

PREFERENCE FOR SELF-EMPLOYMENT: PREDICTION OF NEW BUSINESS
START-UP INTENTIONS AND EFFORTS

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The International Journal of Entrepreneurship and Innovation, 2016, 17(2), 100-109

Acknowledgements: The author appreciates the financial support from Innovation Norway to the Global Entrepreneurship Monitor project in Norway. He gratefully acknowledges the help, guidance and suggestions provided by Bjørn Willy Åmo, Paul Westhead, the editor and anonymous reviewers on earlier drafts of this manuscript.

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The preference for self-employment varies much between countries. The purpose of this study is to investigate the relationship between the preference for self-employment, new business start-up intentions and actual start-up efforts. This research is an application of the theory of planned behaviour. Data was collected using telephone interviews from a representative sample of Norwegian adults aged 18-64. The results support the theory, showing that the preference for self-employment, together with measures of subjective norm and perceived behavioural control, predict business start-up intentions. These intentions, in turn, together with perceived behavioural control predict involvement in business start-up efforts. This study has important implications for policy makers and future research.

Keywords: preference for self-employment, start-up intentions, start-up efforts

INTRODUCTION

Katz (1992, p. 30) defines occupational status choice as “the vocational decision process in terms of the individual’s decision to enter an occupation as a wage-or-salaried individual or as a self-employed one.” The International Social Survey Programme (Svallfors, 1996) and the Flash Eurobarometer show that the preference for self-employment vary much between countries. For example, the Flash Eurobarometer 160 on entrepreneurship (http://ec.europa.eu/public_opinion/flash/fl160_en.pdf) report the lowest preference for self-employment in Finland (28%), The Netherlands (33%), Sweden and Norway (both 35%), compared to an average in the EU15 countries of 45% and 61% in the USA. These country differences were remarkably stable in four different Flash surveys carried out from 2000 to 2004. One relevant question is the extent to which the preference for self-employment in the population of the country matters. If the preference for self-employment predicts new business start-up intentions and involvement in new business start-up attempts, there is reason to be concerned about the low preference for self-employment found in several North-European countries.

Researchers have devoted much effort into the development of scales to measure attitude toward entrepreneurship. Assuming that individuals face only two alternatives of occupational status choice it is possible to obtain a measure of an individuals’ attitude toward entrepreneurship by a single question: *Imagine you can choose between being self-employed or employed in an organization. What would you prefer?* Previous research has identified factors that influence individuals’ occupational status choice intentions (Kolvereid, 1996a), but little is known about the consequences the preference for self-employment has for entrepreneurial activity in a society. Therefore, the purpose of this study is to investigate the relationship between preferences for self-employment, intentions to start a new business, and involvement in new business start-up efforts. The central research question being: Are there

significant relationships between individuals' preference for self-employment, intentions to start a business and actual efforts to start a business?

In their review of the literature on entrepreneurial intentions, Schlager and Koenig (2014) identify 98 studies from more than 30 countries. The majority of studies used student samples (65%) and only four studies looked at the intention – behaviour relationship. None of these studies used the preference for self-employment as an independent variable. The novelty of the present study is that it uses a random and representative sample of the adult population in Norway to investigate not only the effect of the preference for self-employment on business start-up intentions, but also on actual efforts to start a business.

This article starts with a review of the literature of the preference for self-employment with hypotheses derived from theory. The methodology section follows, containing a description of the research design and the measures used. Finally, the conclusion section, which contains a summary of the results, implications, limitations and suggestions for future research.

LITERATURE REVIEW

Models of entrepreneurial intentions

Most studies on entrepreneurial intentions have used the theory of planned behaviour (TPB) (Ajzen, 1991), the entrepreneurial event model (EEM) (Shapero and Sokol, 1982), or a combination of them. According to the TPB, attitude toward the behaviour, subjective norm and perceived behavioural determine intentions. Further, behavioural intentions together with perceived behavioural control determine actual behaviour. The EEM postulates that entrepreneurial intention is a function of perceived desirability, feasibility and the propensity to act. The two theories overlap considerably, and some researchers have combined them into

one model of entrepreneurial intentions (Schlaegel and Koenig, 2013). In the integrated model the antecedent of intention in TPB determine desirability and feasibility, which again, determine entrepreneurial intention.

