Not Only Fools Rush In:
The Opportunity Cost of Entrepreneurship

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Abstract *Several research fields study how individual resources are important for founding, surviving, and growing a new venture. This study contributes to this literature by exploring the role of personal characteristics, human capital, and social capital for individual level success measured by earnings and work satisfaction. By estimating these relationships for both full-time working entrepreneurs and employees in an innovation driven economy, it is possible to assess the opportunity cost of entrepreneurship.*

Introduction

Entrepreneurship is gaining more and more interest among academic researchers and policymakers as new firms are recognised for productivity growth (Caves, 1998; Bosma and Nieuwenhuijsen, 2002), competition enhancement (Carree et al., 2002), and job creation (Haltiwanger et al., 2010; Ibsen and Westergaard-Nielsen, 2011; Dahl et al., 2009). Moving from society level outcomes of entrepreneurship to individual level outcomes, the positive picture does not change. Although entrepreneurs are found to earn less than employees (Parker, 2004; Hamilton, 2000), they express higher work satisfaction (Hundley, 2001; Blanchflower and Oswald, 1998). Thus, the policies generating and promoting entrepreneurship in advanced economies (Carree and Thurik, 2003) seem to be justified on multiple levels.

Determining the individual resources that are pivotal for founding a new venture has a long history within the entrepreneurship literature. The question "why do some individuals become entrepreneurs?" has been pursued within very different disciplines like psychology, sociology, and economics (Landström, 1999, 2010). In psychology, measures of individual personality traits, cognitive styles, attitudes, and values have been used. On the other hand, sociologists have em-

phasised the importance of inter-personal networks, culture, and environment. The focus in economics has mainly been on the importance of individual human capital and the opportunity cost of becoming an entrepreneur. Even though interdisciplinary theoretical frameworks have been developed, empirical studies including concepts from different disciplines are rare and encouraged.

The vast majority of studies including individual resources compare entrepreneurs with non-entrepreneurs (Sarasvathy, 2004). The remaining studies try to link individual resources of the entrepreneur to measures of firm performance, e.g. survival or growth in profits, turnover, or employees. These studies take advantage of the fact that it is hard to argue why theories explaining "why do some individuals become entrepreneurs?" should not be valid in explaining "why do some entrepreneurs become successful?". For instance, having a high tolerance of ambiguity is very likely to influence the decision to enter entrepreneurship. However, it is hard to argue why this personal trait does not also influence new venture performance. The same applies when replacing firm level outcomes with individual level outcomes but these studies are rare. A recent comprehensive study in this direction is Hartog et al. (2010) looking at the returns to cognitive and social ability among entrepreneurs and employees.

This research contributes to these rare studies by exploring which individuals should enter entrepreneurship when looking at how individual resources influence earnings and work satisfaction; not just in entrepreneurship but also in the alternative of employment in an established firm. This is important as intrapreneurship (i.e. individuals acting entrepreneurial within an established firm) is more prevalent in high income and innovation driven economies Bosma et al. (2011b). The specific personal characteristics, human capital measures, and social capital indicators associated with individual success in entrepreneurship are likely also to be related to success in the alternative of employment; e.g. having a high tolerance of ambiguity (personal characteristics), having industry experience (human capital), and being willing to contact others for work-related help (social capital). The impact of human capital on employee earnings has already been established within labour market economics (Borjas, 2005) while studies relating personal characteristics and social capital to employee earnings on the labour market are rare when applying the same indicators as in entrepreneurship research. Exceptions are Hartog et al. (2010) and Granovetter (1995), the former looking at ability and the latter looking at personal contacts. This picture does not change when replacing earnings with work satisfaction. In exploring the role of individual resources for new venture formation together with the impact on earnings and work satisfaction for both entrepreneurs and

employees, this study assess which individuals make the right or wrong decision to enter entrepreneurship.

The data used is longitudinal register data from IDA (Integrated Database for Labour Market Research) combined with data from a questionnaire survey conducted on Danish entrepreneurs and non-entrepreneurs in 2008. IDA contains data on the entire Danish population of individuals and firms in the period 1980 onwards. The sample used in this study consists of full-time workers including both first-time entrepreneurs and employees that have never been entrepreneurs. Indicators for personal characteristics include (common) entrepreneurial personality traits (Cromie, 2000), intrinsic and extrinsic work values (Kalleberg, 1977), and work involvement measured by value-orientation towards work (Fagin and Little, 1984) and the possibility of work-family conflict (Parasuraman and Simmers, 2001). Indicators for human capital are years of education, industry experience, and unemployment history (Parker, 2004; Borjas, 2005). Finally, indicators for social capital covers both behaviour - contact frequency and contact willingness (Burt, 2000) - and characteristics - presence of entrepreneurial role models (Nanda and Sørensen, 2010; Bosma et al., 2011a) - of the social network. Moreover, control variables are created from IDA, the most important being predicted earnings in employment (for both entrepreneurs and employees) based on personal demographics, industry, and labour market region.

