public sector	53%	9	-0.06	0.01	-0.03	-0.04	0.54*	0.56*	0.04	-0.02	-0.02	0.28*	1								
12. Agriculture sector	13%	11	0.07*	0.03	0.06	0.06	-0.66*	-0.79*	0.12*	0.10*	0.12*	-0.06	-0.72*	1							
13. Manufacturing sector	35%	9	-0.06	0.00	0.00	-0.02	0.27*	0.24*	0.31*	0.00	0.03	0.39*	0.74*	-0.42*	1						
14. Service sector	53%	11	-0.02	-0.03	-0.06	-0.05	0.43*	0.58*	-0.38*	-0.10*	-0.14*	-0.26*	0.09*	-0.64*	-0.44*	1					
15. Political ethos	19%	11	-0.04	-0.02	-0.09*	-0.06	0.69*	0.50*	-0.23*	-0.22*	-0.04	0.15*	0.50*	-0.69*	0.28*	0.44*	1				
16. Net entry rate	0.0196	0.0075	0.02	0.05	0.06	0.07	-0.66*	-0.36*	0.45*	0.15*	-0.01	0.08*	-0.50*	0.48*	-0.16*	-0.34*	-0.65*	1			
<i>Individual controls</i>																					
17. Female	65%		-0.13*	-0.09**	0.02	-0.16*	0.05	0.05	-0.03	-0.02	-0.01	-0.02	0.04	-0.02	0.03	0.00	0.02	-0.07	1		
18. Age	42 years	13	-0.34*	-0.08*	-0.37*	-0.15*	-0.09*	-0.02	0.08*	0.10*	-0.09*	-0.03	0.02	0.01	-0.01	0.00	-0.05	0.05	-0.09*	1	
19. Education	33%		-0.02	0.07	0.10*	0.09*	-0.01	0.07	0.01	-0.03	-0.09*	-0.01	0.02	-0.04	0.01	0.03	0.01	-0.01	0.14*	0.03	1
20. Entrepreneurial experience	10%		0.09*	0.08*	0.09*	0.13*	-0.08*	-0.09*	-0.05	-0.06	0.00	-0.04	-0.07*	0.06	-0.06	0.00	-0.02	0.05	-0.09*	0.12*	0.00

Notes: $N = 834$. Pearson correlation coefficients. Due to space restrictions, the spatial controls are not included in this table.

* $p < 0.05$; ** $p < 0.01$.

((a) *authority and autonomy*, (b) *self-realization* and (c) *economic opportunity*) and five items that capture two components of the dimension (2) attitudes towards employment ((d) *security* and (e) *avoidance of responsibility*). Initially, exploratory factor analysis was performed with all 14 items to validate the five conceptual factor components (a–e; KMO = 0.77, $p < 0.001$). All items loaded highest on the expected factors except for the five items denoting the theoretical components (a) *authority and autonomy* and (b) *self-realization*. These five items loaded highest on one factor, which results in a total of four factors, with an explained cumulative variance of 60.6%. Subsequently, separate simple regressions were performed with the factor scores of each of the four resulting factors, to test the significance of their influence on entrepreneurial intention in order to establish their relevance for this analysis. The factors (c) *economic opportunity* and (e) *avoidance of responsibility* have a marginal and non-significant ($p > 0.1$) impact, and were, thus, excluded from the subsequent index construction. The other factors have a significant effect on entrepreneurial intention. The remaining nine items were reduced to two indices by averaging the scores of both the items denoting (a) *authority and autonomy* and (b) *self-realization* (Cronbach's alpha: 0.80) and the items denoting (d) *security* (Cronbach's alpha: 0.72). Thus, the index measuring attitudes favourable to business ownership is the linear sum of the items representing *authority and autonomy*, and *self-realization*, while the index capturing attitudes favourable to paid employment is the sum of the *security* items. In a final step, the difference between these two measures forms an index of attitude towards occupational choice so that a low positive or a negative score represents attitudes that favour paid employment, while a high positive score refers to an attitude towards work that is conducive to entrepreneurship.

3.2.1.3. *Subjective norm*. Following Kolvereid (1996), the independent variable, subjective norm, is the product of two sets of measures. The first set contains three items measuring the individual's beliefs of whether their family, friends and colleagues or other important people think that they should or should not become an entrepreneur. The second set represents the degree to which those opinions affect the individual's decision as to whether or not to go ahead and start a business. After multiplying the corresponding pairs of the belief and motivation-to-comply items three products were added up to create a final index (Cronbach's alpha: 0.79).

3.2.1.4. *Perceived behavioural control*. Three rating scales were added up to form an index (Cronbach's alpha: 0.81), capturing the individual's perceived behavioural control, defined as their perception of how easily and successfully they could establish and run a business, if they chose to start one.

3.2.2. *Regional environment*

3.2.2.1. *Population density*. Based on the present literature, the effect of urban (vs. rural) environment is measured by the population density of a region, that is, the average population size per square kilometre (Tödtling and Wanzenböck 2003; Audretsch and Keilbach 2004; Fritsch and Mueller 2007).

3.2.2.2. *Education.* The variable education is captured by the regional proportion of individuals (aged between 18 and 64 years) with a higher education degree (from polytechnics and universities; Reynolds, Bygrave, and Autio 2004; Lundström and Stevenson 2005).

3.2.2.3. *Income.* The variables *household income* and *household income growth* are used to capture the effect of the regional income level (Reynolds, Storey, and Westhead 1994; Lundström and Stevenson 2005; Mueller 2006). Following the guidance of Statistics Finland (2010a), household income is defined as the median household's disposable monetary income, which consists of the sum of the household members' total wages and salaries, entrepreneurial income, property income and current transfers received (minus current transfers paid). This measure is further weighted by the household's number of adults (weight 1), children 13 years and over (weight 0.5) and children under 13 years (weight 0.3). Household income growth is calculated as the household income level (2006), minus the household income level (2000), divided by the household income level (2000).

3.2.2.4. *Wealth.* The regional wealth is captured based on two asset measures. The first measure refers to the general level of *financial assets* (per capita; e.g. Bates 1995; Rotefoss and Kolvereid 2005), which are defined as 'economic assets, comprising means of payment, financial claims and economic assets which are close to financial claims in nature' (Statistics Finland 2010b). Considering that firm formation is also subject to liquidity constraints (Evans and Jovanovic 1989), the second measure *financial resources* denotes particularly liquid (or current) assets (per capita), indicating the amount of available cash or cash equivalent assets.

3.2.2.5. *Public sector.* The variable *public sector* captures the effect of sector employment by ownership (private or public) by indicating the share of all jobholders in a municipality working in the public sector (Davis and Henreksson 1999; Lundström and Stevenson 2005).

3.2.2.6. *Industry sectors.* The regional industry structure is measured based on the proportion of employment by the three main industry sectors – *agriculture*, *manufacturing* and the *service sector* (Brixy and Grotz 2007) – classified and summarized according to the international standard industrial classification TOL 2002 (Statistics Finland 2010c). Thus, the variable agriculture sector consists of the sub-sector indices A (agriculture and hunting) and B (fishing). The variable manufacturing sector includes the sub-sectors mining and quarrying (C), manufacturing (D), electricity (E), gas and water supply and construction (F). The service sector comprises the sub-sector indices from G to Q, which capture, for instance, wholesale and retail trade, financial intermediations, transport and communication. The three main sectors sum up to 100% of the regional employment across all specific sectors, excluding one undefined sector category (~3%) by Statistics Finland. In order to avoid multicollinearity, agriculture is treated as the reference category in the regression analysis.

3.2.2.7. *Political ethos.* The measure political ethos indicates the proportion of elected seats held by the left-wing representatives in the local council (Kangasharju 2000; Rotefoss and Kolvereid 2005), which, in the Finnish context, counts for the sum of the proportion held by the Social Democratic Party and the Left Alliance.

3.2.2.8. *Entrepreneurial entry and exit rate.* Based on the labour-market perspective (Audretsch and Fritsch 1994; Armington and Acs 2002), the dimension of entrepreneurial dynamism refers to the regional net entry rate in the past (Audretsch and Fritsch 2002), by measuring the difference between the number of start-ups and closures in the period 2000–2006, relative to the size of the labour force.

3.2.3. *Control variables*

3.2.3.1. *Individual controls.* In order to account for effects that might otherwise influence entrepreneurial intention at the individual level, the model specifications include sex, age, education and previous entrepreneurial experience as control variables. Sex is included as a dummy variable with the value 1 assigned to *female* respondents. In order to account for the curvilinear effects of *age*, the model specification includes both linear and squared terms for age (mean-centred) in years. *Education* is operationalized as a dummy variable with the value one indicating a university or polytechnic degree. *Previous entrepreneurial experience* is included as a dummy variable with the value 1 representing respondents who have owned a business previously, but who did not own one at the time of the survey.

3.2.3.2. *Spatial controls.* The standard errors can be underestimated due to spatial autocorrelation, thus causing unreliable significance estimates (Anselin and Rey 1991). Following Brixy and Grotz (2007), the present model specification adjusts for two potential types of spatial autocorrelation. The first type refers to possible spillover effects of neighbouring regions. In order to control for this type of autocorrelation, the model includes the weighted average of each of the 12 regional model variables from the neighbouring regions. The second type of spatial autocorrelation may occur in the presence of influential regional factors that are unknown and not reflected by the explanatory regional variables included. Hence, the model also accounts for the mean value of the residuals of the neighbouring regions.

3.3. *Factor analysis and common method variance*

Since the study used a self-report questionnaire to capture the individual-level measures at one point in time, common method bias may affect empirical results and conclusions. A number of procedural and statistical steps were taken to minimize the risk. Procedurally, in order to reduce socially desirable responses and item ambiguity, the questionnaire featured different response formats and a 'counter-balanced' question order, and the respondents could choose to remain completely anonymous (Podsakoff et al. 2003). Statistically, a series of factor analyses were performed to examine the extent of potential common method bias. First, Harman's (1976),

post hoc one-factor test was performed to all 15 included items (Appendix) using principal axis factoring and the unrotated factor solution (Podsakoff et al. 2003). Factor analytic results indicated the existence of multiple factors with *eigenvalues* greater than one ($KMO = 0.80$). These factors explained 62% of the variance among the 15 items, while the first factor accounted for 28% of the variance. Since the analysis identified several factors, as opposed to one single factor, and since the first factor did not account for the vast majority of the variance, a substantial amount of common method variance does not appear to be present. Next, the rotated solution was examined to ensure discriminant validity. All items load on their intended factors (*attitude towards entrepreneurship, attitude towards employment, subjective norm and perceived behavioural control*) higher than on the other factors. The confirmatory factor analysis confirmed the existence of the hypothesized factor structure with fit indices supporting an adequate fit between the model and the data ($\chi^2_{81df} = 292.15$; $CFI = 0.95$; $RMSEA = 0.056$; $SRMR = 0.044$; Hu and Bentler 1999; Hair et al. 2006).

4. Results

Multilevel regression analysis, following the recommendations in Hox (2010), is utilized to test the proposed indirect effects – mediation and moderation (Baron and Kenny 1986) – of the regional conditions on the formation of individual entrepreneurial intentions in the TPB. This technique allows the analyst to account for the hierarchical and clustered nature of the data, avoiding misleading significance levels (see, e.g. Bosma, Schutjens, and Stam 2009). Skewness and kurtosis tests support the univariate normality assumption. The variation inflation factor values for all model variables are under 7, which signals the absence of serious multicollinearity (Hair et al. 2006). Since prior literature has not always described the effects of the regional model variables unambiguously, the likelihood-ratio test and the two-tailed Wald test are used for significance testing. The independent variables were mean-centred prior to the computation of the interaction terms for testing the moderation proposition (Aiken and West 1991).

Stepwise introduction of blocks of variables into the regression equation (reported in Table 3) presents that the regional covariates (model 1) do not significantly contribute to explaining entrepreneurial intentions. The direct effects of both the control variables (model 2) and of the TPB antecedents (model 3) – attitude, subjective norm and perceived behavioural control – add significantly to the explanatory power of the model, while the inclusion of the spatial control effects (model 4) does not contribute to model fit. As a robustness check, model specifications including random slopes for the antecedents of intentions were estimated, but the amount of regional variance in the slopes was marginal and not statistically significant.

The results of the regression models (Table 3) for the direct effects do not support Proposition 1, which suggested that the impact of ‘objective’ regional conditions on entrepreneurial intention would be mediated by entrepreneurial attitude, subjective norm and perceived behavioural control. While the three antecedents of intentions are significant predictors of the dependent variable, none of the other three conditions of mediation are fulfilled (Baron and Kenny 1986). First, the regional variables do not exert a significant influence on entrepreneurial intention (model 1

Table 3. Random-intercept regression estimates: direct effects.

Variable	Model 1 coefficient (SE)	Model 2 coefficient (SE)	Model 3 coefficient (SE)	Model 4 coefficient (SE)
<i>Regional environment</i>				
Population density	-0.0009 (0.0013)	-0.0012 (0.0012)	-0.0013 (0.0010)	-0.0011 (0.0017)
Higher education	-0.0034 (0.0228)	-0.0072 (0.0209)	-0.0005 (0.0181)	0.0163 (0.0281)
Household income	-0.0001 (0.0000)	-0.0001 (0.0000)	-0.0000 (0.0000)	-0.0000 (0.0000)
Household income growth	1.26002 (0.8171)	2.6105 (2.5887)	0.1921 (2.2350)	-0.2994 (2.4990)
Financial resources	-0.0002 (0.0002)	-0.0003 (0.0002)	-0.0002 (0.0002)	-0.0001 (0.0002)
Financial assets	0.0001 (0.0002)	0.0001 (0.0001)	0.00007 (0.0001)	0.0001 (0.0001)
Public sector	0.0010 (0.0016)	0.0021 (0.0015)	0.0010 (0.0013)	0.0003 (0.0017)
Manufacturing sector	-0.0002 (0.0002)	-0.0002 (0.0002)	-0.0002 (0.0001)	-0.0002 (0.0002)
Service sector	-0.0001 (0.0001)	-0.0001 (0.0001)	-0.0001 (0.0001)	-0.0001 (0.0001)
Political ethos	0.0039 (0.0115)	0.0004 (0.0105)	0.0037 (0.0091)	0.0061 (0.0107)
Net entry rate	0.0015 (0.0039)	0.0008 (0.0035)	-0.0019 (0.0031)	-0.00005 (0.0039)
<i>Individual controls</i>				
Female		-0.5481*** (0.1176)	-0.3428*** (0.1036)	-0.3280** (0.1035)
Age		-0.0516*** (0.0046)	-0.0297*** (0.0042)	-0.0312*** (0.0042)
Age square		0.0001 (0.0004)	0.0001 (0.0003)	0.0000 (0.0003)
Education		0.0219 (0.1204)	-0.2388* (0.1048)	-0.2397* (0.1047)
Entrepreneurial experience		0.7049*** (0.1869)	0.2647 (0.1631)	0.2560 (0.1625)
<i>TPB antecedents</i>				
Attitude			0.1401*** (0.0260)	0.1402*** (0.0259)
Subjective norm			0.0191*** (0.0022)	0.0190*** (0.0022)
PBC			0.0820*** (0.0132)	0.0822*** (0.0132)

<i>Spatial controls</i> ^a			
Spillover effects			
Population density	0.0000	(0.0057)	
Higher education	0.0253	(0.0488)	
Household income	-0.0000	(0.0000)	
Household income growth	-2.3421	(4.7852)	
Financial resources	-0.0005	(0.0004)	
Financial assets	0.0006	(0.0003)	
Public sector	0.8712	(3.8191)	
Manufacturing sector	-4.0024	(4.2116)	
Service sector	-3.8166	(3.3787)	
Political ethos	-0.0411	(0.0272)	
Net entry rate	87.0319	(97.7674)	
Residuals	-0.7458	(0.7681)	
Log likelihood	-1438.8412		
O _u (SE)	0	(0.0553)	
O _e (SE)	1.3584	(0.0333)	
LR chi-squared ^b	16.14		
	-1446.9105		
	0	(0.0688)	
	1.3716	(0.0336)	
	248.96***		
	-1571.3895		
	0	(0.0786)	
	1.5924	(0.0390)	
	147.13***		
	-1644.9541		
	0	(0.0828)	
	1.739	(0.0426)	
	13.30		

Notes: $N = 834$. Number of clusters (regions) = 53. Observations per cluster: 5–106. Maximum-likelihood estimates. SE, standard error. LR, likelihood-ratio test. PBC, perceived behavioural control.