Other scholars have developed models of entry into self-employment. A dictionary defines self-employment as ‘working for oneself, as a freelance or owner of a business, rather than for an employer’ (Pearsall, 2001). This definition suggests that individuals face two career alternatives, either as self-employed or employed in an organization. Inspired by Ajzen’s (1991) theory of planned behaviour, Verhaul et al. (2012) suggest a model where attitude, subjective norm and perceived behavioural control determine the preference for self-employment, which in turn determines the intention to start a business and actual involvement in self-employment. This model is very similar to Katz’ (1992) three hurdles model of entry into self-employment. Katz’ first hurdle is aspiration, which concern the intention to become self-employed. The second hurdle is preparation for self-employment through environmental scanning, resource gathering, networking and obtaining training. This involves efforts to start a new business and becoming a nascent entrepreneur. The final hurdle in Katz’ model is entry into self-employment. ‘Jumping’ this hurdle involves running the new business and making a living out of it.

The Verhaul et al. and Katz models suggest that the preference for self-employment leads to intentions to start a business, to becoming a nascent entrepreneur and eventually entry into self-employment. The accuracy of the Verhaul et al. and Katz models depends on the extent to which individuals who intend and try to start businesses prefer self-employment and have self-employment as their objective. The degree of freedom present in a society or among a particular group of people to pursue entrepreneurship is another issue that may jeopardize the accuracy of these models (Wilson and Martin, 2015).

Some people may start businesses and become self-employed because they have no other way to make a living (Acs, 2006). They start businesses out of ‘necessity’ and become self-employed since they have no other options. Models of self-employment that start with the preference for self-employment are not likely to work well in societies where ‘necessity’ entrepreneurship is common.

People who start businesses have different objectives and only a certain proportion of nascent entrepreneurs start businesses in order to become self-employed (Folta et al., 2010). Therefore, the accuracy of the Verhulst et al. and Katz models also depend on the extent to which people with start-up intentions intend to become self-employed, the extent to which nascent entrepreneurs try to start businesses in order to become self-employed, and the presence of possible structural barriers that creates difficulties for people to pursue a career as self-employed.

Both opportunity and necessity entrepreneurs can choose whether to start a business or not to. Necessity entrepreneurs do not have to start businesses, although they may not have many desirable options available. Even in poor countries where the jobs are scarce and salaries low, most people start businesses because they want to, not because they have to. Rosa et al. (2008) investigated the motives for starting a business among entrepreneurs in Uganda and Sri Lanka, and found that other motives for starting a business were clearly more important than ‘necessity’. The poorer the people were, the less likely they were to start a better business, and the very poor tended to be ‘trapped’ in a state of routine in which long hours were needed to earn a subsistence living. Most new business ventures were associated with entrepreneurs who were opportunity driven and had command of some resources. Therefore, it seems plausible, as suggested in the Verhulst et al. and Katz models, that the majority of people who intend to start businesses or try to do so are people who prefer self-employment.

Except for habitual entrepreneurs, most nascent entrepreneurs are involved in efforts to start a new business on a part-time basis. Petrova (2012) estimates that 80% of nascent entrepreneurs were involved in business start-ups on a part-time basis. However, the majority of nascent entrepreneurs intend to become self-employed. One study reported that 51.1% of entrepreneurs, who had recently founded a new business, intended to become full-time self-employed in the business one year after start-up (Isaksen and Kolvereid, 2005).

Hybrid entrepreneurship is the process of starting a business while retaining a 'day job' in an existing organization (Folta et al., 2010; Raffee and Feng, 2014). Many hybrids eventually enter into self-employment, presumably because they want to. Folta et al. (2010) find that hybrids are over thirty-eight times more likely to transform to self-employment than non-hybrids. Further, Raffee and Feng (2014) find that hybrid entrepreneurs who subsequently enter full-time self-employment have much higher rates of survival than individuals who enter self-employment directly from paid employment. This finding suggests that individuals who start business as hybrids and later become self-employed have at least the same preference for self-employment as non-hybrids have. Even though a large proportion of nascent entrepreneurs engage in business start-up on a part-time basis, most of them are likely to prefer self-employment, as suggested by the Verhaul et al. and Katz models.