Results show that all indicators for personal characteristics and social capital are found to successfully differentiate entrepreneurs from employees. However, those that have an "entrepreneurial personal profile" are not found to be worse of in employment, suggesting that these individuals are able to act entrepreneurial in their environment which is highly valued in established firms located in innovation driven economies. Furthermore, the statement that entrepreneurship is a networking activity is supported as individuals with an "entrepreneurial social network" seem to be better off in entrepreneurship. Finally, high education seems to provide significant opportunity costs for entrepreneurs; both in terms of earnings and work satisfaction. These findings are important for understanding the entry choice and for assessing whether entrepreneurship policy should encourage certain individuals to enter entrepreneurship in innovation driven economies.

Theory

This study sets up hypotheses of how personal characteristics, human capital, and social capital are related not only to success in entrepreneurship but also success in the alternative of employment. This requires introducing broad indicators for entrepreneurial success also applicable for employee success.

Earnings and work satisfaction

Two indicators often used when assessing work-life success are earnings and work satisfaction. Studies focusing only on the former are important as earnings are expected to be positively related to work satisfaction. However, empirical research suggests that this relationship might be less strong among entrepreneurs than among employees based on the following empirical findings. First, entrepreneurs are generally found to earn less than employees (Parker, 2004; Hamilton, 2000). Second, entrepreneurs express higher work satisfaction than employees (Parker, 2004; Hundley, 2001; Blanchflower and Oswald, 1998). Hence, entrepreneurs seem to be more satisfied then employees which can be explained by non-pecuniary benefits like "being one's own boss" more than outweigh the earnings penalty.

The remainder of this section argues why personal characteristics, human capital, and social capital influence the decision to enter entrepreneurship, followed by a discussion of how these means influence earnings and work satisfaction in both entrepreneurship and employment.

Personal characteristics and entrepreneurship

The entrepreneurial characteristics will be explored in this study by looking at three concepts: Personality traits, work values, and work involvement. Starting within the psychology literature, the following personal traits are often used to differentiate (successful) entrepreneurs from others (Hisrich et al., 2005; Parker, 2004; Kirby, 2003; Cromie, 2000): *tolerance of ambiguity, risk taking ability, feelings about locus of control, creativity or innovativeness, need for achievement, and desire for autonomy.*

Personal traits

Compared to wage earners, entrepreneurs have undertaken a considerable risk in the light of the low survival rates for new venture. Nevertheless, entrepreneurs are willing to give up the regular wage income for the uncertain future

earnings of the new venture. In addition to the financial risk of founding a new venture (which the entrepreneur not necessarily bears alone) there are socio-psychological risks related to, for instance, prestige and income status, which are dependent on the success of the new venture (De Vries, 1977). Closely related to risk taking ability is tolerance of ambiguity measuring a persons ability to deal with situations characterised by incomplete information which the entrepreneur, undoubtedly, to a smaller or larger extent is going to experience. The term locus of control originate from Rotter (1966) and indicate the extent that a person feels that she has control over her own situation. A high degree of internal control is tantamount to the feeling that your situation is determined by your decisions and actions as opposed to your environment while a high degree of external control is tantamount to the diametrical opposite. The indicator is later broadened in Levenson (1973) so that external control is divided into control from powerful others and chance control (i.e. luck and coincidence). Entrepreneurs are assumed to have a high feeling of internal control making them willing to try to beat the low odds of new venture survival.

High creativity or innovativeness is often emphasised as an important characteristic of an entrepreneur. According to Schumpeter (1934), the essential function of the entrepreneur is the ability to recognise and realise new opportunities, where the entrepreneur is driven by the will to found a private kingdom and prove oneself superior to other as well as the joy of exercising one's energy and ingenuity (Andersen, 2007). Moreover, entrepreneurs are often assumed to differ from wage earners by having a high need for achievement (nAch) (McClelland, 1961). According to McClelland (1961), entrepreneurs prefer to be proactive and committed, to take personal responsibility, to take moderate (not high) risks, and to receive feedback on their performance, while they dislike repetitive and routine work (Parker, 2004). Finally, a great desire for autonomy or independence is associated with entrepreneurs since this is considered an attractive feature of this kind of employment (Parker, 2004). Cromie (2000) argues that entrepreneurs prefer to avoid restrictions in the form of rules, procedures, and social norms because a restrictive work environment stifles the opportunity to be creative and the need for achievement.

The empirical studies of the entrepreneurial traits are not unambiguous regarding whether entrepreneurs really are different from wage earners; for a comprehensive review of these studies see Cromie (2000).