^aThe non-significant effects of the spatial control variables signal the absence of potential spillover effects. It further suggests that the present model does not suffer from omitted variable bias by having excluded other influential regional factors. In order to further reduce the risk of excluding other potential regional determinants of the formation of entrepreneurial intention, separate regressions were computed with the use of alternative regional measures discussed in the extant entrepreneurship literature: population size and growth, (un-)employment (change), stock of firms and entrepreneurs, university presence and immigration rate. None of these regressions showed significant (in)direct effects in the TPB model. In order to control for the potential effects of overfitting the model, a number of model specifications were estimated with a narrower range of regional covariates. None of these regressions implied significant changes in the estimations.

^bThe likelihood-ratio test indicates the improvement in model fit compared to the previous model (in case of model 1 the null model). * $p < 0.05$; ** $p < 0.01$; and *** $p < 0.001$ (two-tailed Wald test).

in Table 3). Second, separate multiple regressions (not reported) show that the regional covariates do not have significant effects on the proposed mediators either. Given these findings, a test of the fourth condition – whether the impact of the regional factors on the dependent variable diminishes significantly when controlling for the mediators – is not required.

The next step of the analysis examines Proposition 2, which expects the regional environment to moderate the influence of attitude, subjective norm and perceived behavioural control on entrepreneurial intentions. In order to facilitate interpretation, the interaction terms were entered into the regression equation one by one, with model 4 in Table 3 as the base model. Table 4 displays the estimates for the nine interaction effects, which improved the fit of the model compared to the base model with at least 5% significance based on the likelihood-ratio test. Due to space restrictions, the analysis does not consider a further discussion of the remaining 24 non-significant interactions. Finally, a model specification including all significant interactions terms was estimated in order to examine their joint effect to model fit. Compared to the base model, the model including all significant interactions provides a significantly better fit ($\chi^2_{df} = 25.78, p = 0.002$). Therefore, the regional dimension clearly adds explanatory power to the TPB model in the entrepreneurial context. Next, the individual significant interactions are discussed one by one.

The significant interactive effects of attitude and three regional factors (models 1–3 in Table 4) – household income, household income growth and financial assets – on entrepreneurial intentions are positive, while the significant interactions between subjective norms and public and manufacturing sector employment (models 4 and 5 in Table 4) have a negative impact on the intention to start a business. The interactions of perceived behavioural control with population density, higher education and public and manufacturing sector employment (models 6–9 in Table 4) have a negative impact on the dependent variable. Thus, Proposition 2 receives support. To facilitate further interpretations, the significant interactions were plotted following the advice in Brambor, Clark and Golder (2006). Due to space restrictions, only three examples can be included in this report (Figures 2–4). An interpretation of the interaction effects follows in the next section.

5. Discussion

This study demonstrates that ‘objective’ regional conditions have an indirect impact on entrepreneurial intentions in the TPB. In other words, individual perceptions of entrepreneurship and the formation process of entrepreneurial intentions are shaped by the ‘objective’ regional environment within which an individual is embedded. Contrary to the main assumption of the TPB (Proposition 1), this study found no mediation effects; however it did identify several moderation effects (Proposition 2) with all three TPB antecedents of intention.

A multilevel analysis based on data across 53 Finnish municipalities found a relatively higher household income (growth) and wealth levels in a region strengthen the positive impact of an individual’s attitude towards entrepreneurship on their entrepreneurial intention. In light of the presented literature, this can imply that the higher demand of products and greater purchasing power of potential customers in regions with higher economic (growth) levels enhance individual perceptions of an attractive local market for establishing a business. In addition, wealthier regions

Table 4. Random-intercept regression estimates: interaction effects.

Variable	Model 1 coefficient (SE)	Model 2 coefficient (SE)	Model 3 coefficient (SE)	Model 4 coefficient (SE)	Model 5 coefficient (SE)	Model 6 coefficient (SE)	Model 7 coefficient (SE)	Model 8 coefficient (SE)	Model 9 coefficient (SE)
<i>Regional environment</i>									
Population density	-0.0011 (0.002)	-0.0013 (0.002)	-0.0014 (0.002)	-0.0014 (0.002)	-0.0014 (0.002)	-0.0013 (0.002)	-0.0014 (0.002)	-0.0013 (0.002)	-0.0013 (0.002)
Higher education	0.0104 (0.028)	0.0190 (0.028)	0.0221 (0.028)	0.0167 (0.028)	0.0204 (0.028)	0.0161 (0.028)	0.0173 (0.028)	0.0139 (0.028)	0.0183 (0.028)
Household income	-0.0000 (0.000)	-0.0000 (0.000)	-0.0001 (0.000)	-0.0000 (0.000)	-0.0000 (0.000)	-0.0000 (0.000)	-0.0000 (0.000)	-0.0000 (0.000)	-0.0000 (0.000)
Household income growth	-0.7491 (2.50)	-0.1923 (2.49)	0.0976 (2.50)	-0.6852 (2.50)	-0.7357 (2.50)	-0.3039 (2.49)	-0.3580 (2.49)	-0.3131 (2.49)	-0.3124 (2.49)
Financial resources	-0.0002 (0.000)	-0.0001 (0.000)	-0.0001 (0.000)	-0.0001 (0.000)	-0.0001 (0.000)	-0.0001 (0.000)	-0.0002 (0.000)	-0.0002 (0.000)	-0.0002 (0.000)
Financial assets	0.0001 (0.000)	0.0001 (0.000)	0.0001 (0.000)	0.0001 (0.000)	0.0002 (0.000)	0.0001 (0.000)	0.0002 (0.000)	0.0002 (0.000)	0.0002 (0.000)
Public sector	0.0004 (0.002)	0.0000 (0.002)	-0.0002 (0.002)	0.0005 (0.002)	0.0002 (0.002)	0.0003 (0.002)	0.0002 (0.002)	0.0006 (0.002)	0.0005 (0.002)
Manufacturing sector	-0.0002 (0.000)	-0.0002 (0.000)	-0.0002 (0.000)	-0.0002 (0.000)	-0.0002 (0.000)	-0.0002 (0.000)	-0.0002 (0.000)	-0.0002 (0.000)	-0.0002 (0.000)
Service sector	-0.0001 (0.000)	-0.0001 (0.000)	-0.0001 (0.000)	-0.0001 (0.000)	-0.0001 (0.000)	-0.0001 (0.000)	-0.0001 (0.000)	-0.0001 (0.000)	-0.0002 (0.000)
Political ethos	0.0041 (0.011)	0.0054 (0.011)	0.0055 (0.011)	0.0072 (0.011)	0.0074 (0.011)	0.0068 (0.011)	0.0071 (0.011)	0.0083 (0.011)	0.0092 (0.011)
Net entry rate	-0.0002 (0.004)	-0.0000 (0.004)	-0.0000 (0.004)	-0.0006 (0.004)	-0.0006 (0.004)	-0.0000 (0.0039)	-0.0002 (0.004)	-0.0002 (0.004)	0.0001 (0.004)
<i>Individual controls</i>									
Female	-0.3309*** (0.103)	-0.3336*** (0.103)	-0.3357*** (0.103)	-0.3225*** (0.103)	-0.3286*** (0.103)	-0.3322*** (0.103)	-0.3249*** (0.103)	-0.3150*** (0.103)	-0.3157*** (0.103)
Age	-0.0310*** (0.004)	-0.0310*** (0.004)	-0.0311*** (0.004)	-0.0311*** (0.004)	-0.0310*** (0.004)	-0.0312*** (0.004)	-0.0310*** (0.004)	-0.0311*** (0.004)	-0.0307*** (0.004)
Age square	0.0001 (0.000)	0.0001 (0.000)	0.0001 (0.000)	0.0001 (0.000)	0.0001 (0.000)	0.0001 (0.000)	0.0001 (0.0003)	0.0001 (0.000)	0.0001 (0.000)

(continued)

Table 4. Continued.

Variable	Model 1 coefficient (SE)	Model 2 coefficient (SE)	Model 3 coefficient (SE)	Model 4 coefficient (SE)	Model 5 coefficient (SE)	Model 6 coefficient (SE)	Model 7 coefficient (SE)	Model 8 coefficient (SE)	Model 9 coefficient (SE)
Education	-0.2405** (0.104)	-0.2431* (0.104)	-0.2432** (0.104)	-0.2224* (0.105)	-0.2308* (0.104)	-0.2288* (0.105)	-0.2291* (0.104)	-0.2260* (0.105)	-0.2394* (0.104)
Entrepreneurial experience	0.2695 (0.162)	0.2579 (0.162)	0.2570 (0.162)	0.2487 (0.162)	0.2664 (0.162)	0.2534 (0.162)	0.2488 (0.162)	0.2561 (0.162)	0.2627 (0.162)
<i>TPB antecedents</i>									
Attitude (ATT)	0.1435*** (0.026)	0.1435*** (0.026)	0.1448*** (0.0258)	0.1432*** (0.026)	0.1442*** (0.026)	0.1413*** (0.026)	0.1420*** (0.026)	0.1432*** (0.026)	0.1447*** (0.026)
Subjective norm (SN)	0.0190*** (0.002)	0.0187*** (0.002)	0.0187*** (0.0022)	0.0191*** (0.002)	0.0190*** (0.002)	0.0189*** (0.002)	0.0189*** (0.002)	0.0189*** (0.002)	0.0188*** (0.002)
PBC	0.0821*** (0.013)	0.0824*** (0.013)	0.0802*** (0.0132)	0.0817*** (0.013)	0.0805*** (0.013)	0.0830*** (0.013)	0.0829*** (0.0132)	0.0828*** (0.013)	0.0820*** (0.013)
<i>Two-way interactions</i>									
ATT × income	0.0002* (0.000)								
ATT × income growth		0.0001* (0.0000)							

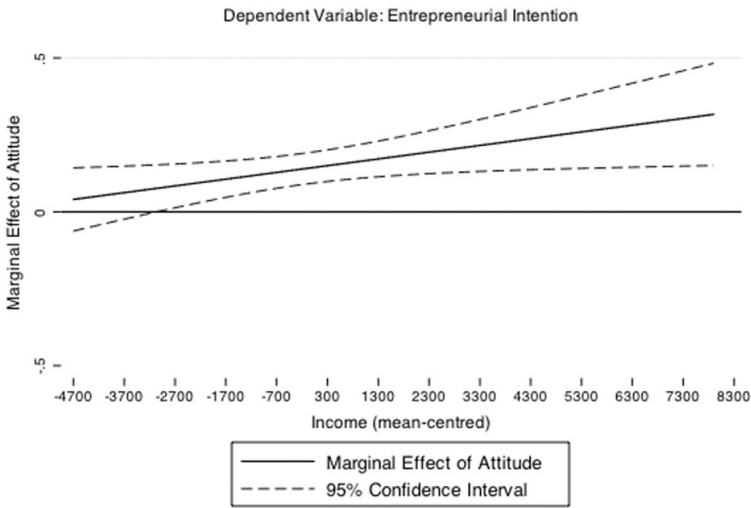


Figure 2. Marginal effect of attitude on intention as income changes.

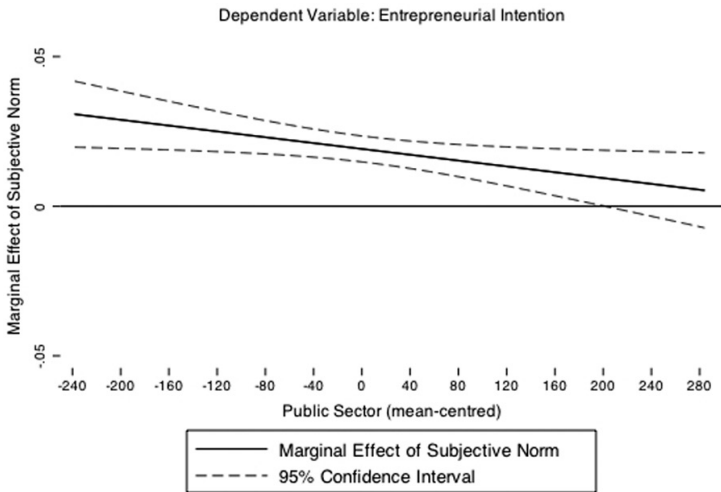


Figure 3. Marginal effect of subjective norm on intention as public-sector employment changes.

represent a greater local supply of financial resources for business capitalization, with potentially higher proportions of venture capitalists, which, in turn, may foster common perceptions of a local environment financially supportive of entrepreneurship. In this context, van Gelderen, Thurik, and Bosma (2005) propose that greater

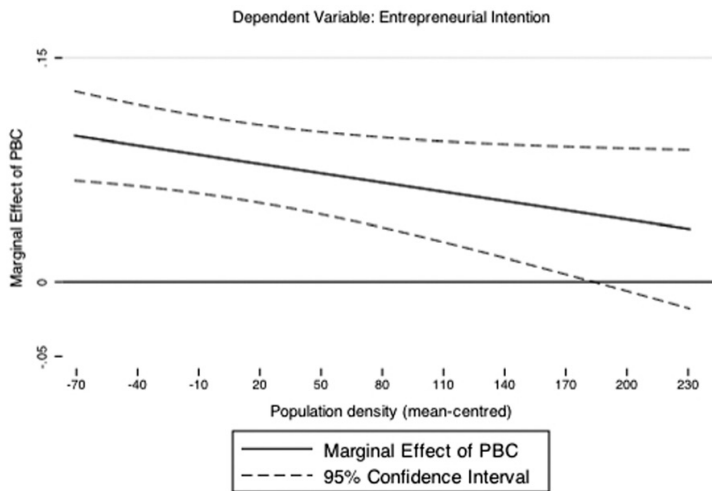


Figure 4. Marginal effect of perceived behavioural control on intention as population density.

start-up capitalization and fewer perceived market risks are one of the main environmental conditions that encourage potential entrepreneurs in their early start-up phases, while Pe'er and Vertinsky (2008) suggest that less pressure on prices increases the attractiveness of regional entrepreneurship. Hence, drawing upon the moderation insights from the TPB study by Cooke and Sheeran (2004), a greater local demand and purchasing power, together with lower financial start-up risks, seems to enhance more certain, and less ambivalent, individual perceptions of entrepreneurship as an attractive, less risky and career option. Accordingly, if an individual feels more certain about their attitudes towards entrepreneurship, their entrepreneurial attitude has a stronger impact on their intention to become an entrepreneur. Therefore, while prior literature suggests ambiguous influences of income and wealth effects on entrepreneurship, this study implies that both economic conditions in a region support the individual formation of entrepreneurial intentions.