Behaviours are sometimes subject to uncertainty and factors beyond one's control (Ajzen, 2005). As Wilson and Martin (2015) point out, not all have the freedom to become an entrepreneur. Some individuals who prefer self-employment may not develop intentions to start a business. This lack of intention can be a realistic response to structural barriers. Wilson and Martin (2015) further argue that the structural barriers may cause people from disadvantaged groups with intentions to start a business not to engage in business start-up efforts. Since the degree of volitional control over a behaviour can vary, actual behaviour is a function of not only the intention to perform the behaviour, but also the extent to which the

individual has control over the behaviour (Ajzen, 2005). Actual control over a behaviour often is often difficult to assess. The TPB therefore uses perceived behavioural control to account for this phenomenon. However, perceived behavioural control may not be the only factor that influences the relationship between intentions to start a business and involvement in actual business start-up efforts.

Different entrepreneurial intentions

Researches have sometimes measured the intention to start a business is by a single item. Examples include ‘the interest in starting/owing a business’ (Wilson et al., 2007), ‘the probability you’ll start a new business in the next 5 years’ (Krueger et al., 2000), ‘having definite plans to start a business’ (Pruett et al., 2009), and how likely respondents are ‘to set up their own company’ (Kautonen et al., 2013; Piperopoulos and Dimov, 2015). Others have measured the intention to become self-employed using a single item. One example is ‘the likeliness to become self-employed in the foreseeable future after graduation’ (Lüthje and Franke, 2003). However, the majority of studies have measured entrepreneurial intentions using an index of intention to start a business, such as the 6-item scale developed by Liñán and Chen (2009), or Kolvereid’s (1996b) 3-item index of intention to become self-employed. Bae et al. (2014) find that the Liñán and Chen (2009) and Kolvereid (1996b) indexes of intentions are equally popular in research on the effect of education in entrepreneurship on entrepreneurial intentions.

The intention to become self-employed is clearly a more encompassing concept, than just the intention to create a new venture (Shook et al., 2003). It is much easier to start a business than it is to make a living as self-employed. Many new businesses started by hybrid entrepreneurs are likely to stay a part-time activity for the founder as the business may continue to be a part-time operation. The founders can also hire others to manage the

businesses, while they stay employed by someone else. Another difference between business start-up and self-employment is that individuals do not have to start a business in order to become self-employed. An alternative route to self-employment is the acquisition of an existing business through purchase or inheritance.

The intention to become self-employed can be broken down into: (1) a choice intention, i.e. a preference for self-employment over organizational employment, and (2) a behavioural intention, reflecting individuals' intentions to become self-employed or employed in an organization. Conceptually, choice intention comes first, followed by behavioural intentions (Ajzen and Fishbein, 1980). That is, the preferences for an alternative influence the subsequent intention to pursue that alternative. Individuals decide if they want to be self-employed, before they form intentions to pursue a career as self-employed.

Iakovleva and Kolvereid (2009) investigated whether the intention to become self-employed differed from intentions to start a business and intentions to acquire a business in a sample of Russian students. They found that all items that concerned self-employment and business start-up loaded on the same component in a principal component analysis, while intention to acquire a business loaded on a separate component. Several other studies have found items concerning intention to start a business and intention to become self-employed to load on the same dimension (Kautonen et al., 2011; Lee et al., 2011). This suggests that most participants in entrepreneurship intention surveys perceive the start-up of a new business as a step toward self-employment and a career as an entrepreneur, and not as a part-time activity or hobby. Therefore, it does not seem to make much difference if researchers measure entrepreneurial intent by asking about the intention to start a business or about the intention to become self-employed.

Factors associated with the preference for self-employment

Kolvereid (1996a) asked a sample of 250 Norwegian business school graduates about their reasons for preferring self-employment or organizational employment. The respondents stated the following reasons for their employment status preferences: security, economic opportunity, authority, autonomy, social environment, challenge, self-realization, participate in the whole process, avoid responsibility, and career. Based on a cross-tabulation of reasons and employment status preferences, the following reasons were associated with a preference for organizational employment: security, social environment, work load, avoid responsibility, and career. Further, the reasons expected to be associated with a preference for self-employment were economic opportunity, authority, autonomy, challenge, self-realization, and participate in the whole process. The single most important reason for preferring self-employment is probably autonomy or independence (Croson and Minniti, 2012).