Work values

Numerous studies find higher work satisfaction among entrepreneurs than among wage earners which often is attributed to differences in the work characteristics for the two types of employment (Parker, 2004; Hundley, 2001; Blanchflower and Oswald, 1998); Hundley (2001) outlines the significance of autonomy, flexibility, skill utilization, and job security. In Kalleberg (1977) work characteristics are categorised into six dimensions: *intrinsic, convenience, financial, relations with co-workers, career opportunities, and resource adequacy.* The intrinsic dimension covers work characteristics associated with the work tasks itself (e.g. whether the work is interesting, allows the worker to develop and use her abilities, allows the worker to be self-directive, and allows the worker to see the results of her work) while the following dimensions (except resource adequacy) represent an extrinsic dimension where the work characteristics are not related to the work tasks (e.g. whether the work has good hours, pays good, has friendly and helpful co-workers, and has good chances for promotion) (Kalleberg, 1977). Finally, work characteristics under resource adequacy cover the access to different resources that influence on the extent to which the person can do her work satisfying and, thereby, receive the desired intrinsic or extrinsic work rewards. Given that the intrinsic dimension covers work characteristics that can be related to the personal traits associated with entrepreneurs, it is assumed that entrepreneurs appreciate the intrinsic work values, in particular.

Work involvement

High job satisfaction among entrepreneurs – as a result of intrinsic work characteristics combined with the financial and socio-psychological risks related to starting a venture – makes it reasonable to assume that entrepreneurs experience high work involvement as well. In continuation of the work values above, it would be relevant to look at work involvement as a persons value-orientation towards work and, hence, the different functions work have according to the literature. In reviewing eight other authors work on the subject, Fagin and Little (1984) identify seven major functions of work (Furnham, 1990): *a source of identity, a source of relationships outside the nuclear family, a source of obligatory activity, an opportunity to develop skills and creativity, a factor which structures time, a sense of purpose, and a source of income and control.* From these functions it is reasonable to assumed that entrepreneurs have higher value-orientation toward work than wage earners; e.g. work is not just a source of income or a factor that structures time but it is also an opportunity to develop skills and abilities. However, it is also possible that high work involvement leads to greater work-family conflict which is found in Parasuraman and Sim-

mers (2001).

Personal characteristics and work-life success

The reasons why having entrepreneurial characteristics are important for new venture performance and, hence, entrepreneurial earnings should be obvious from the previous section. However, it is less obvious if these individual qualities are also valued for employees working in established firms. In advanced economies where assembly line labour to a great extent is either replaced by machines or outsourced to developing countries this is very likely to be the case. Entrepreneurship within an established firm is labelled "intrapreneurship" and differ mainly from entrepreneurship in that the established firm can create advantages (e.g. access to resources like capital and labour) or disadvantages (e.g. lack of acceptance of new ideas) for the intrapreneurs. Besides the organisational characteristics (e.g. management support, work discretion, and organisational boundaries), individual characteristics (e.g. risk-taking propensity, desire for autonomy, and need for achievement) are assumed to be very important for the individual decision to act intrapreneurial in the model put forth in Hornsby et al. (1993). In reviewing empirical studies of intrapreneurship in Denmark (which is the national setting of this study), Nielsen et al. (2009) find a positive attitude towards intrapreneurship from both employers and employees, a high priority of intrapreneurship in large and small firms, and a high work discretion for employees. As a result, individuals with entrepreneurial characteristics are expected to earn a higher income than individuals without; both in entrepreneurship and employment.

Hypothesis 1a: Entrepreneurs with entrepreneurial characteristics will have a higher income than entrepreneurs without these.

Hypothesis 1b: Employees with entrepreneurial characteristics will have a higher income than employees without these.

Turning to work satisfaction, the effect of having entrepreneurial characteristics are expected to be different in entrepreneurship and employment, taking the view that work satisfaction is determined by the degree of fit between the person and work environment. Starting with entrepreneurship, individuals with entrepreneurial characteristics are expected to be more satisfied than individuals without these because the characteristics of the former group fits better with the work environment. The expected effect of having entrepreneurial characteristics on work satisfaction in employment is less clear. On the one hand, employees

might be able to act intrapreneurial as suggest above which has a positive influence on both earnings and work satisfaction for entrepreneurial individuals. On the other hand, entrepreneurial individuals still have to act within organisational boundaries. After all, the positive influence on earnings and challenging work tasks might not outweigh "being your one's boss" which is often the most desired feature of being an entrepreneur (Dahl et al., 2009). Hence, the latter effect is assumed to be greatest.

Hypothesis 2a: Entrepreneurs with entrepreneurial characteristics will be more satisfied than entrepreneurs without these.

Hypothesis 2b: Employees with entrepreneurial characteristics will be less satisfied than employees without these.

Human capital and entrepreneurship

The human capital of the entrepreneur is in the literature often assumed to be given by certain types of work experience and education.