A relatively higher population density and education level was found to weaken the relationship between an individual's perceived behavioural control and their entrepreneurial intention. Considering a close association between urban areas and higher education levels (Tödtling and Wanzenböck 2003), both negative moderation effects might be well explained by the fact that higher values of these two indicators represent an increasingly competitive environment that might hinder the formation of a new firm. Based on prior evidence, urban environments constitute more competitive markets with less room for innovation-based differentiation compared to rural areas, which, in the context of this research, may enhance an individual's uncertainty about their own ability to explore and exploit entrepreneurial opportunities. Moreover, individuals embedded in a region with a higher proportion of people with higher education degrees, face a large pool of well-educated (potential)

entrepreneurs with established professional networks (e.g. former university or college colleagues) that possibly compete on the local market. This, in turn, can also increase the number of perceived entrepreneurial 'congesting factors' (Naudé et al. 2008). Taken together, an individual's general awareness of highly competitive regional market conditions seems to hinder them in feeling confident about their own perceived entrepreneurial capability. Therefore, in line with the moderation logic utilized (Cooke and Sheeran 2004), an individual's uncertainty about their perceived behavioural control decreases in regions with a relatively higher population density and education level, and, in turn, weakens the positive impact of their perceived entrepreneurial ability on their entrepreneurial intent. It is also possible that populated and well-educated regions offer a range of interesting job opportunities that can withhold individuals from intending to become an entrepreneur, even if they strongly believe to be able to successfully start and run a business.

The results further show that a relatively higher public and manufacturing sector employment level in a region weakens the positive impact of both an individual's perceived entrepreneurial capability and support from their family and friends on their entrepreneurial intention. As suggested in the presented literature, a higher proportion of public-sector employment in a region sets institutional conditions that can undermine fair and open market competition and opportunities to start a business. Furthermore, the high capital and knowledge intensity in the manufacturing sector, potentially together with a generally low level of small businesses activity, can create conditions less supportive to new firm formation in regions with a larger manufacturing sector. Consequently, individuals who live in regions dominated by the public and manufacturing sectors can face a limited munificence of entrepreneurial opportunities and availability of resources, thus potentially are less confident and more ambivalent in their belief of being able to become a successful entrepreneur. Thus, following Cooke and Sheeran (2004), this study proposes that if an individual feels uncertain about the feasibility of starting and running a business, this weakens the relationship between an individual's perceived behavioural control and their entrepreneurial intent.

Prior research also suggests that public-sector workers tend to be less entrepreneurial than workers in the private sector, and reveals low transition rates into entrepreneurship, which, therefore, could undermine the communication of an entrepreneurship-friendly environment in regions with a large public-sector presence. The same rationale could apply for the (usually larger) organizations in the manufacturing sector, where the tasks for a large share of employees are often regarded as non-entrepreneurial as it is associated with, for example, a relatively low degree of autonomy and little requirement for innovation (Carter, Howcraft, and Smith 2010). Fritsch and Mueller (2007) argue that employees in small firms have a generally greater propensity to start a business than those in larger organizations. Therefore, a larger proportion of manufacturing workers in a local community may also enhance common opinion that disapproves of – or at least does not support – entrepreneurial behaviour. Following this logic, an individual embedded in an environment with a larger proportion of public and/or manufacturing sector employment can feel less certain of receiving approval of starting up in business from their local and social environment. Hence, one possible explanation of the moderation effect is that an individual feels more uncertain about the social acceptance of entrepreneurship in a public and/or manufacturing sector dominated

region, which, in turn, weakens the impact of an individual's perceived social approval from their closer social environment on their intent to start a business (Cooke and Sheeran 2004).

In summary, these findings encourage further development of the theoretical understanding of the formation of entrepreneurial intentions by examining regional factors as moderating variables in the TPB framework. Further, the study implies that regional conditions can support and hinder the formation of entrepreneurial intentions by shaping the relationships between intentions and their cognitive antecedents in different ways. Thus, applying the TPB in a regional context allows greater differentiation of how certain environmental conditions positively (or negatively) affect individual perceptions towards entrepreneurship and, therefore, regional entrepreneurial potential in general. For instance, even though Finland is known as a highly innovation-driven economy with a well-functioning education system (Heinonen and Hytti 2008), the share of the adult population stating an intention to become an entrepreneur 'is the second lowest among the Nordic GEM countries and seventh lowest among all GEM countries' (Stenholm et al. 2010, 8). Accordingly, Finnish scholars recently raised the issue that Finland has too few adult (and especially well-educated) people who are motivated enough to actually start-up in business (Heinonen and Hytti 2008), suggesting the need for further policy initiatives to address individuals' perceptions of entrepreneurship (Arenius 2009). In this context, a detailed picture of the different attributes of regions and their effects on entrepreneurial cognition processes can provide a better understanding of the emergence of higher (and lower) regional entrepreneurial aspirations. Such information can assist local governments and enterprise support communities in customizing initiatives to stimulate the level of entrepreneurial potential in a region.

5.1. Limitations and future directions

This study is limited in at least three ways. First, the sample is limited in terms of its geographic scope and gender balance. That is, the sample is restricted to 53 municipalities within three provinces in Western Finland and it includes a disproportionate number of women compared to the actual gender distribution in those regions. These issues need to be kept in mind when interpreting the results. Moreover, in the spirit of Trettin and Welter (2011), further studies are needed which include socio-spatial contexts across different geographic scales in order to provide more information on the regional embeddedness of entrepreneurial intention and behaviour.

A second limitation of the study is its cross-sectional quantitative nature. The cross-sectional data used in this analysis prevents the regression model from demonstrating causation and it automatically excludes the examination of the intention-behaviour relationship in the TPB. It is widely acknowledged in the psychological literature that hardly any (social) behaviour is unintentional (Greve 2001). However, in the entrepreneurship context, the author is only aware of a single study that applies the TPB and includes a test of the intention-behaviour link (Kautonen, van Gelderen, and Tornikoski 2013). While their findings support the predictive validity of the TPB in the business start-up context, their study does not address regional influences. Hence, further research applying longitudinal research designs is required to examine the TPB in the regional context. Moreover, future

studies should follow Ajzen (2012) and specify a time horizon in the items that measure the different TPB constructs. This would improve the unambiguous assessment of intentions resulting from temporally open-ended questions, and provide important insight into the role of both time and context (Gartner and Shane 1995) in the formation of entrepreneurial intentions and their subsequent translation into actions.

A third limitation is the use of 'objective' proxy measures alone in operationalizing regional conditions. One significant approach for further research would be to complement the 'objective' proxy measures with perceptual measures of the regional environment. Moreover, further studies could apply the subjective moderating variables identified by Cooke and Sheeran (2004). This would provide more insight into the moderating influences of regional conditions in the TPB model.

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Appendix

Scale items

Entrepreneurial intention

How likely is it that you will start your own business? (very unlikely–very likely)

Subjective norm^a

I believe that my closest family members think that I should not/should pursue starting my own business and becoming an entrepreneur \times motivation to comply

I believe that my closest friends think that I should not/should pursue starting my own business and becoming an entrepreneur \times motivation to comply

I believe that my colleagues and people important to me think that I should not/should pursue starting my own business and becoming an entrepreneur \times motivation to comply

Perceived behavioural control

For me starting my own firm and becoming an entrepreneur would be (very difficult–very easy)

If I wanted to, I could easily pursue a career as an entrepreneur

If I started my own business and became an entrepreneur, the chances of success would be (very low–very high)

Authority and autonomy^b

I look for independence

I want decision-making power

I look for a position of authority

I would like to be my own boss

Self-realization^b

I would like to make use of my creativity

I would like to carry out my dreams

I would like to create something new

Economic opportunity^b

I would like a large share of my salary to be based on results^c

I would like to be paid based on my achievements^c

Avoidance of responsibility^b

I do not want to take on many tasks with responsibility^c

I want to avoid excessive commitment to my work^c

I want to avoid responsibility^c

Security^b

The stability of employment is very important to me

The continuity of employment is very important to me

Notes: ^aThe subjective norm scores were calculated by multiplying the item score for the belief statement (presented in the table) with the item score for the motivation to comply, which was measured by asking ‘How much do you care what the following people think if you strive to start your own business?’ and providing a list of groups of people to match the belief statements.

^bThese items were measured as responses to the general question ‘To what extent do you agree or disagree with the importance of the following items in terms of your working career?’ (1 for definitely disagree; 7 for definitely agree).

^cBased on pre-analyses of the different conceptual components of entrepreneurial and employment attitudes, these items were excluded from the final index construction.

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Entrepreneurial intentions in the third age: the impact of perceived age norms

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Abstract This article investigates the impact of perceived age norms on the formation of entrepreneurial intentions in the third age. Age norms refer to those social norms that determine whether establishing and running a business are considered appropriate behavior for a mature individual. An empirical analysis of Finnish individuals finds that norms perceived as permissive of enterprising activity in the third age exert a significant positive influence on entrepreneurial intentions in this segment, even when controlling for the general level of entrepreneurship in the municipalities. This influence is partially mediated by whether the individual has a positive attitude toward entrepreneurship, by how the individual perceives their own ability to start and run a business, by the extent of support from their family and friends they perceive and by the importance of that support to them. Thus, if policy aims to increase enterprising activity in the third-age segment, the portfolio of instruments should include measures that address people's general awareness of third-age entrepreneurship as a viable, positive and attractive late-career option.

Keywords Age · Aging · Social norm · Entrepreneurial intention · Entrepreneurial environment · Third age

JEL Classifications J14 · M13 · L26

1 Introduction

This research contributes to the current discussion on the aging workforce in developed economies (e.g., Johnson and Zimmermann 1993; von Nordheim 2004; OECD 2001) by examining entrepreneurship at older ages (e.g., Curran and Blackburn 2001; Singh and DeNoble 2003; Weber and Schaper 2004). At least two lines of argumentation explain the recent surge of policy and research interest in entrepreneurship in the third age, which the extant literature defines as people aged 50-plus starting up in business (e.g., Curran and Blackburn 2001; Hart et al. 2004; Kautonen et al. 2008).

One is the expectation that the number of older business founders is likely to increase in the future as a result of both “pull” and “push” factors. The “pull” argumentation suggests that there will be growing numbers of (early) retirees with the experience, know-how and financial means for entrepreneurship (Baucus and Human 1994; Singh and DeNoble 2003) who may wish to remain economically active in order to maintain a lifestyle (Walker and Webster 2007) or choose self-employment as a

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flexible alternative to organizational employment (Curran and Blackburn 2001). The “push” argumentation, on the other hand, is based on the proposition that older employees are being “pushed” from the traditional labor market by factors such as age discriminatory practices in recruitment, promotion and training as well as a lack of attractive employment options (Chiu et al. 2001; Platman 2004). In such cases, starting up in business may be the only alternative for mature individuals wishing to resume economic activity. The other reason for the increasing topicality of late-career entrepreneurship is that the promotion of entrepreneurship in older age segments is a prospective policy option to prolong the working lives of older people (Webster et al. 2005), reduce older age unemployment (PRIME 2005), increase the social inclusion of older individuals (Kautonen et al. 2008) and enhance the innovative capacity of the economy by employing the human and social capital of mature individuals through new innovative start-ups (Botham and Graves 2009).

However, prior research into third-age enterprise suggests that while mature individuals are generally more capable of starting and running a business than younger people (Singh and DeNoble 2003; Weber and Schaper 2004), they are significantly less likely to engage in entrepreneurial activity (Curran and Blackburn 2001; Hart et al. 2004). Lévesque and Minniti (2006) clarify the age effect in entrepreneurship with the opportunity cost of time by arguing that as individuals get older, they become less willing to invest time in activities that do not produce instant returns, such as starting a new business. Nevertheless, entrepreneurship at older ages is not a marginal phenomenon. For example, individuals aged 50–64 found 16% of all new businesses in Finland (Kautonen 2008). Yet we know little about the factors that predict the likelihood of mature individuals starting up in business.

The present article works toward this end by investigating the formation of entrepreneurial intentions in the third age based on Ajzen’s (1988, 1991) theory of planned behavior. Here, the study turns to the obvious, yet under-researched question of how the perception of age itself affects the intention to start a business. Recent literature on third-age enterprise suggests the role of the socio-cultural perception of the economic potential of aging people to be a factor that may influence their enterprising propensities

(Kautonen et al. 2008; Weber and Schaper 2004). Against this backdrop, the present study sets out to examine how third-age individuals’ perceptions of the norms defining whether establishing and running a business are considered appropriate behavior for mature individuals (see Lawrence 1988; Neugarten et al. 1965; Settersten and Mayer 1997) influence their entrepreneurial intentions.

The empirical analysis employs survey data comprising responses from 496 individuals aged 45–64 in Western Finland. Although the age of 50 has been a common benchmark for the third age in entrepreneurship studies, this analysis, due to its focus on entrepreneurial intentions rather than current enterprising activity, also includes individuals who will turn 50 within 5 years. Moreover, following Hart et al. (2004), the analysis is limited to individuals under the traditional retirement age of 65. In order to account for the possibility that age norms and their impact on entrepreneurial intentions vary among different environments, the empirical analysis examines the potential moderating effect of the level of entrepreneurship in the 55 Western Finnish municipalities included in the study. For this purpose, the researchers supplemented the survey data with publicly available indicators concerning the proportion of entrepreneurs and small firms and also the net entry rate (difference between start-ups and closures) in each municipality.

The contribution of this article is twofold. First, it develops our theoretical understanding of the formation of entrepreneurial intentions by examining perceived age norms as a contextual variable within the framework of the theory of planned behavior. Second, it provides much-needed empirical evidence on third-age enterprising potential, which informs policy makers and serves as a foundation for further research.

2 Theoretical foundations and hypotheses

2.1 Entrepreneurial intentions and the theory of planned behavior

Building on the theory of reasoned action (Fishbein and Ajzen 1975), the theory of planned behavior (Ajzen 1988, 1991) has become one of the most common psychological theories used to explain and predict human behavior, including entrepreneurship (e.g., Carr and Sequeira 2007; Kolvereid 1996;

Krueger and Carsrud 1993; Tkachev and Kolvereid 1999). Entrepreneurship scholars generally argue that entrepreneurial behavior is intentional, and so best predicted by intentions toward the behavior (e.g., Bird 1988; Krueger and Carsrud 1993). Ajzen (1991, p. 181) defines intentions as “indications of how hard individuals are willing to try, of how much of an effort they are planning to exert, to perform the behavior.” The stronger the intention to engage in specific behavior, the more likely should be its actual performance (Ajzen 1991). In other words, Ajzen (1991, 2002) contends that intention is the immediate antecedent of behavior.

The theory of planned behavior posits that intentions have three conceptually independent determinants (henceforth referred to as the “antecedents of intentions”), namely attitude toward the behavior, the subjective norm and perceived behavioral control (Ajzen 1991). Attitude toward the behavior refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question. The term subjective norm refers to the perceived social pressure to perform or not to perform that behavior. Perceived behavioral control refers to the perceived ease or difficulty of performing the behavior. According to Ajzen and Fishbein (2004), the three theoretical antecedents should be sufficient to predict intentions, but only one or two may be necessary in any given application. In other words, the theory of planned behavior states that the relative importance of the three factors can vary from one context to another.

Demographic characteristics and other characteristics related to the individual’s background and the surrounding environment are not directly addressed within the theory of planned behavior. The theory expects such factors not to have a direct impact on intentions, but an indirect one mediated by attitude, the subjective norm and perceived behavioral control (Kolvereid 1996; Krueger and Carsrud 1993). Therefore, this research proposes that (entrepreneurial) attitude, subjective norm and perceived behavioral control mediate the impact of perceived age norms on third-age entrepreneurial intentions (Fig. 1).

2.2 Perceived age norms and third-age entrepreneurial intentions

Previous research implies that the broader social context in which people work and live affects their

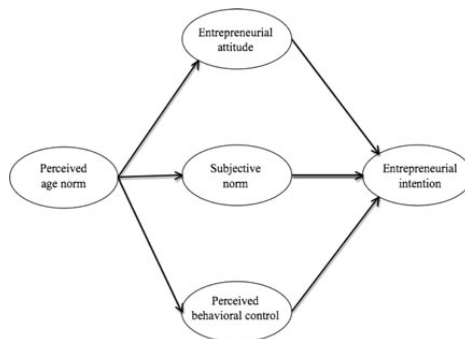


Fig. 1 Conceptual model

entrepreneurial propensities (see, e.g., Acs et al. 2008; Smallbone and Welter 2001; Vaillant and Lafuente 2007). One set of social contextual factors that have an impact on aspiring entrepreneurs is social norms (Giannetti and Simonov 2004), which constitute common understandings and rules between members of a community that evolve in an interactive process where individuals constantly justify their actions and those of others (Giddens 1984). Age norms in this context represent a specific kind of social norm: they are shared understandings as to what kinds of behavior are considered appropriate for individuals of different age groups in a community (Lawrence 1988; Neugarten et al. 1965; Settersten and Mayer 1997).