Using data from the 2004 Flash Eurobarometer survey, Verhaul et al. (2012) investigated factors that are associated with the preference for self-employment. The data set contained information from more than 8000 individuals in 29 countries. They found that gender, risk tolerance, self-employed parents, internal locus of control, and perceived barriers to entrepreneurship predicted the preference for self-employment. Verhaul et al. (2012) concluded that women's lower preference for becoming self-employed plays an important part in explaining their lower rate of involvement in self-employment.

Antecedents of business start-up intentions

According to the theory of planned behaviour, attitude toward entrepreneurship, subjective norm and perceived behavioural control determine intentions to start a business. Schlaegel and Koenig (2013) carried out a meta-analysis of studies on entrepreneurial intent and found

strong support for the theory. The average correlation reported in the meta-analysis between the antecedents and entrepreneurial intentions were .35 for attitude, .29 for subjective norm, and .44 for perceived behavioural control. According to the TPB only these variables should be significantly associated with behavioural intent. If other variables contribute to the explanation of intention, it would indicate that the measures are too poor or that the theory is insufficient (Ajzen, 1991).

Hypothesis 1: The preference for self-employment, subjective norm, and perceived behavioural control are positively associated with the intention to start a business.

Antecedents of business start-up attempts

The theory of planned behaviour postulates that behaviour is a function of intentions to perform the behaviour and perceived behavioural control. However, research on the linkage between entrepreneurial intention and behaviour is scarce.

Arenius and Minniti (2005) used data from the Global Entrepreneurship Monitor to predict involvement in nascent entrepreneurship. Ranked in order of importance, they found that the following perceptual variables related significantly to the involvement in new business start-up attempts: Confidence in one's skills, knowing other entrepreneurs, opportunity perception and fear of failure. The first two of these variables are measures of concepts included in the theory of planned behaviour. Interesting, these two variables were the strongest predictor of involvement in business start-up efforts in the Arenius and Minniti study. Confidence in skills can be an indicator of perceived behavioural control, and knowing other entrepreneurs can be an indicator of subjective norm. Arenius and Minniti (2005) did not include any measure of entrepreneurial intentions in their study. If an intention measure

had been included, the TPB postulates that only confidence in skills along with entrepreneurial intentions should be positively associated with nascent entrepreneurship.

Kautonen et al. (2015) investigated the relationship between intentions to start a business the next 12 months and actual investment in start-up activities with regard to effort, time and money 12 months after the initial data collection. Their research design required a very large data collection. First, they sent out 10,000 questionnaires in Finland and 15,000 in Austria and obtained 2,263 responses from Finland and 766 usable responses from Austria. In the follow up survey, they obtained 703 responses from Finland and 266 from Austria. In support of the theory of planned behaviour, they not only found a strong relation between intention and behaviour, but also that perceived behavioural control had a direct effect on behaviour.

According to the TPB, actual behaviour is a function of behavioural intent and perceived behavioural control. If other variables are significant predictors of behaviour, it means that the concepts are too poorly measured or that the theory is insufficient (Ajzen, 1999).

Hypothesis 2: The stronger the intentions to start a business and the stronger the confidence in skills the more likely respondents are to be involved in new business start-up efforts.

Figure 1 shows the research model with hypotheses. Hypothesis 1 concerns the relationship between attitude (preference for self-employment), subjective norm (knowing entrepreneurs), perceived behavioural control (confidence in skills) and business start-up intentions. Hypothesis 2 concerns the relationship between business start-up intentions, perceived behavioural control (confidence in skills) and efforts to start a business.

INSERT FIGURE 1 ABOUT HERE

METHODOLOGY

The data collected was part of the Norwegian Global Entrepreneurship Monitor (GEM) project in 2015. Using computer-assisted telephone interviews a professional survey vendor carried out the data collection. A random and representative sample of 2000 adults aged 18-64 participated in the survey. Using quotas for age, gender and location (county), the vendor approached participants using fixed and mobile telephones from a random sample of 12,000 individuals drawn from a population base. During the interview process, the vendor used up to five initial contact attempts and up to five call-backs. The final sample is representative of the population with regard to age, gender and county.

Among full-time employed respondents 22.9% replied that they preferred self-employment while 77.1% preferred to stay employed. Among self-employed respondents, 27.2% preferred organizational employed while 77.1% preferred to stay self-employed. In Norway, the proportion of self-employed individuals who want to switch to organizational employment is higher than the proportion of employees who want to switch to self-employment. This is the opposite of what is common in other countries. For example, in the study by Verhaul et al. (2012), which included 29 countries, 49.6% of the respondents preferred to be self-employed, while only 20% of the self-employed indicated that they preferred wage employment rather than self-employment.