Work Experience

More people with work experience are expected to be entrepreneurs given that they as employee or self-employed have had time to learn about the business environment, build important networks in this environment, and, therefore, are more able to create opportunities in this environment (Parker, 2004). Hence, entrepreneurs that have been working in the same industry as they start up in are expected to be better suited for successful entrepreneurship; many studies find that these spin-off entrepreneurs do perform better than other entrepreneurs (Phillips, 2002; Agarwal et al., 2004; van Praag, 2005). Furthermore, work experience related to business development, sales and marketing, and management (from small businesses, in particular) are assumed to be important. Finally, it would be relevant to look at the different work roles the entrepreneurs have had in the past, if entrepreneurs are expected to be "jacks of all trades" (i.e. persons with multiple skills but no expert proficiency) because they have to complete many different tasks. In support of this, Hartog et al. (2010) find that balance in different abilities is rewarded in entrepreneurship but not in employment.

Education

From the literature it is not clear whether more educated individuals are expected be entrepreneurs. On the one hand, more educated individuals might be

better informed about business opportunities and select themselves into occupations or industries where entrepreneurship is more common. van Praag (2005) finds, contrary to conventional wisdom, that the returns to education is higher in entrepreneurship than in employment, likely because entrepreneurs have more influence on how to put their skills and abilities from education to best use. On the other hand, the skills and abilities that make a successful entrepreneur are not necessary the same as those embodied in formal qualifications (Parker, 2004). For instance, this is true if successful entrepreneurs have the personal traits or work values described in the previous section, are "jacks of all trades". Hartog et al. (2010) find that general ability has a stronger impact on income in entrepreneurship than on income in employment. The question is then to what extent general ability is a result of formal education.

Human capital and work-life success

Unlike entrepreneurial traits, the role of human capital for employee earnings and work satisfaction have been heavily studied within labour market economics. The general findings are that both education and work experience are rewarded in employment. According to Borjas (2005), empirical studies show that differences in education and labour market experience among workers account for about a third of the variation in wage rates in the population. Even though the labour market institutions in many countries are different, the general finding is an upward-sloping and concave age-earnings profile explained by older workers investing less in human capital while receiving more from previous investments compared to younger workers (Borjas, 2005). Hence, human capital is expected to increase earnings in employment. In entrepreneurship, however, the answer is less straight forward based on the discussion earlier. Therefore, a more conservative position is adopted regarding the role of Human capital and earnings in entrepreneurship.

Hypothesis 3a: Entrepreneurs with more human capital will not have a higher income than entrepreneurs with less.

Hypothesis 3b: Employees with more human capital will have a higher income than employees with less.

The empirical findings that employees with more human capital have higher earnings, and appertaining more challenging work tasks, result in high knowledge employees being both extrinsically and intrinsically rewarded. Hence, more human capital is assumed to lead to greater work satisfaction among em-

ployees. Again, this relationship is questioned in entrepreneurship given that knowledge is not necessary extrinsically rewarded while the entrepreneurial setting is intrinsically rewarding independent of individual knowledge. Based on the higher opportunity cost of entrepreneurship for individuals with more human capital, the following is hypothesized.

Hypothesis 4a: Entrepreneurs with more human capital will be less satisfied than entrepreneurs with less.

Hypothesis 4b: Employees with more human capital will be more satisfied than employees with.

Social capital and entrepreneurship

Within the sociology literature, the study of entrepreneurs emerged as a critique to the view that the decision to become (or remain) an entrepreneur is dependent on individual rationality or personal traits (Granovetter, 1985; Aldrich and Zimmer, 1986). The importance of the social network for the entrepreneur is, according to the literature, mainly related to (Parker, 2004; Brüderl and Preisendörfer, 1998; Aldrich and Zimmer, 1986): *motivation, access to resources (information, customers and suppliers, capital and labour), and network compensation (resources).*

Motivation

Often is emphasised that it is importance for the entrepreneur to have a moral support network (Hisrich et al., 2005; Parker, 2004; Brüderl and Preisendörfer, 1998). The decision to start a venture involves an accept of risk and uncertainty which is why understanding, backing, and support from close family, in particular, but also from other relatives, friends and acquaintances can be essential for the decision. Add to this the following running of the venture which can give rise to difficult, busy, and lonely periods as well as the opposite. Moral support from the social network is especially important because the entrepreneur to a greater extent can confide in people close to them without fear of harsh criticism but, nevertheless, receive more honest advice than from people in a professional network (Hisrich et al., 2005). Empirical support for the importance of family relations and the moral support network can be found in Hanlon and Saunders (2007) and Brüderl and Preisendörfer (1998). Furthermore, the social network gets an even greater importance if it contains (former) entrepreneurs who can act as mentors or role models (Bosma et al., 2011a). Thereby, it is possible to gain a realistic insight into the personal traits, abilities, and skills that are

important for starting and running a (successful) venture (Nanda and Sørensen, 2010; Hisrich et al., 2005).