This research is interested in how third-age individuals themselves perceive those age norms that define the social appropriateness of starting up in business at a mature age. The reasoning is that an age norm that is perceived as permissive or even supportive of business ownership at any age, including the third age, exerts a positive influence on third-age entrepreneurial intentions.

While an individual’s perception does not represent the aggregate age norm in a community but merely its subjective interpretation, this interpretation is important since an age norm, as with any information, can only influence behavior if it is part of the individual’s knowledge and influences their perception of the available courses of action (Koch 1998). Hence, this analysis posits that it is the individual’s subjective understanding of the prevailing age norm that influences the formation of their entrepreneurial intention. This perspective concurs with the theory of planned

behavior, which, as a psychological theory, positions behavior as a function of salient information, or beliefs, relevant to the behavior (Ajzen 1991). Thus:

Hypothesis 1 An age norm that is perceived as favorable to third-age entrepreneurship will have a positive impact on entrepreneurial intentions in this age segment.

The theory of planned behavior posits that the impact of perceived age norms on entrepreneurial intentions is not direct, but is however mediated by the three antecedents of intentions: attitude, subjective norm and perceived behavioral control.

Attitudes emerge from beliefs that individuals hold about the object of attitude (Ajzen 1991), which in this case is a business start-up by a third-age individual. Moreover, these beliefs link the object of attitude with either positive or negative outcomes. The more positive the perception of a third-age individual of the outcome of starting a business, the more favorable their attitude should be toward that behavior and, consequently, the stronger the individual's intention to go ahead and start a business should be (Ajzen 1991, 2002). The present study argues that perceived age norms can contribute to the formation of entrepreneurial attitudes, which are defined as attitudes that favor business ownership (Kolvereid 1996). If mature people think that the community regards them generally as capable of business ownership, this belief is likely to reflect positively in their attitude toward entrepreneurship, as they would expect a positive response for a business start-up from the community. On the other hand, if mature people believe that the regional community and the closer social environment consider it inappropriate for third-age individuals to become entrepreneurs, they would expect any failure to conform to this norm to result in a negative outcome. This could have a pre-emptive effect and influence entrepreneurial intentions negatively. Hence:

Hypothesis 2a Entrepreneurial attitude will mediate the relationship between perceived age norms and entrepreneurial intentions in the third age.

The subjective norm in this context is based on beliefs concerning whether important referent individuals or groups—such as family and friends—approve or disapprove of a third-age individual establishing a business and to what extent this

approval or disapproval matters to the individual (Ajzen 1991). Age norms are likely to have at least some influence on the appraisals that a third-age individual receives from their significant others. As members of community, the prevailing social norms affect the evaluation of referent individuals as regards the appropriateness of entrepreneurship in the third age, and these people are likely to pass this evaluation on to the prospective third-age entrepreneur. Third-age individuals, in turn, use these evaluations to understand how they should behave, thus influencing their subjective norm (Carr and Sequeira 2007). Further, a third-age individual's own perception of the prevailing age norm is likely to affect whether she or he expects support from their significant others. For example, if the individual thinks that the community finds it perfectly acceptable for a mature person to pursue a business opportunity, it would be logical for them to expect their friends and family to find it acceptable, too, and thus be supportive of their start-up intentions. Generally speaking, the more influential the opinion of a particular referent group or individual is to the third-age individual and the more encouraging the third-age individual thinks it is of enterprising activity, the stronger should be the individual's intention to start a business (Ajzen 1991, 2002). Similarly, if the opinion is influential and the individual perceives it as discouraging of entrepreneurship, the effect on their entrepreneurial intentions should be negative. Therefore:

Hypothesis 2b The subjective norm will mediate the relationship between perceived age norms and entrepreneurial intentions in the third age.

The concept of perceived behavioral control in the theory of planned behavior is akin to Bandura's (1977) concept of self-efficacy, which refers to a person's belief in their ability to successfully deal with prospective situations, such as starting and running a business. In general, the greater this perceived behavioral control, the stronger should be the individual's intention to start up in business (Ajzen 1991, 2002). Ajzen (1991) contends that perceived behavioral control is based on beliefs regarding the presence or absence of requisite resources and opportunities for performing a given behavior. These beliefs can be influenced by second-hand information about the behavior that increases or reduces the perceived

difficulty of performing it. This research posits that age norms are one source of such second-hand information. For example, if the life experience of mature people is generally perceived to be an asset and third-age individuals themselves share this perception, such an age norm could contribute to a sense of empowerment, which in this context refers to a belief in one's own capability and competence to start and run a business. Similarly, if the third-age individual believes that the general shared understanding in a community places little value on the economic potential of older people, such a perceived age norm may reduce their belief in their own entrepreneurial capabilities. These effects, then, contribute to the emergence of third-age entrepreneurial intentions positively or negatively. Thus:

Hypothesis 2c Perceived behavioral control will mediate the relationship between perceived age norms and entrepreneurial intentions in the third age.

2.3 The moderating effect of the regional level of entrepreneurship

It is likely that a range of exogenous factors influence how third-age individuals' perceptions of the prevailing entrepreneurship-related age norm impact on their entrepreneurial intentions. This section introduces the regional level of entrepreneurship as one such potential factor into the analysis.

The reasoning behind this explorative hypothesis is based on prior literature, which maintains, for instance, that a higher number of entrepreneurs (within the labor force as a whole) in a regional and socially tight context can foster the acceptance and social legitimacy of entrepreneurial activity (Lafuente et al. 2007; Lundström and Stevenson 2005; Reynolds et al. 2000). Alongside the number of entrepreneurs, previous research contends that a stronger presence of small enterprises in the region enhances entrepreneurial aspirations, for example, by providing business ideas for potential entrepreneurs (Rotefoss and Kolvereid 2005). Besides contributing to the social legitimacy of business ownership in a region, a notable presence of entrepreneurs and small firms increases the likelihood of a third-age individual personally knowing one or more entrepreneurs, who provide (positive) role models that can stimulate the individual's enterprising intentions (Shane 2000). Moreover, previous research

raises the net entry rate—defined as the number of business start-ups less the number of closures (Audretsch and Fritsch 2002)—as a further indicator of regional entrepreneurship. On the one hand, prior studies show that a higher regional start-up rate in the past serves as an ongoing conduit for higher entrepreneurial activity, for example, by increasing innovation activity, knowledge spillovers, competition and firm diversity (Fritsch and Mueller 2007; Ritsilä 1999). On the other hand, new firms tend to have high failure rates, and if the regional exit rate is persistently high, this may communicate risks of failure and thereby reduce the attractiveness of business start-ups to potential (third-age) entrepreneurs (Pe'er and Vertinsky 2008). Nonetheless, this research expects a high net entry rate to indicate a positive entrepreneurial climate.

In summary, prior research suggests that a regional community with a strong presence of entrepreneurs and small firms, and where the stock of firms is growing as a result of a high net entry rate, provides a positive entrepreneurial climate where enterprising activity enjoys a high degree of social legitimacy. This research suggests that such a climate contributes positively to the appropriateness of business start-ups at any age, including the third age, which in turn exerts a positive effect on entrepreneurial intentions in the third-age segment too. Therefore:

Hypothesis 3 The level of entrepreneurship in a regional community positively moderates the relationship between perceived age norms and entrepreneurial intentions in the third age.

3 Methodology

3.1 Data collection and sample characteristics

The following empirical analysis uses primary survey data as well as secondary regional data from public databases in Finland to test the hypotheses outlined above. The survey data were collected as part of a research project on Ostrobothnian entrepreneurship in the provinces of Central Ostrobothnia, Ostrobothnia and South Ostrobothnia in Western Finland in November and December 2006. The researchers used the Finnish Population Register Center to obtain a random sample of 5,600 individuals from a sampling

frame that included all individuals aged 15–75 who were registered as residents in one of the Ostrobothnian provinces at the time the sample was drawn (October 2006). Thus, the sampling frame comprised approximately 350,000 individuals. The mailing of 5,600 questionnaires resulted in a total of 1,301 responses, indicating a response rate of 23.2%. For this analysis, the researchers chose only those respondents who were aged 45–64 when they filled out the questionnaire. They further excluded responses from individuals who were already either full or part-time entrepreneurs.

The final sample employed in this analysis consists of 496 respondents aged 45–64. The gender distribution shows 42% male and 58% female respondents, while the educational background variable reveals that 15% of the respondents had earned a higher education degree. At the time the survey was conducted, 77% of the respondents were working full or part-time, 20% were retired or on incapacity benefits, and 3% were unemployed. When asked to describe the central content of their careers so far, 85% of the respondents reported having been in paid employment, 10% in self-employment, a further 4% evenly in paid and self-employment, and the remaining 1% had been homemakers.

The researchers obtained supplementary regional data from the year 2006 from public databases maintained by Statistics Finland, a government agency that maintains and develops national official statistics. The regional data were added to the survey data at the level of the 55 municipalities in the Ostrobothnian provinces. These three provinces are predominantly rural. The mean number of inhabitants in the 55 municipalities is 19,322, with the smallest municipality having 942 inhabitants and the largest 57,622. According to the regional classification system of Statistics Finland (2009), 9% of the 55 municipalities are urban, 22% semi-urban and 69% rural.

3.2 Measures

The survey enquired about the respondents' opinions, attitudes and intentions related to entrepreneurship as a personal choice and more generally. The researchers adapted the measurement instrument item scales for entrepreneurial intentions, entrepreneurial

attitude, the subjective norm and perceived behavioral control from Kolvereid (1996) and, given that a suitable scale was not available in the extant literature, developed a new one for perceived age norms (Appendix Table 4). All scale items in the survey were measured on a seven-point Likert scale. The scale developed to capture the level of entrepreneurship in the regional community is based on relevant recent enterprise literature.

3.2.1 Entrepreneurial intention

The four items used to measure entrepreneurial intention follow the spirit of, but do not correspond exactly to, those found in Kolvereid (1996), because the researchers adapted the original items to the third-age context. In the resulting index, a high score indicates a desire to become an entrepreneur, and a low score a desire to become/remain organizationally employed or retire (or stay retired).

3.2.2 Entrepreneurial attitude

The survey instrument features three separate scales, which according to Kolvereid (1996) represent attitudes that are favorable to entrepreneurship as opposed to organizational employment: authority and autonomy (four items, Cronbach's $\alpha = 0.75$), self-realization (three items, Cronbach's $\alpha = 0.73$) and economic opportunity (two items, Cronbach's $\alpha = 0.65$). The researchers created three corresponding indices by averaging the item scores and used them as measured variables for the latent variable entrepreneurial attitude in the structural model.

3.2.3 Subjective norm

The subjective norm was constructed using three items that measure the individual's perceptions of whether family, friends, colleagues or other important people think that the individual should or should not start a business. These belief items were multiplied by the respective motivation to comply items, which measure the degree to which the opinions of those people influence the individual's decision to start a business or not. The resulting products became the

observed variables for the subjective norm latent variable in the structural model.

3.2.4 *Perceived behavioral control*

This construct consists of three rating scales, which measure the individual's perception of how easily and successfully they could establish and run a business, if they chose to start one.

3.2.5 *Age norm*

Based on the literature review, the researchers developed three items to establish how third-age individuals perceive the entrepreneurship-related age norm in their community. These items measure the degree to which the respondent agrees that it is socially appropriate for a person of any age, and a mature person in particular, to start a business.

3.2.6 *Entrepreneurial environment*

The researchers chose three measures to capture the level of entrepreneurship in each of the 55 municipalities included in the analysis. Following the labor-market approach (e.g., Audretsch and Fritsch 1994), each indicator is measured in relation to the size of the labor force or the number of employees in the municipality. The first indicator represents the proportion of entrepreneurs relative to the labor force in the municipality (Fritsch 2004). The second item reflects the presence of small businesses in the municipality, measured as the average size of firms, that is, the total number of employees relative to the stock of firms (Kangasharju 2000). The third item refers to the net entry rate in the past (Audretsch and Fritsch 2002) by measuring the difference between the number of start-ups and closures in the period 2000–2006, relative to the size of the labor force. The items were standardized before they were aggregated to the construct level. The data for these environmental indicators were derived from public databases maintained by Statistics Finland, which publishes such data only at the municipal level. Since the actual analysis in this paper is performed at the individual level, the data were disaggregated by assigning each respondent the value representing the municipality in which they live (e.g., Rotefoss and Kolvereid 2005).

3.3 Common method variance

Compared to other disciplines, the extent of common method bias is generally below average in fields such as marketing and management (Cote and Buckley 1987). Nonetheless, the researchers took a number of steps, both procedural and statistical, to ensure that the risk of common method bias was minimized. Procedurally, in order to reduce socially desirable responses and item ambiguity, the questionnaire featured different response formats and a “counter-balanced” question order, and the respondents could choose to remain completely anonymous (Podsakoff et al. 2003). Statistically, Harman's (1976) post hoc one-factor test was applied to the model variables. This test did not result in a strong first factor, which indicates that common method bias is not a serious limitation in this dataset. One should bear in mind, though, that this procedure does nothing to statistically control for the common method effect; it is merely a diagnostic technique (Podsakoff et al. 2003, p. 889). As a result, the presence of common method problems cannot be fully discounted.

4 Data analysis and results

4.1 Analytical strategy

The research hypotheses require the testing of whether entrepreneurial attitude, subjective norm and perceived behavioral control mediate the impact of the perceived age norm on third-age entrepreneurial intentions. Instead of applying linear regression to test for mediation, the researchers chose to utilize structural equation modeling given that such models not only account for measurement error (Baron and Kenny 1986), but potentially provide a more complete illustration of the relationships among the constructs under investigation. The research model is examined by means of the partial least squares (PLS) approach to structural equation modeling, which is a regression-based technique that has gained popularity among entrepreneurship researchers recently (e.g., Fink et al. 2008; Liñán and Chen 2009; Mitchell et al. 2008). Like other methods of structural equation modeling, PLS renders the measurement of latent variables possible (Jacoby 1978; Churchill 1979). Generally speaking, PLS is more appropriate than maximum likelihood

approaches when the goal of the research is prediction rather than model fit (Fornell and Bookstein 1982), and it is particularly well suited to exploratory, theory-building research because it makes minimal demands with respect to measurement scales, sample size and residual distributions (Chin 1998; Wold 1985). Since the aim of this research is to predict the formation of third-age entrepreneurial intentions and because it introduces age norm and entrepreneurial environment as new constructs into the theory of planned behavior framework, the PLS approach is well suited for this analysis.

The analysis applies the software package Smart-PLS 2.0 (Ringle et al. 2005) in four steps to examine the research model. The first step of the analysis involves the calculation of a reduced model, which examines the direct impact of age norm on entrepreneurial intention, thus testing Hypothesis 1. The second step tests Hypotheses 2a–c with a complete mediation model featuring entrepreneurial attitude, the subjective norm and perceived behavioral control as mediators (Baron and Kenny 1986). Entrepreneurial environment is included as a control variable in the second step to determine its possible effect on all endogenous variables (Srite and Karahanna 2006). The third step examines the potential moderating effect of entrepreneurial environment, as proposed in Hypothesis 3.