Only respondents who submitted complete datasets are included in the analysis. Therefore, the sample consists of 1,548 cases. Response bias tests showed no significant differences with regard to any of the control variables included at $p \leq .05$. Therefore, the sample remains representative of the population in Norway.

Among the 1,548 participants, 379 answered that they prefer self-employment, 83 that they intend to start a business, 44 that they are nascent entrepreneurs, and 138 that they are self-employed.

Measures

The following question, which is compulsory in all Adult Population Surveys carried out by GEM, measures intention to start a business: ‘Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years?’ The responses were coded 1=yes and 0=no.

To obtain an indicator of involvement in a new business start-up effort, GEM asks the following question: ‘Are you, alone or with others, currently trying to start a new business, including any self-employment or selling goods or services to others?’ The responses were coded 1=yes and 0=no.

The independent variables in this study are indicators of attitude, subjective norm, and perceived behavioural control. The Norwegian version of the 2015 GEM Adult Population Survey included the following question as a measure of the participants’ occupational status preference: ‘Imagine that you can choose between being self-employed or employed in an organization. What would you prefer?’ The responses were coded 1=prefer self-employment and 0=prefer organizational employment. This measure of preference for self-employment is used here as an indicator of attitude toward self-employment.

The GEM Adult Population Survey includes four perceptual variables that in previous research have proven to influence the involvement in new business start-up attempts (Arenius and Minniti, 2005). These four variables are: (1) Knowing other entrepreneurs, measured by asking: ‘Do you know someone who personally started a business in the last 2 years?’ (1=yes, 0=no). This variable is a proxy for subjective norm. (2) Confidence in skills, measured by

asking: 'Do you have the knowledge, skills and experience required to start a business?' (1=yes, 0=no). This variable is a proxy for perceived behavioural control. The GEM Adult Population Survey also include two other perceptual variables: (1) Opportunity perceptions, measured by asking: 'In the next six months, there will be good opportunities for starting a new business in the area where you live?' (2) Fear of failure, measured by asking: 'Would fear of failure prevent you from starting a business?' These two variables were not included in the analysis since they did not fit into the theoretical framework, since many respondents had missing value on them, and since they proved to have no effect on business start-up intentions or start-up efforts.

The following control variables were included: (1) age measured in years; (2) age squared; (3) household income measured in NOK (1 NOK = approx. 0.8 GBP) and coded as follows: 1=0-199', 2=200-399', 3=400-599', 4=600-799', 5=800-999, and 6=1,000'+; (4) high education, indicating whether the respondent has at least 4 years of university education (1=yes, 0=no); (5) an indicator of the respondents' current involvement in self-employed (1=yes, 0=no). Finally, two dummy variables that concerned the location of the respondent were included as controls: (6) rural location, living in a municipality with less than 7,500 inhabitants (1=yes, 0=no); and (7) semi-urban location, living in a municipality with 7,500 to 75,000 inhabitants (1=yes, 0=no).

RESULTS

The correlation matrix offers preliminary support for the relationship between the independent variables, entrepreneurial intentions and behaviour. The correlation between preference for self-employment and business start-up intentions is .31, between knowing entrepreneurs and intentions .21, and between perceptions of skills and intentions .25. The correlation between

intentions to start a business and involvement in start-up attempts is .35, and between confidence in skills and involvement in start-up attempts .20. The correlations between the independent variables are relatively modest, and the VIF-values indicate that no multicollinearity problem is present. Table 1 shows the descriptive statistics and the correlations among the variables included.

INSERT TABLE 1 ABOUT HERE

Regression analysis represents a stronger test than correlations of the association between preference for self-employment and entrepreneurial intention and behaviour. Logistic regression is the appropriate method in the present circumstances since the dependent variables are dichotomous. Table 2 shows the results. The first model of new business start-up intentions in Table 2 includes the control variables only. Being self-employed and being male are here strong predictors of business start-up intent. The second model represents a test of Hypothesis 1, which stated that preference for self-employment, knowing entrepreneurs, and confidence in skills determine intentions to start a new business. In support of Hypothesis 1, all the three independent variables are strongly associated with business start-up intentions. The theory passes the test of sufficiency since none of the control variables are significant predictors of business start-up intentions at $p \leq .05$.