Access to resources

According to Burt (2000), information benefits from the social network occur in three forms: *access, timing, and referrals.* Information from the entrepreneur's network ties is in the literature often assumed to be more useful, reliable, exclusive, and less redundant than information from formal sources (Brüderl and Preisendörfer, 1998). The social network can give access to both customers and suppliers through these information benefits. Regarding the former, the entrepreneur can initiate a fast growing number of customers through what is called "the snowball effect" (Brüderl and Preisendörfer, 1998); i.e. the first customers are among the entrepreneur's family, friends, and acquaintances whereupon they spread the reputation of the firm to their social network and so forth. Finally, capital and labour are necessary resources for starting and running a venture and help from family, friends, and acquaintances can be very useful, particularly, in the star-up phase (Brüderl and Preisendörfer, 1998). First, the entrepreneur can be restricted with regard to capital from banks or other formal sources due to lack of confidence in the entrepreneur and the new venture (Shane, 2003). This confidence is, however, often present in the social network where the individuals have a more in-depth insight into the motivation, abilities, and skills of the entrepreneur. Second, labour from family, friends, and acquaintances are often cheaper (or free) compared to labour obtained through formal sources. Again, this is particularly appreciated if the entrepreneur is capital restricted. Add to this the entrepreneur's lack of knowledge with regard to hired labour from formal sources which can result in a greater need for control compared to loyal labour from the social network (Brüderl and Preisendörfer, 1998).

Optimising the network

It is important to emphasise that the characteristics of social network are not exogenously determined. According to Dubini and Aldrich (1991), networking involves an expansion of the number of strong ties in the social network, where strong ties are characterised by a high degree of trust between the individuals while weak ties, on the other hand, are more superficial acquaintances. Strong ties are often assumed to be spouse, parents, other relatives, and close friends while weak ties are business partners, (former) employers and co-workers, and other acquaintances (Brüderl and Preisendörfer, 1998). Thus, it is natural to presume that a social network mainly consisting of strong ties is optimal. Such a network, however, is often characterised by homophily given that a person

often establish strong ties to other persons like themselves with respect to, for instance, education, income, occupation, and age (Burt, 2000). It is particularly important to continuously maintain the relationships to weak ties since they otherwise will decay over time (Burt, 2000). One way to do this is to keep regular contact given that the strength of a given tie is assumed to be dependent on the *frequency* of contact and on the emotional closeness between the ties. Thus, strategic entrepreneurs will have more frequent contact to weak ties but in the end, the important thing is whether the entrepreneur is willing to contact to these individuals if it is necessary or beneficial to the entrepreneur.

Social capital and work-life success

Based on the above arguments, it is straight forward to see why being extrovert regarding the social network and having entrepreneurial role models in the social network are important for new venture performance and, hence, entrepreneurial earnings. A similar effect could be expected for employees based on the following reasoning. First, extrovert individuals could have higher earnings as these individuals would be better informed about attractive job positions from their social network. Second, having (former) entrepreneurs in the social network could be especially important for receiving valuable information about job opportunities if these individuals are more likely to provide access to additional network ties. Mark Granovetter, who was among the first to bring awareness of the strength of weak ties (Granovetter, 1973), finds that the present income of workers who found their job through personal contacts is higher then for workers who found their job by formal means, direct application, or other methods (Granovetter, 1995). As was the case among entrepreneurs (Brüderl and Preisendörfer, 1998), the workers studied by Granovetter (1995) believed that information from personal contacts is of higher quality than information from other means. Hence, the following are expected.

Hypothesis 5a: Entrepreneurs with more social capital will have a higher income than entrepreneurs with less.

Hypothesis 5b: Employees with more social capital will have a higher income than employees with less.

Emphasising again that entrepreneurship is a networking activity, individuals who are not extrovert regarding the social network – or have entrepreneurial role models in the social network – are expected to be less satisfied with being an entrepreneur. But as before, the superior information from personal contacts

is not only beneficial for the group of entrepreneurs. Not only do Granovetter (1995) find that workers who found their job through personal contacts have a higher income, they also express higher job satisfaction, which is likely to explained by the empirical finding that these individuals are also more likely to enter newly created job positions (Granovetter, 1995). The underlying assumption is that these job positions take into account the abilities, skills, and preferences of the worker. Again, a positive effect for both entrepreneurs and employees are expected.

Hypothesis 6a: Entrepreneurs with more social capital will be more satisfied than entrepreneurs with less.

Hypothesis 6b: Employees with more social capital will be more satisfied than employees with less.

Method

Data

The data used is longitudinal register data from IDA (Integrated Database for Labour Market Research) combined with a questionnaire survey conducted on Danish entrepreneurs and non-entrepreneurs in 2008. IDA is a matched employer-employee dataset containing the entire Danish population of individuals and firms in the period 1980 to 2007.