Finally, the fourth stage of the analysis subjects the full research model, including the moderating effects from the third step, to an explorative group comparison (Chin 2000) between “younger” (45–54 years, $N = 254$) and “older” (55–64 years, $N = 242$) third-age individuals. While the third age is often defined in terms of chronological age, it does not represent a homogeneous age group. The age-related expectations concerning a 51- and 63-year-old person are likely to vary (see McKay 2001), as are those individuals’ perceptions of age norms related to entrepreneurship. Hence, the group comparison aims to explore whether the model results are robust across age segments within the third-age category.

4.2 Reliability and validity assessment

The research model consists of six latent variables with reflective measurement models. The construct reliability measures for the latent variables are satisfactory. Both the composite reliability and

convergent validity (average variance extracted, AVE) scores (Table 1) clearly exceed the recommended threshold values of 0.7 and 0.5, respectively (Chin 1998). Discriminant validity was assessed both at the item level and at the construct level. With respect to item discriminant validity, the PLS confirmatory factor analysis indicates that all indicators load at their highest with their respective construct and that no indicator loads higher on other constructs than on its intended construct. It is therefore safe to assume item discriminant validity. At the construct level, the comparison of latent variable correlations and the square root of each reflective construct’s AVE (Table 1) suggests that there is satisfactory discriminant validity (Chin 1998; Fornell and Larcker 1981). Overall, the evaluation of the reflective measurement models reveals that all constructs are of satisfactory reliability and validity for the purposes of this analysis.

4.3 Model testing

The path weighting scheme is utilized to estimate the paths between the latent variables because it is the only weighting scheme that explicitly considers the directions of the causal relationships between exogenous and endogenous variables (Chin 1998; Lohmöller 1989). A standard bootstrapping procedure (Yung and Bentler 1996) with 500 resamples consisting of the same number of cases as in the original sample is applied in order to determine the statistical significance of each estimated path.

The first step of the analysis tests Hypothesis 1, which predicted that an age norm perceived as favorable to entrepreneurship at older ages would have a positive direct impact on entrepreneurial intention. The results show that this relationship is indeed statistically significant at the $p < 0.001$ level (path coefficient: 0.48) with a medium to strong effect ($f^2 = 0.30$) according to Cohen (1988). Age norm alone explains 23% of the variance in entrepreneurial intention.

The mediation effects model (Model 1 in Table 2) examines Hypotheses 2a–c, which suggested that the impact of age norm on entrepreneurial intention would be mediated by entrepreneurial attitude, subjective norm and perceived behavioral control. Overall, the PLS algorithm results in acceptable explanatory power for the four endogenous variables

Table 1 Reliability and validity assessment

Measurement model			Latent variable correlations (off-diagonal) versus the square root of AVE (diagonal, <i>italicized</i>) ^a					
	Composite reliability	AVE	Intention	Attitude	Subjective norm	PBC	Age norm	Environment
Intention	0.81	0.51	<i>0.71</i>					
Attitude	0.81	0.59	0.43	<i>0.77</i>				
Subjective norm	0.88	0.71	0.48	0.19	<i>0.85</i>			
PBC	0.90	0.75	0.56	0.35	0.46	<i>0.86</i>		
Age norm	0.77	0.54	0.45	0.33	0.23	0.35	<i>0.73</i>	
Environment	0.90	0.74	0.15	0.09	0.11	0.08	0.09	<i>0.86</i>

AVE average variance extracted, PBC perceived behavioral control

^a For adequate construct discriminant validity, diagonal elements should be greater than the corresponding off-diagonal elements

in the model, with R^2 values ranging from 0.06 to 0.12 for the mediators and 0.48 for the dependent variable. Moreover, the Q^2 values associated with the Stone–Geisser criterion are consistently higher than zero, indicating that the prerequisites of predictive relevance for the model are fulfilled (Chin 1998).

Age norm shows a significant positive path coefficient to all three mediators ($p < 0.001$), which in turn are all statistically significant predictors of entrepreneurial intention at the $p < 0.001$ level. However, the model also shows a significant path coefficient from age norm to entrepreneurial intention. Since this path coefficient (0.22) and the corresponding effect size ($f^2 = 0.08$) are considerably lower than in the direct effect model (0.48 and 0.30, respectively), entrepreneurial attitude, subjective norm and perceived behavioral control seem to partially mediate the relationship between age norm and entrepreneurial intention. This finding partly supports Hypotheses 2a–c, which predicted a full mediation effect based on the theory of planned behavior. The level of entrepreneurship in the municipality, included as a control variable in Model 2, plays only a marginal role in the structural model as a whole, exerting a moderately positive influence on the mediators and the dependent variable.

Introducing the interaction terms (age norm \times entrepreneurial environment) in Model 2 (Table 2) does not greatly change the model results, and none of the paths from the interaction terms to the mediators or the dependent variable is statistically significant. Therefore, this finding does not support Hypothesis 3.

That is, the level of entrepreneurship in the municipality does not moderate the impact of the perceived age norm on entrepreneurial intentions in the third age.

Table 3 displays the results of the exploratory group comparison (Chin 2000) between “younger” (45–54 years, Model 3) and “older” (55–64 years, Model 4) respondents in the sample. The group comparison involved running the analysis for both subsamples separately and subsequently comparing the differences in path coefficients. Table 3 shows three statistically significant ($p < 0.05$) differences. First, the moderating effect of entrepreneurial environment on the relationship between age norm and entrepreneurial attitude becomes significant in the 55–64-year-old subsample. This means that a 1-SD increase in the score for entrepreneurial environment will increase the path coefficient of age norm to entrepreneurial attitude by 0.17. In other words, if the level of entrepreneurship in a municipality is high, the positive impact of the perceived age norm on entrepreneurial attitude is stronger for the 55–64-year-old respondents than in municipalities where the level of entrepreneurship is lower. At the same time, the impact of entrepreneurial attitude on entrepreneurial intentions is significantly weaker in the 55–64-year-old subsample. The third significant difference is in the path from entrepreneurial environment to subjective norm, which is non-significant in the “older” subsample but significant at the $p < 0.01$ level in the “younger” subsample. Thus, the level of entrepreneurship in the municipality exerts a positive

Table 2 Results of the PLS path model analysis for the sample of 45–64 old respondents ($N = 496$)

Model 1: mediation effects					Model 2: interaction effects						
IV	DV	Path	f^2	R^2	Q^2	IV	DV	Path	f^2	R^2	Q^2
Age norm		0.32***	0.11			Age norm (AN)		0.32***	0.13		
Environment		0.06 [†]	0.01			Environment (ENV)		0.06 [†]	0.01		
	Attitude			0.11	0.06	AN × ENV		0.09	0.01		
Age norm		0.22***	0.05			Age norm (AN)	Attitude	0.23***	0.07		0.12
Environment		0.09*	0.01			Environment (ENV)		0.09*	0.02		
	Subjective norm			0.06	0.04	AN × ENV		0.11	0.01		
Age norm		0.34***	0.13			Age norm (AN)	Subjective norm	0.34***	0.14		0.07
Environment		0.05 [†]	0.01			Environment (ENV)		0.05	0.01		
	PBC			0.12	0.09	AN × ENV		0.09	0.01		
Age norm		0.22***	0.08			Age norm (AN)	PBC	0.22***	0.08		0.13
Environment		0.06*	0.01			Environment (ENV)		0.06*	0.01		
Attitude		0.21***	0.06			Attitude		0.20***	0.06		
Subjective norm		0.25***	0.09			Subjective norm		0.25***	0.08		
PBC		0.29***	0.10			PBC		0.29***	0.10		
	Intention			0.48	0.23	AN × ENV		0.05	0.00		
							Intention				0.48

Effect sizes (Cohen 1988): $f^2 > 0.35$ strong effect; $f^2 > 0.15$ moderate effect; $f^2 > 0.02$ weak effect

DV Dependent variable, IV independent variable, PBC perceived behavioral control

[†] $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (based on one-sided t -test with 500 df)

effect on the perceived support from family and friends, but only for respondents aged 45–54. As a whole, however, the group comparison shows only minor differences in the model results between “younger” and “older” third-age individuals.

5 Discussion

This research found that if a third-age individual perceives it as socially acceptable to be entrepreneurially active at any age, and in the third age in particular, such a perception exerts a significant positive influence on their entrepreneurial intention. In other words, if the shared understanding between members of a regional community signals to the individual that aging people are an asset and that they should pursue their economic potential by means of business start-ups, such an age norm has a positive impact on third-age individuals’ enterprising inclinations.

The results further show that this impact is partially mediated by the three theoretical antecedents of intentions put forward in the theory of planned behavior: attitude, subjective norm and perceived behavioral control. This means that the perceived age norm not only affects the formation of entrepreneurial intentions directly, but also indirectly via how entrepreneurship-friendly the individual’s attitudes toward work are, how the individual perceives the extent and importance of support from their family and friends, and how the individual perceives their ability to start and run a business. Since the mediation turned out to be only partial, this finding actually contradicts the theory of planned behavior to some extent, given that the theory would anticipate the three antecedents fully mediating the impact of the perceived age norm on entrepreneurial intention.

A possible explanation for this finding is that perhaps perceived social norms emanating from the surrounding community are not contextual variables

Table 3 Comparison of respondents aged 45–54 and 55–64

Model 3: 45–54 year olds (N = 254)				Model 4: 55–64 year olds (N = 242)				Δ Models 3 and 4			
IV	DV	Path	f^2	R^2	Q^2	IV	DV	Path	f^2	R^2	Q^2
Age norm (AN)	Environment (ENV)	0.28***	0.11			Age norm (AN)	Environment (ENV)	0.35***	0.19		0.07
AN × ENV	Attitude	0.06	0.02			AN × ENV	Attitude	0.06	0.04		0.00
		-0.13	0.02	0.11	0.05			0.17***	0.03	0.17	0.08
Age norm (AN)	Subjective norm	0.24***	0.10			Age norm (AN)	Subjective norm	0.22***	0.07		0.02
Environment (ENV)		0.16**	0.07			Environment (ENV)		0.01	0.01		0.15*
AN × ENV		0.21	0.05	0.12	0.05	AN × ENV		0.11	0.01	0.07	0.10
Age norm (AN)		0.32***	0.16			Age norm (AN)		0.36***	0.15		0.04
Environment (ENV)		0.09†	0.05			Environment (ENV)		0.02	0.00		0.07
AN × ENV		-0.18	0.04			AN × ENV		0.02	0.00		0.20
	PBC			0.15	0.09		PBC			0.13	0.09
Age norm (AN)		0.18***	0.05			Age norm (AN)		0.23***	0.10		0.05
Environment (ENV)		0.00	0.00			Environment (ENV)		0.12**	0.04		0.12*
Attitude		0.23***	0.09			Attitude		0.14**	0.03		0.09
Subjective norm		0.30***	0.14			Subjective norm		0.22***	0.06		0.08
PBC		0.31***	0.14			PBC		0.30***	0.10		0.01
AN × ENV	Intention	-0.03	0.01	0.53	0.26	AN × ENV	Intention	0.09†	0.02	0.47	0.23

Effect sizes (Cohen 1988); $f^2 > 0.35$ strong effect; $f^2 > 0.15$ moderate effect; $f^2 > 0.02$ weak effect

DV Dependent variable, IV independent variable, PBC perceived behavioral control

† $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (based on one-sided *t*-test with 500 df)

in the theory of planned behavior after all, but in fact another dimension of subjective norm. In enterprise studies including the present one, subjective norm is commonly operationalized as referring to particular, identifiable groups of individuals, such as family members, friends and colleagues—so-called significant others. Perhaps subjective norm also includes anonymous sources such as perceived social norms, which refer to the generalized other in a community. This would imply that in entrepreneurial contexts, subjective norm in the theory of planned behavior consists of two distinct sources: an individual's significant others and the generalized other.

This interpretation is in line with the empirical results, which indicate both a direct and a partially mediated indirect effect from the perceived age norm on entrepreneurial intent. According to this line of reasoning, the direct effect occurs because the age norm is another source of subjective norm, and thus actually an antecedent of intention. However, previous research has found subjective norm also to exert an indirect effect on entrepreneurial intent via attitude and perceived behavioral control (Liñán and Chen 2009). Thus, as a source of subjective norm, the perceived age norm should influence entrepreneurial intention indirectly as well. The finding of the present study that subjective norm mediates the effect of the perceived age norm does not contradict this reasoning. Different sources of subjective norm are unlikely to be independent and social norms (the generalized other) in particular affect the appraisals that an individual receives and expects from their significant others, to whom the operationalization of subjective norm in this study referred. Further research is required to determine whether social norms in general are part of the concept of subjective norm, as proposed here, or a contextual variable, as previous theories imply.

The empirical analysis did not find notable support for the hypothesis that the level of entrepreneurship in the regional community moderates the impact of the perceived age norm on entrepreneurial intention. It may well be that the perceived age norm exerts an influence on the formation of entrepreneurial intention regardless of the level of entrepreneurship in a municipality. Moreover, it may be that even though the level of entrepreneurship does not moderate the impact of age norms, it affects entrepreneurial intention as a further contextual variable within the theory of planned behavior, mediated by attitudes,

subjective norm and perceived behavioral control. The preliminary results in this analysis point in this direction, since the entrepreneurial environment was found to exert a moderate influence on attitude, subjective norm and entrepreneurial intent. Further research is required to examine these relationships in more detail. However, the non-finding in terms of the moderation effect would suggest that objective measures of entrepreneurship (number of entrepreneurs/small firms, net entry rate) do not set conditions that change the way an individual's perceptions affect the formation of entrepreneurial intentions. By the same token, the implication of this would be that even in a community with a low level of entrepreneurial activity, it would be possible to foster the level of entrepreneurial intention in the population by addressing their perceptions regarding the appropriateness and attractiveness of business ownership.

The principal policy implication of the study is that if the aim of government policy were to increase enterprising activity in the third-age segment, the portfolio of instruments should include measures that encourage people's general awareness of third-age entrepreneurship as a viable, positive and attractive late-career option (see Lundström and Stevenson 2005). Even if the aim of policy were not (only) to encourage third-age business start-ups explicitly, increasing positive awareness of third-age enterprising potential might have a positive effect on the participation of the aging population in social and economic life in broader terms, including but not limited to social enterprise and voluntary work. Such activities may not only generate economic benefits, but also contribute toward a better quality of life (Kautonen et al. 2008).

6 Limitations and future directions

Like all research, this study is not without some notable limitations. First, the cross-sectional data used in this analysis limit the demonstration of causation. Future studies should thus seek to develop longitudinal research designs. A particularly interesting study design would be one where entrepreneurial intentions and their antecedents at one point in time would be connected to actual behavior (i.e., whether or not the individual has started up in business) at a later point in time. The theory of planned behavior posits that intention is the immediate antecedent of

behavior (Ajzen 1991). However, without empirical enquiry based on longitudinal research designs, we will remain in the dark about the actual extent of the predictive power of entrepreneurial intentions vis-à-vis start-up behavior in the third age, and more generally.

A further limitation is the geographic scope of the sample, which was limited to three provinces in Western Finland. Understanding the empirical versatility of the phenomenon requires further investigation, as it is likely that not only the nature of the enterprise-related age norms as such, but also the magnitude of their influence on entrepreneurial intentions will vary across regional and national cultures (see Weber and Schaper 2004). Hence, further studies using culturally versatile, preferably cross-border samples, would increase our knowledge of the potential differences in the effects of perceived and institutionalized age norms across diverse socio-cultural environments. Such analyses should not be restricted to the individual level, but they should also consider the application of multilevel analytical

techniques (see e.g., Hox 2002) to examine cross-regional and cross-national differences in the impact of age norms on entrepreneurial intentions.

Finally, while the focus of this research was limited to intentions to start a business in the third age, future studies should seek to examine whether age norms that are favorable to third-age entrepreneurship also exert a positive influence on other forms of economic and social activity that may benefit society, such as return to employment (from unemployment or early retirement), social entrepreneurship or voluntary work. Positive results from such investigations would bolster the tentative policy implication of the present study that consideration of policy measures that increase awareness of third-age enterprise, in terms of its being a positive late-career alternative, is well worthwhile.