The next step was to carry out a similar analysis with involvement in new business start-up efforts as the dependent variable. Among the control variables, only the variable indicating whether the respondent is self-employed has a statistical significant effect. The last model represents a test of Hypothesis 2, which stated that business start-up intentions and confidence in skills determine involvement in new business start-up efforts. In support of Hypothesis 2, both variables relate positively and significantly to involvement in new business efforts. In the last model, being self-employed has also a significant effect.

INSERT TABLE 2 ABOUT HERE

CONCLUSIONS

The present study used the preference for self-employment as an indicator of attitude toward entrepreneurship, knowing entrepreneurs as a measure of subjective norm, and confidence in skills as a measure of perceived behavioural control. As proposed by the TPB, and the first hypothesis, these variables predict the intention to start a new business. Further, as predicted by the theory, and stated in hypothesis 2, the preference for self-employment and confidence in skills predict the involvement in business start-up attempts.

The effects of the control variables deserve attention. This study revealed no clear effect of age. Only the first regression model suggests that there is an inverted U-shaped association between age and entrepreneurship. The effect of income on entrepreneurship is also non-existing, suggesting that entrepreneurship is a career path that is open for the poor as well as the rich. The low self-employment rate among women is partly due to their low preference for self-employment, as suggested by Verhaul et al., (2012). However, women also score lower than men do on the other two critical variables, knowing entrepreneurs and confidence in skills. These variables together with the low preference for self-employment explain the low intention among women to start a new business and involvement in new business start-up efforts.

The self-employed score higher than other people on intention to start a business, as well as on involvement in nascent entrepreneurship. As the theory predicts, this effect disappears when the dependent variable is business start-up intentions. The self-employed have stronger intentions to start a business than people who are not self-employed, because they score higher on attitude (preference for self-employment), subjective norm (knowing entrepreneurs), and on perceived behavioural control (confidence in skills). However, the

effect of being self-employed remains significant when the dependent variable is nascent entrepreneurship. This finding can indicate that the theory is insufficient, since intention and perceived behavioural control are not the only significant predictors of behaviour. The self-employed, represent a contribution to new business start-up efforts, beyond the theory of planned behaviour.

One possible explanation is that variables, not included in this study, moderate the intention – behaviour relationship. Wilson and Lee (2015) argue that existing theory cannot fully explain why some individuals with entrepreneurial intentions do not engage in entrepreneurial action. They suggest that some individuals, especially in disadvantaged groups, fail to engage in entrepreneurial action because they face structural barriers and lack the freedom to act on their intentions. Empirical research has also demonstrated that certain variables moderate the intention – behaviour linkage. For example, Van Gelderen et al. (2015) investigated the moderating effect of role of action doubt/aversion/fear and trait self-control on the intention – behaviour relationship. They found that action doubt and self-control mediated the relationship between intentions and behaviour. The effect of intention was positive and significant when action doubt was low, but not significant when action doubt was high. Similarly, the effect of intention was positive and significant when self-control was high, but not statistically significant when self-control was low. Based on these finding, Van Gelderen et al. (2015) recommend researchers who use the TPB to study the emergence of entrepreneurial actions to include action level constructs that may mediate or moderate the intention-behaviour relationship.

The final control variables included concern location in a rural or semi-urban location. An interesting observation from the correlation matrix is that rural location is significantly associated with a larger preference for self-employment, a stronger intention to start a business, an increased likelihood of being involved with business start-up efforts, and an

increased rate of self-employment. The statistically significant effect of location disappears in the regression analyses. People in rural areas, compared to people in urban and semi-urban areas, have stronger intentions to start a business and are more likely to be involved in new business start-up efforts, because they score higher on attitude (the preference for self-employment), subjective norm (knowing other entrepreneurs) and perceived behavioural control (confidence in skills). People in rural areas may have an advantage because they have well developed social networks (Onyx and Bullen, 2000). Social networks and trust appears to play an important role for small businesses (Welter and Kautonen, 2005), and social networks are especially important under new firm formation (Jenssen, 2001).