Sample

This study only utilises the responses from the first-time entrepreneurs and the individuals that have never been entrepreneurs. The former group was defined as having started an incorporated or unincorporated business with "real" activity[1]. The population, sample, and response population for the two strata used in this study can be seen in Table 2. Disproportionate stratified sampling was used, largely oversampling the first-time entrepreneurs. 3,178 individuals returned the questionnaire resulting in an overall response rate of 34%; the response rate being significantly higher for the non-entrepreneurs. In order to make the sample more fit for the analysis of earnings in 2007 (based on IDA data) and work satisfaction in 2008 (based on survey data), further reductions are needed. First, individuals not full-time employed in 2007 are excluded as this influences the

[1]For the business to be "real" active in a given year, the work effort and/or the earnings (calculated from turnover) have to be above given industry specific levels set by Statistics Denmark; in the start-up year the earnings level is set to half.

earnings in 2007[2]. This reduces the population of first-time entrepreneurs and never entrepreneurs to 5,592 and 1,678,183 individuals, respectively. The number of respondents from the total population is 1,625 which is further reduced to the final sample of 1,254 individuals used in the study. First, individuals not full-time employed in 2004 (IDA) and full-time employed in 2008 (survey) are excluded. Furthermore, the few individuals with conflicting entrepreneurship status from IDA and the survey are excluded (30 individuals). Finally, the few individuals with a missing work satisfaction score are excluded (14 individuals). Among the 1,254 respondents used in this study, 635 are full-time entrepreneurs, 337 are full-time employed former entrepreneurs, and 282 are full-time employed never entrepreneurs in 2008.

Independent variables

Predicted earnings

From the population of 1,678,183 never entrepreneurs (see previous section) are randomly drawn 10,000 individuals to be used for estimating a predicted earnings in 2007 for all respondents based on personal demographics, geographical area, and industry in 2007. Given that it is only possible to confirm entrepreneurship status in 2007 for the first-time entrepreneurs in 2004 from the survey, the predicted earnings in 2007 for the entrepreneurs are assumed to be equal to that of the never entrepreneurs plus an earnings premium (because of the greater risk) or penalty (because of the more attractive work characteristics). Taking an equilibrium point of view, the assumption is as follows. If what a given individual, within a given area and industry, can earn from entrepreneurship, rises, compared to the earnings as an employee, then more of these individuals choose to become entrepreneurs and vice versa. The OLS regression used to estimate the predicted earnings for the respondents can be seen in Table 3; the dependent variable are the natural logaritm to earnings in 2007.

IDA and survey indicators

Four indicators for personal characteristics, human capital, ans social capital, respectively, are created. In the remainder of the paper these three categories are labelled entrepreneurial means. Indicators for personal characteristics and social capital are based on the survey. The former includes an indicator for: intrinsic work motivation (dummy), high value-orientation towards work (dummy), high work-family conflict (dummy), and number of entrepreneurial traits (discrete). The latter includes an indicator for: number of groups with

[2]Also a few observations with missing values in 2007 are excluded.

frequent contact (discrete), number of groups with high contact willingness (discrete), entrepreneurs in the family (dummy), and entrepreneurs among friends (dummy). Indicators for human capital are based on information from IDA and cover: years of further education (discrete), years of industry experience (discrete), number of different industries worked in (discrete), and unemployment history (continuous). A detailed description of these variables can be found in Table 1. In order to have the same number of observations, the missing values for each indicator are imputed using regression imputation with gender, age, and education as explanatory variables; see Levy and Lemeshow (2008). The number of imputations for each indicator can be seen in Table 1.

Dependent variables and model specification

Information on earnings can be found in IDA based on tax records while information on work satisfaction is indicated in the questionnaire on a scale from 0 (very dissatisfied) to 10 (very satisfied) with 5 being (neutral). The natural logarithm of earnings are used in the regression analyses as this allows to interpret the percentage change in earnings from given changes in the independent variables. Because of a strong centering of responses around high values of work satisfaction, a binary variable was used for these analyses with a score above the mean value of 8 was considered highly satisfied. This is in line with the literature where individuals "satisfies" instead of continuously evaluating and optimizing their situation (Simon, 1996). The earnings equation for entrepreneurs and employees is estimated from Equation 1:

$$ln(E_{2007}) = \alpha + \beta_1 ln(P(E_{2007})) + \beta_2 Mj_{2008} \qquad j = 1, 2, ..., 12 \qquad (1)$$

where E_{2007} is the realized income in 2007, $P(E_{2007})$ the predicted income in 2007, and Mj_{2008} are the 12 entrepreneurial means measured in 2008 (survey) or before (IDA). The predicted income and the realized income are expected to be closely correlated for both entrepreneurs and employees with the earnings premium or penalty of entrepreneurship being incorporated in the constant term. The satisfaction equation for entrepreneurs and employees is estimated from Equation 2:

$$S_{2008} = \alpha + \beta_1 [ln(P(E_{2007})) - ln(E_{2007})] + \beta_2 Mj_{2008} \qquad j = 1, 2, ..., 12 \quad (2)$$

where the difference between the predicted earnings and the realized earnings in 2007, $[ln(P(E_{2007})) - ln(E_{2007})]$, is assumed to negatively affect work

satisfaction in 2008.