Appendix

See Table 4.

Table 4 Construct variables

Variable (all measured on a 7-point Likert scale; translated from Finnish)

Entrepreneurial intention

If you were to choose between running your own business and being employed by someone, what would you prefer?

If you were to choose between running your own business and being unemployed, what would you prefer?

How likely is it that you will start your own business?

When you retire, how likely is it that you will run your own business?

Subjective norm^a

I believe that my closest family members think that I should not/should start my own business and become an entrepreneur × motivation to comply

I believe that my closest friends think that I should not/should start my own business and become an entrepreneur × motivation to comply

I believe that my colleagues and people important to me think that I should not/should start my own business and become an entrepreneur × motivation to comply

Perceived behavioral control

For me starting my own firm and becoming an entrepreneur would be (very difficult–very easy)

If I wanted to, I could easily pursue a career as an entrepreneur

If I started my own business and became an entrepreneur, the chances of success would be (very low–very high)

Age norm

One can very well become an entrepreneur after retiring

In my opinion, a person of any age can start up in business

There is no point in starting up in business when aged over 50 (reversed scale)

Authority and autonomy^b

I look for independence

I want decision-making power

Table 4 continued

Variable (all measured on a 7-point Likert scale; translated from Finnish)

I look for a position of authority
I would like to be my own boss
Self-realization ^b
I would like to make use of my creativity
I would like to carry out my dreams
I would like to create something new
Economic opportunity ^b
I would like a large proportion of my salary to be based on results
I would like to be paid according to my achievements

^a The subjective norm scores were calculated by multiplying the item score for the belief statement (shown in the table) with the item score for the motivation to comply (both measured on a seven-point Likert scale), which was measured by asking “How much do you care what the following people would think if you strove to start your own business?” and providing a list of groups of people to match the belief statements

^b The construct “entrepreneurial attitude,” as used in the analysis, is based on these three scales. The items in these scales were measured as responses to the general question “To what extent do you agree or disagree with the importance of the following items in terms of your working career?” (1 for definitely disagree, 7 for definitely agree)

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Paper 4: Wainwright, T., E. Kibler, T. Kautonen, and R. Blackburn.
Who are you calling old? Negotiating 'deviance' of older
entrepreneurs.

Who are you calling old? Negotiating 'deviance' of older entrepreneurs¹

Abstract

Drawing upon a micro-sociological approach to 'deviance', this article provides new insight into the role of social normative settings for entrepreneurial behavior at an 'older' age. Based on 22 in-depth narratives in Greater London, UK, we generate new understandings of how perceptions of 'deviance' vary across and within different social networks, and are open to change from direct or indirect interventions by 'older' entrepreneurs themselves. Specifically, we identify four strategies used by 'older' entrepreneurs to manage negative judgments within three types of networks: family, friends and clients.

Keywords: Entrepreneurship; social norms; deviance; older entrepreneurs

1. Introduction

One current challenge in many advanced economies is the aging of populations and the subsequent need for people to work longer (OECD, 2006). However, questions have been raised as to whether older workers want to, or are physically able, to work beyond traditional retirement ages (Black, 2008; Duval, 2003). Entrepreneurship has long been recognized as an important activity to overcome economic and social challenges (Audretsch et al., 2006; Baumol, 2002; Carree and Thurik, 2010). In the aging context, scholars have suggested that entrepreneurship amongst older individuals, could help overcome the barriers that make it more difficult for older workers to pursue careers in organizations (Curran and Blackburn, 2001; Singh and DeNoble, 2003; Weber and Shaper, 2004), while enabling the management of work-life balance commitments (Platman, 2003; Lévesque and Minniti, 2006; Zissimopoulos and Karoly, 2007) and ascertaining financial independence (Curran and Blackburn, 2001; Weber and Schaper, 2004). Moreover, it is argued that older entrepreneurship can generate positive social externalities including, a reduced burden on the welfare system (Kautonen et al., 2008) and the deployment of older workers' human and social capital through business venturing (Baucus and Human, 1994; Botham and Graves, 2009), in contrast to poverty in retirement or unemployment.

¹ This paper represents a substantially revised version of the paper awarded the *Best Paper* in the track 'Business Creation, Resource Acquisition, Business Closure' in the *34th Institute for Small Business and Entrepreneurship (ISBE) Annual Conference*, ISBN: 9781900862233.

In this paper, we contribute to debates that transverse ageism, employment and entrepreneurship. Prior research has uncovered practices of ageism within organizations, based on for instance, employers viewing older workers as expensive to employ (Loretto and White, 2006) and less able to manage rapid technological change (Duval, 2003). Ageist practices have been found to affect employees at different stages of their later working lives: recruitment, promotion, training and circulation between jobs (Moore, 2009). One of the advantages ascribed to starting a business as a late-career move is the ability to overcome age-related barriers within larger organizations (Platman, 2003). We argue that entrepreneurship is not free of age-based barriers either, and seek to understand when such barriers emerge and how older entrepreneurs cope with them.

In particular, our interest is geared toward how age-related social norms are reflected in older entrepreneurs' networks, and how these norms influence their business venturing activities. A limited body of research has suggested that age-related social norms affect the entrepreneurial intentions of older individuals, where entrepreneurial norms critical of older individuals may set a barrier to older entrepreneurship (Kautonen et al., 2011; Weber and Schaper, 2004). This barrier emerges from popular understandings, prevalent in societies, that perceive the entrepreneur as a risk-taking "superman" (Anderson and Warren, 2011; Nicholson and Anderson, 2005), representing a younger, dominant "enterprising culture", which excludes older entrepreneurs since they do not fit within the discourse (Ainsworth and Hardy, 2008, 2009). In the following analysis, we draw upon a micro-sociological view of 'deviance' (Becker, 1963) as a conceptual framework to explore how notions of an enterprise culture can vary within different social networks (Jack, 2010) and how they can affect older entrepreneurs.

Based on an analysis of previous studies, several important research gaps emerge that we seek to address. First, we argue that although older entrepreneurship has been promoted as a strategy which can counter age discrimination against employees, older entrepreneurs can also face age-related societal barriers. We acknowledge how ageist perceptions and barriers emerge from within society (Ainsworth and Hardy, 2009), but seek to contribute to the knowledge base further, by exploring how age-related barriers and/or support emerge from particular social networks, and how these barriers and/or support can affect older entrepreneurs. Following the work of Jack (2010), we apply a qualitative approach, in order to gain in-depth understandings into how the age-related norms of social networks positively and negatively influence an entrepreneur's business venturing activities.

Second, we seek to provide novel and nuanced insights into the different sources and perceptions of positive and negative deviance. In other words, we

examine the varying views and evaluations of older individuals' entrepreneurial activities, which emerge across and within three types of networks: family, friends, and clients. By examining the social perceptions of older entrepreneurship, from different networks and their influence on older entrepreneurs, we offer new insight which builds on the pioneering work of Baucus and Human (1994), who suggest that the nature of networks differ, based on the professional and entrepreneurial experience of older entrepreneurs. In doing so, we draw particular attention to the difference between novice older entrepreneurs and serial older entrepreneurs (Westhead and Wright, 1998; Podoynitsyna et al., 2011), where the latter have experience from business venturing when they were aged 49 years and below.

Third, we apply an interactionist lens of deviance to uncover how normative evaluations of older entrepreneurs are exercised by different social networks, but also how these views can be challenged and renegotiated by older entrepreneurs, to demonstrate how social norms and barriers are mutable. Accordingly, we provide new knowledge into how older entrepreneurs are able to resist and change ageist perceptions of entrepreneurship prevalent in their social environments. This contributes to Welter's (2011) recent call for further research into the individual's role in shaping social contexts through entrepreneurial activity. Subsequently, the central aim of this article is to examine the relationship between older entrepreneurs' reactions to being perceived as social deviants, and to provide new micro-sociological understandings into how older entrepreneurs interact with different social environments.

2. Older Entrepreneurship and “Deviance”

The entrepreneurship literature has emphasized the importance of developing new insight into the social and institutional contexts within which entrepreneurial behavior is embedded (Aldrich and Martinez, 2001; Bruton et al., 2010; Jack and Anderson, 2002; Thornton et al., 2011; Welter, 2011), and in turn, is affected by social norms of acceptability (Scott, 1995). Research has discussed how “popular” discourses in the media promote particular enterprise norms, that have been absorbed by society, prescribing *who* business owners should be, and *how* they should (not) act (Ainsworth and Hardy, 2009; Anderson and Warren, 2011; Down and Warren, 2008; Nicholson and Anderson, 2005). These discourses create social normative contexts (Du Gay, 1996), which legitimize assumptions and prescribe who should become an entrepreneur (Bruton et al., 2010). Within this framework, we consider that older entrepreneurs are often viewed as deviants, or “outsiders” (Becker,

1963), in that they subvert accepted dominant societal social norms, that often assume they “should” retire, or withdraw from mainstream employment.

Debates surrounding deviance frequently stress how individuals deviate from social norms that are commonly held by members of society (for example, Becker, 1963; Merton, 1949; Spitzer, 1975). Earlier work by Merton (1949) views deviance as the emergence of a divide between society’s goals and the means of achieving those goals. Merton’s research focused mainly upon negative deviance, based on extensive and supposedly ubiquitous social values (Thompson, 1998) that often resulted in the identification of “moral panics” (Cornwall and Linders, 2002), which stimulate the formation of crude, undesirable stereotypes within society (Badham et al., 2003). These earlier studies have been referred to as functionalist frameworks, which view deviance at a macro societal level, where sociological narratives assume that widespread norms are often immutable, such as theft and violence (Merton, 1949). Similarly, studies at the organizational level have focused on the deviance from stable norms prescribed by the management of large companies (Robinson and Bennett, 1995). However, studies on deviance have overlooked the field of entrepreneurship, most probably with the exception of Kidwell and Nygaard (2011).

Changing social and economic structures have brought an increase in older entrepreneurship and thus it arguably deviates from the perceived norms of the way in which older workers engage with the labor market, where they have historically continued in employment, until they reached their retirement age. More contemporary research, while not directly referring to theories of deviance, can be considered to use a functionalist perspective, where older entrepreneurs can be seen to deviate from fixed social norms, at the societal level (see Ainsworth and Hardy, 2008; 2009). In this context, Ainsworth and Hardy (2008) suggest that enterprise and age are independent constructs that do not complement each other, and that older individuals find it difficult to conform to a younger, dominant “enterprising culture”. As such, it is argued that older entrepreneurs can be viewed as being deviant to popular norms of entrepreneurship through discourse, often promoted by the media (Nicholson and Anderson, 2005). These norms are seen to reflect social reality, where perceived stereotypes can impair motivations toward entrepreneurship and discriminate against older individuals (Ainsworth and Hardy, 2009). As a consequence of subverting social norms, sanctions can be levied by social groups, which can also affect how people respond to business opportunities (Meek et al., 2009), and can arguably act as a disincentive to older people entering entrepreneurship. Deviance, in this context, can be defined “...as behavioral departures from norms of a reference group” (Warren, 2003: 622).

Previous research has indicated that the functionalist perspective has provided useful insights into the deviant behavior of older workers, although contemporary studies have argued that its simplistic framework tends to view norms as stable constructions (Badham et al., 2003; Bryant and Higgins 2010). Successive research has sought to develop more nuanced understandings of deviance by shifting to an interactionist approach, where perceptions of deviance are viewed as being socially constructed by particular networks rather than the interpretation of norms as pre-given social facts (Bryant and Higgins, 2010). Becker's (1963) interactionist view of deviance is particularly important as it stresses the construction and negotiation of social norms. For instance, Becker (1963) highlights how deviance is articulated through the exercise of normative perceptions and how they are applied to individuals through interactions within social networks. Following this argument, Dennis and Martin (2005) have discussed how interactionists explore the development, reinforcement, renegotiation and rejection of particular norms developed and projected by particular social networks. In addition, Ford et al. (2008) suggest that social networks can have the ability to mark individuals as deviants even they have not subverted the accepted norms of a social group. Based on Rose's (1990) idea of the "enterprise of the self" individuals can also reshape perceptions, bringing the norms of the reference group in line with their own behavior, emphasizing how normative views are not fixed. Referring to entrepreneurship, Fligstein (2001) has suggested how some entrepreneurs are able to change prevalent social norms within their social environment, an issue developed further, later in our empirical analysis.

This article utilizes an interactionist lens to examine social normative influences on older entrepreneurship. This is important as studies highlighted how perceptions of deviance can be used to highlight positive behavior which varies from accepted norms rather than being restricted to negative behavior (Badham et al., 2003; Warren, 2003). For example, positive deviance can be aligned with Schumpeter's (1934) vision of entrepreneurship where individuals seek to break from established regimes of production, to engage in entrepreneurship. Following Warren's (2003) argument, older entrepreneurs could be recast as positive deviants, as they are perceived to derive benefits from enterprise formation (Weber and Schaper, 2004), while supporting the economy (Singh and DeNoble, 2003). Since older entrepreneurship is considered to have positive attributes, in addition to negative connotations (Platman, 2003), this article suggests that the negotiation of positive and negative deviance can be applied to older entrepreneurs.

Previous research has acknowledged the importance of examining social processes of older entrepreneurship (Clarke and Holt, 2010) as the reality of an individual is shaped by shifting social conventions and habits, where

deviants are subject to social sanctions from immediate social networks, for instance resulting in negative emotions, such as shame (Goss, 2005). Highlighting the important role of social networks in business venturing, Aldrich and Cliff (2003) have explored how family networks have a strong influence over the recognition of entrepreneurial opportunities and resources, and the decision of individuals to create and develop new enterprises. Similarly, Greve and Salaff (2003) have argued how social relations articulate an important role in establishing a firm, where social networks provide important access to resources and social support during the firm formation process, while Chang et al. (2009) argue that social networks enable entrepreneurs to become better prepared for venture formation. Although scholars have widely recognized the role of social networks in entrepreneurship, there is limited recognition of the role of social norms which are embedded within different social networks (Jack, 2010), and particularly how this affects older entrepreneurship. This is surprising as the institutional literature has increasingly highlighted how social networks are embedded within wider informal institutional environments, which consist of social norms and values which are exercised through everyday relationships and interactions (Powell and Colyvas, 2008; Owen-Smith and Powell, 2008; Fligstein, 2001).

Adding to entrepreneurship research on social relations and age norms, Kautonen et al. (2011) have highlighted that age-related norms perceived by friends, family and work networks influence an older individual's intention to engage in entrepreneurship. However, Kautonen et al.'s (2011) study does not differentiate between the various networks, masking their different processes and effects. Baucus and Human (1994) have addressed how older entrepreneurs with different professional backgrounds vary in their informal and formal networking strategies to support their businesses; however, their study does not address age-related perceptions and social barriers specific to older entrepreneurship that might affect these interactions. In summary, this leads us to propose the following main research question for our empirical investigation: *Do older entrepreneurs experience positive and negative "deviance" across different social networks, and how they respond to and are able to negotiate these social norms?*

3. Research Method

Following Jack (2010), we used a qualitative methodology to explore how social networks support and/or hinder the enterprising activities of older individuals. This method enabled us to gain nuanced insights into how older entrepreneurs were discriminated against by their communities, if they

violated accepted social norms. Our article follows an interpretative qualitative approach (Gephart, 2004), and undertakes an inductive study by providing an in-depth exploration of the behavior of older entrepreneurs, particularly in facing and challenging social barriers. This enabled the study to provide “thick, detailed descriptions [...] of real-life settings” (Gephart, 2004: 455) and gain exploratory insight into the ‘meanings and concepts’ (Gephart, 2004: 457) used in the different social settings in which older entrepreneurs create and operate their enterprises (Jack, 2010; Welter, 2011).