Implications

These results reported here should be a concern for policy makers in countries where the preference for self-employment is low in the population. Many countries in Northern Europe offer very good conditions for employees. Not many of the benefits offered to employees are available to the self-employed. Efforts that can increase the job security and reduce the workload of people who are self-employed, seems particularly appropriate, as security and workload are two of the most commonly mentioned reasons for preferring organizational employment. Measures to increase the desire for self-employment among women is particularly important, since they represent a large potential for entrepreneurship in the country.

Confidence in skills and knowing entrepreneurs also contribute significantly to explaining the variance in business start-up intentions. Education and training of potential entrepreneurs may be able to change perceptions of entrepreneurial skills and subjective

norms (Souitaris et al., 2007). Similarly, participation in network programs can contribute to the development of more relevant contacts for aspiring business founders.

The findings indicate that many self-employed become portfolio entrepreneurs. People who are involved in several businesses may be important contributors to job-creation in a society. Portfolio entrepreneurs are likely to be more successful in their efforts to start a new business than novices are, since they are more competent and have a more relevant network through which they can obtain necessary resources for the business.

Limitations and suggestions for future research

The Adult Population Survey of the Global Entrepreneurship Monitor uses telephone interviews where participants answer yes/no to questions. This means that it is impossible to calculate indexes. Under normal circumstances, indexes are more reliable than single items. Future research is therefore advised to replicate the findings reported here using measures which has proven to be both valid and reliable.

The present study used a cross sectional design while a longitudinal design is required to establish causality. Researchers are encouraged to replicate the findings reported here using a longitudinal design. Kautonen and associates have shown one way to do it in practice (Kautonen et al., 2015; Van Gelderen et al., 2015). However, longitudinal designs are expensive and time consuming. The loss of respondents between data collection at different points in time can be a big problem, especially in surveys. As time passes and respondents are lost, the remaining sample may lose representativeness. A major strength of the Global Entrepreneurship Monitor is that it identifies a representative sample of the population in each country each year.

This study has shown that the preference for self-employment is positively associated with business start-up intentions and nascent entrepreneurship. The preference for self-employment has a stronger effect on entrepreneurial intention and behaviour than any other measure included in GEM. This measure therefore deserves consideration for inclusion in future GEM surveys. It is then also easy to obtain a measure of reluctant entrepreneurship, by cross-tabulating nascent entrepreneurs who prefer organizational employment with a measure of intent to become self-employed in the new business. In the present survey, 23.8% of the nascent entrepreneurs reluctantly intend to become self-employed in the new business, but the sample is too small to obtain a reliable figure of this phenomenon.

The most important contribution of this study is probably that it has shown that the preference for self-employment matters. The differences between countries on the preference for self-employment is likely to explain some of the national variance in entrepreneurial activity. Women have a lower preference for self-employment than men, which can explain the low rate of self-employment among women. People in rural areas have a much stronger preference for self-employment compared to people in urban areas. Providing people in rural areas with good framework conditions for entrepreneurship can be equally or even more important than providing job opportunities. Research on rural entrepreneurship provide several examples of policy measures that can enhance entrepreneurship in rural areas in North European countries (Korsgaard et al., 2015; North and Smallbone, 2006; Vik and Villa, 2010).

This study as well as additional recent research (Van Gelderen et al., 2015; Wilson and Lee, 2015) suggest that factors other than perceived behavioural control influence the relationship between entrepreneurial intentions and actions. Judging from the figures reported by GEM, around 50 percent of people who intend to start a business never engage in efforts to start a business. Among the respondents who expressed intentions to start a business in the

Kautonen et al. (2015) study, 37% had taken actions to start a business twelve months later. Further, around 50 percent of those who engage in business start-up efforts fail to start a business (Reynolds and Curtin, 2011). It is important to identify the factors that can explain why so many people give up during the business start-up process. There is little reason to be concerned if those who give up are poorly qualified individuals with poor business ideas. However, if structural barriers (Wilson and Martin, 2015) or psychological barriers (Van Gelderen et al., 2015) prevent people from starting businesses, we can promote entrepreneurship in a society by introducing measures that can remove or reduce such barriers.