Selection bias

A problem that arises when estimating Equation 1 and 2 for the entrepreneurs are the possibility of selection bias. Only 65% of the first-time entrepreneurs in 2004 survives to 2008 and are, therefore, included in the analyses. A solution to this is to estimate a Heckman selection model for entrepreneurial earnings/satisfaction which takes into account the likelihood of surviving the critical three years after start-up. Therefore, Equation 1 is specified as the main equation in a Heckman selection model with the selection equation containing the same variables plus an additional variable as instrument. Household wealth the year before startup (2003) is chosen to be a suitable instrument. Equation 2 is problematic to specify as a Heckman model given that realized earnings in 2007 needs to be included in the selection equation. However, as will become evident later, selection bias does not seem to be a problem. Variables with * in the tables indicate that the years up to 2004 are used (i.e. the start-up year for the entrepreneurs) instead of the years up to 2007.

Results

Becoming an entrepreneur

Initially is tested whether the three categories of entrepreneurial means are important for becoming an entrepreneur as expected from theory. Table 4 estimates the likelihood of being a novice entrepreneur compared to being a non-entrepreneurs (never entrepreneur). Model 1-4 include each of the four indicators for human capital together with control variables (see table text). Model 5-8 and Model 9-12 do the same with the four indicators for personal characteristics and network, respectively.

Table 4 supports the theory in general. Starting with human capital indicators, the years of further education do not have an influence on the likelihood of startup while the number of years in the same industry have a negative effect on start-up. Contrary, the number of different industries that the individual has worked in and the number of weeks of unemployment have a significant and positive effect on start-up. This supports the view of entrepreneurs as being "jacks of all trades". However, spin-off entrepreneurs (i.e. entrepreneurs with work experience from the start-up industry) are shown to have better chances of survival (Phillips, 2002; Agarwal et al., 2004; van Praag, 2005). Furthermore, all four indicators assumed to be related to entrepreneurial characteristics - being

more motivated by intrinsic than extrinsic work values, having a high value-orientation towards work, having a high probability of work-family conflict, and possessing more of the entrepreneurial psychological traits - have a strong and significant effect on the likelihood of being an entrepreneur. The same is evident for the network indicators where entrepreneurs: have frequent contact to more groups, are willing to contact more groups for work-related help, and have more (former) entrepreneurs in their network, both among family and friends.

These findings are an interesting starting point for the following analyses uncovering whether these entrepreneurial means also are important for work-life success in general.

Success measured by earnings

Estimation of earnings, based on Equation 1, can be found in Table 5 for employees and in Table 6 for entrepreneurs. In each Table is again included 12 Models, one for each of the entrepreneurial means.

Earnings as an employee

Starting with earnings among employees, Table 5 shows that predicted earnings, as expected, has a strong and significant effect on realized earnings in all models. An increase in predicted earnings of 10% (controlling for person, area, and industry), increases realized earnings of between 7.6% and 8.9%, depending on the entrepreneurial means included in the model. Looking at means within the human capital category, each additional year of further education significantly increases earnings by 4.7% while a 10% increase in the number of weeks unemployed decreases earnings by 0.5%. The two measures of industry experience, however, are not found to significantly influence earnings. Turning to entrepreneurial characteristics, all four indicators are significant. Being intrinsically compared to extrinsically motivated, having a high value-orientation towards work, and having a high probability of work-family conflict, increases earnings by 8.0%, 14.5%, and 16.5%, respectively. Moreover, for each additional entrepreneurial trait that the employee possesses, earnings increases by 6.5%. All findings, the latter in particular, are interesting for the debate about whether it is more economic rational for entrepreneurial individuals not to become entrepreneurs. Finally, only one of the network indicators is significant on a 5% level: the number of different groups that the employee are willing to contact for work-related help. For each additional group, earnings increases by 4.9%. If accepting a 10% level of significance, having (former) entrepreneurs among friends increases earnings by 7.4%. However, this result could be subject to

reverse causality; i.e. employees with high earnings attract, or are attracted to, entrepreneurs.

Earnings as an entrepreneur

A similar analysis is done for the novice entrepreneurs based on the models in Table 6. It can be seen that an increase in predicted earnings as employee of 10% (controlling for person, area, and industry), results in a large increase in earnings, ranging between 29.7% and 33.3%. However, this should be seen in connection with the large and negative constant, indicating that the general earnings level for the entrepreneurs are lower than for the employees. This finding is generally supported in empirical studies, indicating an earnings penalty of entrepreneurship (Parker, 2004; Hamilton, 2000). Surprisingly, only one out of the 12 indicators for entrepreneurial means are significant on a 5% level: unemployment. An increase in the weeks of unemployment of 10% decreases entrepreneurial earnings by 1.4%. None of the indicators for entrepreneurial characteristics are significant but one of the network indicators are significant on 10% level. Having (former) entrepreneurs among friends increases earnings by 62.6%. As before, however, this finding is likely to be caused by reverse causality.