The interviewees were aged 50 years or older, which is consistent with the accepted British definition of older entrepreneurs (PRIME, 2010) and as an age-based threshold used in other studies (for example, Kautonen et al., 2008). Due to the limited research base in this area, more advanced and critical definitions of older entrepreneurs have yet to be developed, and as such, we utilize the age-based definition. The chosen interviewees were selected from information held by PRIME (Prince’s Initiative for Mature Enterprise), a charity which provides support and advice to individuals who are intending to start or are already running their own enterprise, providing us with access to appropriate research participants. We chose 22 individuals in order to develop a convenience sample. These interviewees were selected purposefully to provide us with access to a series of narratives which were differentiated by gender, age, and if the individuals were novice or serial entrepreneurs (see Table 1). This sample enabled us to explore how a range of issues, experiences and characteristics can affect older people involved in developing their businesses, while providing the study with the means to examine the narratives of these individuals in greater depth. The interviewees were not selected to form a representative sample, as we seek to explore the social processes and activities which pose barriers to older entrepreneurs, rather than to look at the scale and dimensions of their activities, which a quantitative study may seek to do (Baucus and Human, 1994; Ram et al., 2010; Vershinina et al., 2011). Given that research into the entrepreneurial activities of older individuals has been largely quantitative (Kautonen et al., 2008; 2011), this approach will provide new insight into the enterprising activities of older individuals and how they can be inhibited.

The data used in our study was collected through semi-structured interviews by two of the authors in London between November 2010 and March 2011. The interviews lasted between 45 minutes and two hours, where the interviews were recorded to capture the full narrative of their experiences. Once permission was granted by the interviewees, the interviews were recorded, before being transcribed verbatim to preserve the accuracy of the data. The transcripts and any associated respondent data were anonymised to protect the identities of the older entrepreneurs. A semi-structured interview guideline was

developed, to make certain that similar issues were covered in the interviews in a way that allowed analytical comparability (Baucus and Human, 1994), while providing openness to capture new emerging issues in an under-researched area (Biniari, 2011). In the analysis we developed central themes from the academic literature, which were used to thematically open-code the transcripts (Myers, 2008). We sought to explore the life courses of the interviewees through their narratives, to understand how their social environments and important events had shaped their enterprises (Moore, 2009; Porcellato et al., 2010). Particularly, we paid attention to the social barriers that were perceived by the older entrepreneurs and how they were seen to emerge through social exclusion.

This is important, as in the UK context, society is often seen to apply age discrimination against older workers, in contrast to the celebration of younger peoples' entrepreneurial venturing (Porcellato et al., 2010). As such, older entrepreneurship is frequently viewed as being a negatively deviant activity. Subsequently, in analyzing the narratives, we looked for instances of deviance where older entrepreneurs reported to have faced barriers and discrimination, or received support and resources. Particularly, we examined how interviewees thought that their entrepreneurial activities were viewed positively or negatively by family, friends and clients. Following the same procedure, we also sought to uncover older entrepreneurs' practices of negotiation, where discrimination was managed and resisted.

Table 1 Research participants.

Sex	Age	Novice/Serial	Education¹	Main professional backgrounds	UK industrial classifications²
Male	60-64	Novice	Higher (Professional)	Caretaker, Translator	Professional scientific and technical
Female	55-59	Serial	Further	Secretary, Childcare	Administrative and support service
Female	60-64	Novice	Higher	Local government administration,	Wholesale and retail trade
Male	55-59	Novice	Higher	Academic work, Social Research	Professional scientific and technical
Male	50-55	Novice	Higher (Professional)	IT, Teaching, Customer Service	Human health and social work
Male	50-54	Serial	Further (Professional)	Manufacturing, Accounting, Social	Human health and social work
Male	55-59	Serial	Secondary (Professional)	Sales	Professional scientific and technical
Female	55-59	Serial	Higher (Professional)	Health care, Teaching	Human health and social work
Female	55-59	Serial	Secondary (Professional)	Local Government Administration	Human health and social work
Female	55-59	Novice	Higher (Professional)	Teaching, Education management	Human health and social work
Female	70-74	Serial	Secondary	Accountancy, Travel coordination	Administrative and support service
Male	50-54	Serial	Higher (Professional)	Law	Financial and insurance activities
Male	55-59	Novice	Higher	Visual Media	Wholesale and retail trade
Male	55-59	Serial	Higher	Academic	Wholesale and retail trade
Female	60-64	Serial	Secondary (Professional)	Manufacturing, Training, Social	Wholesale and retail trade
Female	60-64	Novice	Higher	Teaching, Graphic design	Arts, entertainment and recreation
Female	55-59	Novice	Further	Politics, Public Relations	Professional scientific and technical
Female	50-54	Novice	Higher (Professional)	Civil Service, Healthcare	Human health and social work
Female	50-54	Novice	Higher (Professional)	Media, Librarian	Arts, entertainment and recreation
Male	60-64	Novice	Secondary (Professional)	Catering, Finance, Human Resources	Human health and social work
Female	55-59	Serial	Higher	Social Research, Management	Accommodation and food service
Male	75-79	Novice	Higher	Engineering, Academic	Professional scientific and technical

Notes: ¹ Secondary = Secondary school; Further = College; Higher = University degree; (Professional) = additional training/qualification. ² Source: UK Standard Industrial Classification of Economic Activities (2007), http://www.statistics.gov.uk/methods_quality/sic/downloads/SIC2007explanatorynotes.pdf.

4. Results

4.1 *Varying Deviance within Social Networks*

In this empirical section we seek to provide insight into the perceptions of deviance regarding older entrepreneurship within three social networks – family, friends, and clients – and how these judgments can affect older entrepreneurs. Based on an interactionist approach, we particularly use the categories of positive and negative deviance to examine how the perceptions of older entrepreneurs of those in different networks can affect their own self-efficacy and how (a lack of) support from different networks can affect their enterprising activity. As we demonstrate later, the perceptions of older entrepreneurship within and across social networks vary, based on the different backgrounds of actors within the networks as well as the distinction between novice and serial older entrepreneurs, their human capital and age. In so doing, we consider how these networks influence older entrepreneurial behavior. This follows the work of Clarke and Holt (2010), which highlights the importance of studying the social ties in older entrepreneurship, and the contexts within which older individuals' entrepreneurial activities occur.

Contrary to research which has tended to stereotype “younger” entrepreneurship as being positive, and “older” entrepreneurship as being negative (Hardy 2008, 2009), we find that the members of social networks tend to view older entrepreneurship both positively and negatively. For some, in addition to being negatively judged by close family networks, important emotional support was also withdrawn from older entrepreneurs, as illustrated in the quote below:

“Well, cold water has been thrown over me from my children... well, from all relatives, all family, children, everybody. I'm left alone, nobody wants to know what I am doing. If I don't go out there and join [business support groups], well they cannot help, they won't help me. So it's cold water on me all the time. No help. No help from nobody, because I intend to be different.” (Case 11)

In contrast, for other older entrepreneurs, family network members responded positively, supporting their venturing behaviors. Consistent with Aldrich and Cliff (2003), we illustrate how families that had experience of pursuing their own entrepreneurial ventures were more supportive of older entrepreneurs. Although entrepreneurship was viewed as “normal”, as these individuals were older, their activities can be considered to be positively deviant, as they deviate from established entrepreneurial discourses in society

(Ainsworth and Hardy, 2009; Nicholson and Anderson, 2005), but in a positive way. Support was found particularly, for novice older entrepreneurs moving away from the age of 50 (for example, Case 3 aged 60-64 and Case 17 aged 55-59) that needed emotional support to enhance their self-efficacy, and financial support in addition to business advice (Podoyntsyna et al., 2011). Such experiences are shown in the following quotes:

“My children did support me a lot. My oldest son works for himself, he has never worked for anybody. From the age of 18, when he left school, he said ‘Mummy I am going to work for myself’ ... only my son gave me some money to buy some stuff [equipment for her catering business] such as containers and boxes.” (Case 3)

“My parents gave me their support on every decision absolutely clearly. There was never any discouragement. There might have been attempts. I can’t really remember. We had discussions probably about what to do, but they didn’t ever give me negatives. Yeah, so they give me their support and thought it was a good idea and I had some useful advice from one who had been an entrepreneur as well. That’s another! You know, entrepreneurship actually runs through the family on every side that I’ve come across. But I found my friends the least helpful. They always had the whats and ifs and ‘What about the [company] car?’ and ‘What about your pension?’ ...a lot of my friends are extremely conservative and don’t take risks at all.” (Case 17)

However, positive and negative perceptions of deviance varied between different social networks, as demonstrated in the quote above. In this example, friends who were employed as professional executives viewed older entrepreneurship as a riskier activity, in comparison to their own norms which praised the guaranteed benefits available to employees in large corporations. On the other hand, family networks could view business venturing as being a deviant activity at an older age. Families that had no entrepreneurship history often viewed the venturing behavior of novice older entrepreneurs to be negatively deviant, for instance, by comparing the choice with leaving a long-term public sector post:

“The family actually tried to put me off. They said you’re in the NHS, it’s safe, stay there until you’re 90. I suppose that’s fear for me, they didn’t want to see me fail. So I suppose from that point of view they’re worried. Hmmm, but friends are much more supportive of the idea. I mean they are just saying what the hell you were doing all the time working for them when

you could do it for yourself. So they are much more supportive with me for doing it myself and I think it was important, if everybody would have told me it was crazy I probably would have thought: 'Am I the only one who thinks this is a good idea?' and just give up maybe. So yes the emotional support of my friends was really important.” (Case 10)

As represented in the quote above, the emotional support of social networks was also important for older entrepreneurs in offsetting negative perceptions of deviance, providing them with self-efficacy, which has been crucial in not abandoning their enterprising ambitions. Of particular interest is how the references to deviance from friend and family networks, both positive and negative, frequently emerged from novice older entrepreneurs, (for example, Case 1, 3, 10, and 17), rather than serial older entrepreneurs. As serial older entrepreneurs have previous experience in venturing activities, they may be less concerned by the perceptions of friends and family than novice older entrepreneurs, or these networks may not view the behavior of serial older entrepreneurs as deviating from their usual enterprising activities, therefore not requiring as much support, which is consistent with the work of Podoyntsyna et al. (2011). As such, it is not surprising that particularly novice older entrepreneurs often highlighted the importance of supportive friends who perceived older entrepreneurship positively, provided them with support and acted as a sounding board to provide them with legitimacy (Steyaert and Landstrom, 2009) in their endeavours:

“I had a few conversations with the friend I already mentioned, who is running his own company and is working in London. He helped and supported me. He said well, just go for it. I understood that I made the right decision when I talked to him.” (Case 1)

As older entrepreneurs were also developing new ventures in areas of work with which they had no formal experience (for example, Case 1 and 10), this support has the potential to be more important for them than for those starting a new venture in a familiar area (for instance, see below Case 4).

Thus, the findings demonstrate that there can be mixed perceptions of deviance, within and across social networks. However, of particular importance in the results are positive judgments of deviance where perceptions result in the provision of important emotional and financial support from friends and family. In contrast, negative judgments of deviance from social networks, can generate negative emotions (Goss, 2005) amongst older entrepreneurs which can arguably reduce self-efficacy (Podoyntsyna et al., 2011). Interestingly, the results suggest that the perception of positive deviance in one social

network can offset negative deviance in another, which can enhance self-efficacy for older entrepreneurs in developing their enterprise.

Turning to examine the role of client networks, our analysis demonstrates that older entrepreneurs perceived to have experienced both positive and negative deviance from actual and potential customers, where the latter can create difficulties in gaining legitimacy and a market for their products and services. For example, the following quote illustrates how (potential) markets questioned an older entrepreneur's ability to use necessary computer software, which was integral to their business, on the basis of their age, where negatively deviant perceptions of potential clients can create barriers in developing the enterprise:

“In my industry people often think that people at my age are not up-to-date with technology, you know I had people even saying to me: ‘Do you know how to access a computer, really?’ ‘Yes, well I actually do’. ‘Are you familiar with Microsoft-Packages’, ‘Actually, yes I am.’” (Case 2)

Even though serial older entrepreneurs may have experiences that can assist them in developing an enterprise, in addition to having cultivated greater self-efficacy, they may be more alert to negative perceptions of older entrepreneurship from client networks, as a barrier to legitimizing their venture. This may explain why fewer serial older entrepreneurs discussed the positive or negative perceptions of friend and family networks, as they were more concerned with client networks, in contrast to novice older entrepreneurs. While this could become a serious issue for novice older entrepreneurs, as recent research shows that the development of nascent organizations depends on the ability of entrepreneurs to gain legitimacy within their business environment (Tornikoski and Newbert, 2007). However, the extracts from Case 2, and the following quotes from 7 and 12, suggest that client networks may be perceived to be more problematic for serial, rather than novel older entrepreneurs. Following the findings of Down and Reveley (2004), deviations between the shared norms and cultures of different generations can create negative age-related judgments, especially from younger clients where inter-generational culture differences made it difficult for them to communicate:

“You know, I don’t look at the age although I am soon 60, this year, [but] I can feel this can be a problem, when you’re old, in particular when you deal with young people, because the main problem here is the way you speak, they may even not understand, so it’s quite difficult. This is a problem because they are two different worlds...” (Case 7)

On the other hand, client networks could also view older entrepreneurship positively, where their age was associated with experience and, therefore, an improved service quality and professionalism, as illustrated in the quote below:

“I think they respect it in a way because if you’re dealing with an older person in business you have that feeling or belief that he’s experienced and he’s not going to mess up more or less. You know, he’s serious with life, he’s at an age where he has responsibilities, so obviously he’s going to do things properly. So I think there’s a certain degree of respect, you know, when you’re older and you start a new business.” (Case 12)

However, the analysis also indicates that “junior” older entrepreneurs may be perceived by client networks to provide a high quality product, but as older entrepreneurs age further, they tend to increasingly face questions regarding their ability to provide quality products or services. This suggests variation in the perceptions of those in the networks associated with the older entrepreneur population.

Similarly, while the analysis shows that most of the older entrepreneurs perceived positive and/or negative deviance, across and within their social networks, Case 4 below, acknowledged the presence of age discrimination, but did not perceive his own activities to be positively or negatively perceived by his social networks:

“In my experience, there haven’t been age related issues coming up. In a general sense, I mean there are age related issues around and I am sensitive to people making comments about my age [outside of work]. I feel quite aware of that sort of issue... I mean I didn’t sense any age discrimination in my work, I think I didn’t come across that. I was entering self-employment but I wasn’t entering a new area of work. I wasn’t trying to start my business in a new area of work, in a way I was ready based on my former achievements. But to be honest, I haven’t experienced age discrimination in starting up my business.” (Case 4)

Case 4 was a novice older entrepreneur who was toward the junior end of the older entrepreneur spectrum. Despite developing a new venture, he continued to undertake consultancy work of a similar nature to in his previous job. By following a similar path, this was not perceived to be deviant activity by his friends and family. Moreover, by taking some of his previous employer’s clients, he retained his legitimacy as a competent provider, within his client networks, perceiving no deviant judgments against his older entrepreneurial

venture. Subsequently, older entrepreneurs toward the “younger” end (for example, Case 4 and 12) of the older age spectrum are less likely to be viewed negatively by their social networks.

In summary, it is argued that judgments of positive and negative deviancy emerge from the social environments of older entrepreneurs, but more specifically, it varies across and within family, friend and clients networks. The analysis also demonstrates that the support of friends and family are particularly important to novice older entrepreneurs, often reflecting the work experiences of people within these networks, while age variations across the older entrepreneur spectrum can affect judgments of deviance from social networks. Based on this section’s discussion the following is proposed:

Proposition 1. Family and friend networks with predominantly entrepreneurial experiences are more likely to have a positive judgment of older entrepreneurship and to provide support for older entrepreneurs.