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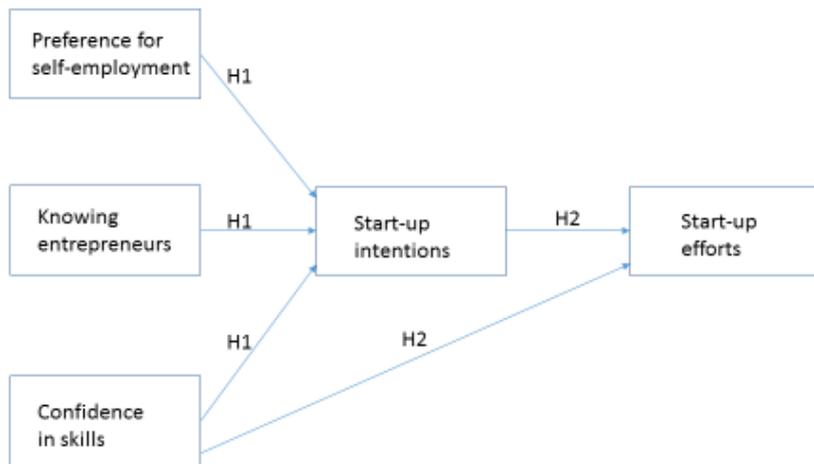


Figure 1. The research model with hypotheses.

Table 1. Descriptive statistics and Spearman correlations among the analysis variables.

| | Mean | SD | VIF | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-----------------------------------|-------|-------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| 1. Age | 44.14 | 12.37 | 1.11 | | | | | | | | | | | |
| 2. Income | 4.33 | 1.38 | 1.24 | .23 | | | | | | | | | | |
| 3. Male | .50 | .50 | 1.07 | .04 | .07 | | | | | | | | | |
| 4. High education | .37 | .48 | 1.12 | .01 | .27 | -.07 | | | | | | | | |
| 5. Self-employed | .09 | .29 | 1.22 | .04 | .06 | .13 | -.04 | | | | | | | |
| 6. Rural location | .16 | .36 | 1.35 | .10 | -.01 | .01 | -.08 | .09 | | | | | | |
| 7. Semi-rural location | .54 | .50 | 1.33 | .05 | -.04 | .02 | -.10 | -.04 | -.47 | | | | | |
| 8. Preference for self-employment | .24 | .43 | 1.27 | .10 | .09 | .14 | -.01 | .37 | .15 | -.10 | | | | |
| 9. Knowing entrepreneurs | .30 | .46 | 1.19 | .01 | .22 | .10 | .02 | .18 | .08 | -.08 | .23 | | | |
| 10. Confidence in skills | .32 | .47 | 1.38 | .15 | .25 | .23 | .04 | .31 | .08 | -.08 | .32 | .34 | | |
| 11. Start-up intentions | .06 | .24 | - | -.02 | .05 | .09 | .03 | .16 | .06 | -.02 | .31 | .21 | .25 | |
| 12. Start-up efforts | .03 | .17 | - | -.01 | .04 | .08 | .01 | .22 | .07 | -.07 | .22 | .16 | .20 | .35 |

Note: n=1548. Correlations $\geq .05$ are statistically significant at $p \leq .05$.

Table 2. Prediction of new business start-up intentions and efforts.

| | New business start-up intentions | | New business start-up efforts | |
|--------------------------------|----------------------------------|---------|-------------------------------|---------|
| | Base | TPB | Base | TPB |
| Age | 1.15† | 1.08 | .99 | .90 |
| Age squared | 1.00* | 1.00 | 1.00 | 1.00 |
| Income | 1.08 | .88 | 1.14 | .94 |
| Male | 2.03** | 1.30 | 2.16* | 1.35 |
| High education | 1.37 | 1.40 | 1.24 | 1.04 |
| Self-employed | 3.58*** | .79 | 8.01*** | 2.90** |
| Rural location | 1.78† | 1.52 | 1.38 | 1.05 |
| Semi-urban location | 1.13 | 1.75† | .52† | .48† |
| Preference for self-employment | - | 7.96*** | - | 2.42† |
| Knowing entrepreneurs | - | 2.87*** | - | 2.05† |
| Confidence in skills | - | 4.22*** | - | 3.58* |
| Start-up intentions | - | - | - | 7.81*** |
| -2 Log likelihood | 652.28 | 507.45 | 343.44 | 263.59 |
| Cox & Snell R Square | .03 | .12 | .04 | .09 |
| Nagerkerke R Square | .09 | .33 | .16 | .37 |

Note: n=1548. Level of statistical significance: † indicates $p \leq .10$; * indicates $p \leq .05$; ** indicates $p \leq .01$; *** indicates $p \leq .001$.