Proposition 2. Family and friend networks with predominantly corporate career experiences are more likely to have a negative judgment of older entrepreneurship and to withhold support for older entrepreneurs.

Proposition 3. The higher the age of an older entrepreneur, the more likely they will experience negative perceptions from client networks, affecting the development of a client base.

Proposition 4. Older entrepreneurs developing a venture associated with their previous professional experience are less likely to experience negative age-related judgments.

Proposition 5. Emotional and financial support from family and friends is more important to novice older entrepreneurs, as compared to serial older entrepreneurs, in developing self-efficacy in enterprise development.

4.2 Contesting and Avoiding Deviance

So far, we have argued that older entrepreneurs perceive that different social networks, can view their venturing activities as being positively or negatively deviant to norms held within those networks. Evidence was also found that there are variations between novice and serial older entrepreneurs. However, further analysis suggests that the negative deviant views emerging from social networks were not always fixed, and that older entrepreneurs were in some cases able to renegotiate norms, or to strategically avoid judgments from

social networks. This resonates with interactionist lenses of deviance which stipulate that social norms within social networks can be changed (Badham et al., 2003; Ford et al., 2008; Down and Warren, 2008). We now turn to contribute further to entrepreneurship research which seeks to develop contextualized understandings of entrepreneurship (Welter, 2011), by suggesting how the negative social norms which create barriers to older entrepreneurs can be negotiated or avoided. In doing so, we identify four potential strategies that older entrepreneurs use to manage negative social norms, which they perceive to be exercised by their social networks. These strategies include: *active negotiation, passive negotiation, network modification and avoidance*.

We suggest that older entrepreneurs undertake a strategy where they attempt to actively negotiate social norms by attempting to change perceptions of deviance held by social networks and their actors (Dennis and Martin, 2005; Rose, 1990). This also implies how some older entrepreneurs have the ability to negotiate social norms by convincing members of their social networks (Fligstein, 2001) to perceive their enterprising activity as a positive endeavor. Subsequently, it is argued that age-related barriers and social norms can be successfully challenged, or partially negotiated, as highlighted in the case below:

“I have actually managed to persuade a couple of people after they’ve seen what I’ve achieved... [when people see] the kind of work and dedication that you need to put into that... a lot of people back off.” (Case 18)

In other circumstances, the social norms and views of older entrepreneurship within networks can be changed through the development of deeper understandings of the activities of older entrepreneurs, as social networks come to adopt a more favorable outlook on older entrepreneurship (Down and Warren, 2008). This further reflects the work of Ford et al. (2008) and Badham et al. (2003) who argue how social groups may change the judgments of individuals, based on access to new information of activities. This can be viewed as a strategy of passive negotiation, where normative views of older entrepreneurs are changed over time, without direct interventions from the older entrepreneur. As such, frequent interactions between older entrepreneurs and their networks can change the social norms used to frame and view older entrepreneurship. Even though their active attempts to change the views of their networks had failed, the indirect transition of information could in some cases reshape the perceptions and norms of the social network, as suggested by the following quote:

“My friends are beginning to understand more what I am doing...[while] my accountant...he doesn't look down his nose so much at me at the moment...he has realized the world has actually changed a bit, [he's] a little bit more open to what I am doing, but I don't try to explain, they don't understand, I have been giving up trying to explain to people who don't understand.” (Case 8)

We suggest that older entrepreneurs, particularly serial entrepreneurs, were not as reliant on support to enhance their entrepreneurial self-efficacy as they had acquired previous experience and business acumen (for example, cases 14, 15 and 21). These serial entrepreneurs may have ceased trying to “turn” unfavorable labels and perceptions to focus on running their business, as they did not mention or recognize any negative or positive perceptions of deviance through their narratives. This resonates with the work of Podoyntsyna et al. (2011) who argue that serial entrepreneurs are more positive and retain fewer negative emotions in comparison to novice entrepreneurs, leading us to argue further that serial older entrepreneurs may no longer require the emotional support to enhance self-efficacy, which novice entrepreneurs may need.

In addition to negotiating norms, some older entrepreneurs, decided to modify and reshape particular social networks, to remove themselves from what they perceived to be negative and unhelpful support environments. As underlined in the quote below, they used the strategy of network modification, to manage negative norm judgments, which they had failed to actively negotiate:

“I found that along the way I had to lose certain type of friends and gravitate towards those who were driven, you know, who were high achievers who were sort of doing what I wanted to do.” (Case 18)

As such, some novel older entrepreneurs reshaped their social networks to remove themselves from negative elements of social networks, to interact with more positive and favorable social environments. Previous research has highlighted how the formation of entrepreneurial ventures is intimately related to their social world (Jack and Anderson, 2002; Anderson and Miller, 2003). Our evidence builds upon this argument by suggesting that network modification is undertaken to reframe the “worlds” of older entrepreneurs so that they could find additional support where their venturing activities did not mark them out as social deviants, but where the networks viewed their entrepreneurial activities more positively. The analysis suggested that network modification is especially useful for novice older entrepreneurs that were part of networks

which had positive and negative elements, but who had reduced self-efficacy in comparison to more experienced and confident serial entrepreneurs:

“I’ve got friends who work in the film industry who all, I think, felt that I’d fallen by the wayside by taking a 9 to 5 job, so yes, so in my little world it’s quite normal to be an entrepreneur...I think I was so determined at that point that I would have found something else or someone else. It just felt like I needed someone to say ‘Yes, it’s okay’ you’re allowed to do it.” (Case 19)

“[My experiences are] mixed, I mean I have a couple of friends who are encouraging because they’ve always known what I want to do and have, you know, encouraged me to try and move on from an employee job, you know, but otherwise it’s been mostly myself. I don’t have any family actually, there’s just me and my sister in the whole world. That’s it really, and a small group of friends, so they’re encouraging.” (Case 13)

We argue that older entrepreneurs which have more frequent interactions with social networks have greater opportunities to actively negotiate norms and judgments, or to indirectly provide more information leading to passive negotiation of negative perception, to become more neutral, or even positive. Subsequently, the existence of dense ties (Granovetter, 1973), such as those among family and friends, expose network members to older entrepreneurs more often. However, as client interactions are less frequent, and more distant through weak ties, they may be more likely to continue to harbor negative, age-based views, providing older entrepreneurs with fewer opportunities to renegotiate negative views of deviance, limiting the use of active and passive negotiation. Older entrepreneurs are also unable to use network modification as a strategy as this could alienate them from potential business opportunities. As such, evidence of an additional strategy is identified, where older entrepreneurs use avoidance to mask attributes associated with age, which may form the basis of discrimination and deviant judgments by clients. This may be necessary in becoming legitimized in the eyes of potential business clients which plays a major role in developing the business (Tornikoski and Newbert, 2007). As outlined in the following quote, avoidance enables older entrepreneurs to “hide” their age, which can be achieved by operating businesses over the internet, where face-to-face interactions are fewer or not needed, and where work quality can be demonstrated, independent of age, as illustrated in the quote below:

“I mean it's more of a problem if you are working in an office and you go to deal with things more in public, then a lot of people want someone, a young slim, dolly bird. That's fine, that's up to them, but if you are actually [a client] employing someone to do donkey work at home, it doesn't really matter what they look like, it's about the quality of work, and that's what I work on.” (Case 2)

Accordingly, we argue that there are multiple strategies which older entrepreneurs use in an attempt to negotiate and avoid negative perceptions of deviance which hamper self-efficacy and support, which can impede business development. As outlined earlier, this is a particularly important issue for novice older entrepreneurs. Based on this section's discussion the following is proposed:

Proposition 6. Novice older entrepreneurs are more active in using strategies to manage negative social norms, in contrast to serial older entrepreneurs, as they are more reliant on social networks for support in developing their business venturing.

Proposition 7. The older entrepreneur's strategies used to manage negative deviance in client networks, will be different to those used in friend and family networks.

5. Discussion

Recent debates have emphasized the pressures which have emerged from the aging of populations, and have stressed the need to extend the working lives of older people (OECD, 2006; Platman, 2003). Existing research has highlighted the barriers that older employees encounter within the workplace (Morris and Mallier, 2003; Loretto and White, 2006; Porcellato et al., 2010) while also exploring work-life alternatives, such as older entrepreneurship (Baucus and Human, 1994; Singh and DeNoble, 2003; Kautonen et al., 2011). In this article we contribute to addressing a lacuna within the literature, by investigating older entrepreneurs' perceptions and responses to age discrimination. In turning to explore how perceived societal norms affect older workers' aspirations to develop a business, we examined how positive or negative deviant judgments are generated within social networks and how they shape the activities of older entrepreneurs.

In seeking to address the research questions posed earlier, our analysis has demonstrated that older entrepreneurs perceive a series of positive and nega-

tive judgments in view of their enterprising activities. These also vary both in and across different social networks. These negative or positive judgments can provide older entrepreneurs with access to resources, information and support, or it can be denied as a consequence of negative judgments, which affect self-efficacy. The study also argued that there are differences which emerge for different types of older entrepreneurs. For example, novice older entrepreneurs sought greater support from networks, in contrast to older serial entrepreneurs that have more experience and self-efficacy. In addition, older entrepreneurs at the “junior” age range were less likely to perceive negative judgments of deviancy, where they were perceived to be competent and knowledgeable, in comparison to their “senior” counterparts.

We also demonstrated that the work background of older entrepreneurs affected how their activities were viewed by their social networks, and that those whose venture was similar to previous sectorial work, were less likely to experience judgments of negative deviance, as the gap between the established norms of their current work and previous work was narrow. The judgments of deviance were also affected by the work histories of social networks, particularly friends and family, as they determine the normative contexts by which older entrepreneurs were judged. However, client networks varied their perceptions of older entrepreneurs, between positive and negative, where they placed trust in older, yet more “junior” older entrepreneurs, but questioned the ability of their more “senior” counterparts. The study also identified four strategies to negotiate and subvert negative perceptions of deviance, discussed in the next section.

5.3 *Implication for Theory*

Through the findings of this article, we contribute to contextualized theories of entrepreneurship (Welter, 2011), by examining the influence of normative evaluations prevalent in different social networks on entrepreneurs. We demonstrated how an interactionist approach of deviance (Becker, 1963), can be used as a novel lens to investigate the different sources of social norms toward entrepreneurship. In doing so, our study complements existing institutional research on social normative elements at larger scale contexts (Busenitz et al., 2000; Stenholm et al., 2013), by emphasizing how social norms emerge and vary in the social settings within which entrepreneurs are embedded. Our study seeks to complement the existing work on macro-level institutional frameworks on entrepreneurship, which tend to frame norms as stable codes, by suggesting how social norms are not fixed, but are flexible and created in immediate social networks. These norms can change with and without interventions by the older entrepreneurs themselves.

In demonstrating that normative contexts for older entrepreneurship are not fixed within and between different social networks, and how older entrepreneurs are able to partially shape these norms, we contribute to Welter's (2011) call for a multi-layered approach to contextualize entrepreneurial behavior and the role of entrepreneurs in influencing their contexts. Particularly, Welter (2011) argues the case for study into social, spatial and institutional contexts for entrepreneurial behavior, and our study adds how multi-layered contexts are also constituted by entwined social networks and their normative contexts toward entrepreneurship, in addition to how older entrepreneurs can influence their social and normative settings. Moreover, we suggest that the application of an interactionist approach provides useful insight in identifying tools which entrepreneurs can utilize to change and subvert norms. This further underlies the importance of developing new understandings of the micro-foundations of institutions (Powell and Colyvas, 2008) in entrepreneurship research, to examine the fluidity of normative contexts. Following the argument of Powell and Colyvas (2008), it is suggested that examining the micro-order and the macro-level simultaneously, enables an examination of everyday practice in normative institutional contexts. In line with the recent institutional theoretical work by Owen-Smith and Powell (2008), our article further suggests that institutional normative forms can emerge from social networks, which is demonstrated in the study empirically through the case of older entrepreneurs operating in normative contexts at the micro-level. This particularly responds to debates where entrepreneurship scholars have called for the development of theoretical understandings into how entrepreneurs are embedded in social and institutional contexts, while also being viewed as agents of context change (Bruton et al., 2010; Thornton et al., 2011; Welter, 2011).

We also provide new insight into the literature on deviance approaches by suggesting four strategies which older entrepreneurs can use to manage negative judgments of deviance. We draw upon existing research on how norms can be negotiated, directly and indirectly (Badham et al., 2003; Bryant and Higgins, 2010; Dennis and Martin, 2005), but we also suggest how negative judgments are avoided by disassociation with the negative elements of social networks, to move towards more positive entrepreneurial networks, and where markers of age such as looking older, are hidden, or reduced, to avoid discrimination, by for example, operating over the internet, as opposed to face-to-face. Examining older entrepreneurship through a deviance approach also provides new theoretical insights into how institutional norms are exercised, in addition to negative and positive stereotypes and how these are managed, by older entrepreneurs as a minority group. Accordingly, an additional theoretical contribution proposed, is that a deviance approach to entrepreneurship could be more generally used to augment institutional theory

and to complement the study of minority groups in entrepreneurship, that often face discrimination as a social barrier.

5.4 *Implication for Practitioners*

As suggested earlier, the challenges of aging populations and fiscal pressures facing advanced economies may be partially resolved through the promotion of older entrepreneurship, as an option to extend the working lives of older people. However, changing the negative perceptions and behavior towards older entrepreneurship is clearly far more complex than simple legislative interventions, where normative judgments are created in the particular normative contexts of older entrepreneurs. Only when informal institutions, that are the social norms within an entrepreneur's networks, are explored in greater depth can we better understand the processes shaping the norms that affect older entrepreneurship. Subsequently, we argue that this paper has three main practical implications, to address the negative perceptions of deviance, faced by older entrepreneurs.

First, we suggest that tailored support programs are needed that differentiate between the unique needs of different types of older entrepreneurs. Specifically, this would include tailored advice for novice and serial older entrepreneurs, and support that vary for different parts of the older entrepreneur age spectrum, in order to enhance their self-efficacy. Second, the four strategies identified in the study that are used to subvert, or negotiate, negative perceptions of older entrepreneurship could be developed and integrated into training and support programs, to enable older entrepreneurs to overcome negative perceptions of deviance and to enhance their self-efficacy, as well as finding positive support elsewhere. Third, it can be argued that as these older entrepreneurs' businesses have continued to operate, and they have not failed or exited at this stage, the negative perceptions held by family, friend and client networks are not necessarily justified. As such, we argue that the promotion and education of older entrepreneurship should also be widened to encompass family, friend and client networks, to educate actors within social networks that their negative perceptions of older entrepreneurship are not necessarily accurate and that the activity can be viewed as positive.

5.5 *Directions for Future Research*

This paper has drawn upon 22 face-to-face interviews using a qualitative research method, and as such, we accept that in addition to presenting findings in their own right, the study also lays foundations for subsequent research. We suggest that quantitative research is required to test the propositions outlined

in this study, as the sample in this article was small. This is necessary to examine if these propositions can be used to develop generalizations about the wider, older population. In this context, future research could also extend this study to examine different cross-regional and national contexts, which compare more affluent and poorer regions, in addition to areas which have higher and lower rates of entrepreneurship. This is important as our exploratory study only focused on the networks within one region. This could provide new insight into how variations in different normative contexts can affect family, friend and client networks and in turn the behavior of older entrepreneurs. Further research could also compare nation-states which have higher-welfare state provision (and which may have a reduced need for older entrepreneurship) and developing countries which do not (and may have an increased need for older entrepreneurship). This would provide new knowledge into how older entrepreneurship varies in different normative contexts, where entrepreneurship may be more “normal” or “deviant”. Further research could develop nuanced understandings of older entrepreneurship to develop more holistic education and training programs, in addition to assisting the development of more effective policy interventions. Extending this knowledge base is important, as advanced countries continue to undergo demographic changes, and fiscal pressures where a transition toward longer working lives seem inevitable.

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