In general, the models seem to explain very little of the variance in entrepreneurial earnings (based on R^2 values) indicating that entrepreneurial means, although important for the start-up decision, do not influence subsequent earnings. Nevertheless, a sensitivity analysis of this conclusion is conducted by removing predicted earnings as employee from the independent variables and replacing this by all the variables used to estimate the predicted earnings; i.e. age, age squared, female, non-Danish, married, industry (10 categories), and labour market region (21 categories). This is possible for the group of entrepreneurs given the larger number of observations compared to the group of employees. These findings, which can be seen in Table 9, are similar to the previous, except for the weakly significant coefficient for (former) entrepreneurs among friends in Table 6 now becomes insignificant. Moreover, the explanatory power of all models are now higher than before which was expected given the strict assumption of parallel earnings in entrepreneurship and employment.

As explained earlier, these results could also be influenced by selection bias given that only entrepreneurs surviving from 2004 to 2008 are used in the analysis. Table 10 mirrors Table 9 except that the results are from Heckman selection models. It can be seen that controlling for selection bias does not change the

results except for the coefficient for (former) entrepreneurs among friends again is insignificant. In addition, Table 11 shows the results from the appertaining selection models estimating the likelihood if surviving. The instrument used in Table 11 is household wealth the year before start-up. Although the coefficients for wealth are significant, a doubling of wealth only increases the likelihood of survival by between 1.0% and 1.1%. None of the human capital indicators are significant while only one of the indicators for entrepreneurial characteristics is significant. Entrepreneurs with a high probability of work-family conflict have a 60.8% higher likelihood of survival. In addition, all of the four indicators for network are significant. Increasing the number of groups that the entrepreneur have frequent contact to and are willing to contact for work-related help, increases the likelihood of survival by 16.4% and 9.3%, respectively. Moreover, having (former) entrepreneurs among family and friends increases the likelihood of survival by 32.3% and 28.0%, respectively, although the latter only is significant on 10% level. Hence, the network seems to be most important for survival besides hard work indicated by possible work-family conflict.

The next section turns to analyses with work satisfaction as the measure of work-life success. Based on the findings so far, it is of special interest to examine whether individuals with entrepreneurial characteristics are trading off higher earnings in employment with greater work satisfaction in entrepreneurship because of a more suitable work environment.

Success measured by satisfaction

Table 7 and 8 estimates the likelihood of high work satisfaction in 2008 from logistic regression of Equation 2. Each Model includes one of the 12 indicators for entrepreneurial means together with the difference between the predicted and realized income in 2007.

Satisfaction as an employee

The findings for employees can be found in Table 7. Initially it can be seen that although the coefficient for earnings difference is negative in all models, it is only significant on a 5% level when including years of further education and work-family conflict, respectively. In these two models an increase in the percentage earnings difference of 100% is associated with a decrease in the likelihood of high satisfaction of 65.4% and 66.5%. Starting with the four indicators for human capital, only unemployment is significant. An increase in unemployment of 10% decreases the likelihood of high satisfaction by 2.3%. This is likely to be explained by long periods of unemployment force individuals to compromise

with their work values when accepting a job offer. On the contrary, three out of four indicators for entrepreneurial characteristics are significant. Individuals more motivated by intrinsic than extrinsic work values are more than twice as likely to have high satisfaction. Moreover, for each additional entrepreneural trait that an employee possesses, the likelihood of high satisfaction increases by 24.2%. This is contrary to the expected given that these entrepreneurial individuals are assumed not to be satisfied in the more restrictive environment in an established firm. Therefore, the findings suggest that these employees are able to receive job positions with work characteristics not too different from those in newly founded firms. Again, this challenges the view of venture start-up being the optimal choice for entrepreneurial individuals. Finally, none of the indicators for network significantly influence work satisfaction.

Satisfaction as an entrepreneur

Table 8 shows the findings for novice entrepreneurs. Contrary to before, it can be seen that the difference between predicted earnings in employment and realized earnings in entrepreneurship has a negative effect on work satisfaction in all models, although by much less than among employees. An increase in the percentage earnings difference of 100% decreases the likelihood of high work satisfaction of between 10.4% and 11.8%. In addition, the constant in all models has a higher value than was the case among employees, indicating a higher general level of work satisfaction among entrepreneurs. The only indicator significant in the human capital category is education. For each year of further education the likelihood of high work satisfaction decreases by 7.6%. The lower satisfaction for highly educated entrepreneurs could be explained by the opportunity cost for these individuals given by the high earnings that could be achieved as en employee in an established firm. As before, intrinsic motivation and entrepreneurial traits increase the likelihood of high work satisfaction when looking at the indicators for personal characteristics. Entrepreneurs more motivated by intrinsic work values are 51.3% more likely to be highly satisfied while adding an additional entrepreneurial trait increases the likelihood by 12.3%. Moreover, entrepreneurs with a high value-orientation toward work have a 53.6% higher likelihood of indicating high work satisfaction. These findings are in accordance with the expected since entrepreneurs with entrepreneurial characteristics are assumed to match their environment better. Interestingly, work-family conflict is significant for employees but not entrepreneurs suggesting that working hard only decreases work satisfaction when working for someone else. Contrary to the findings among employees, the network of the entrepreneurs is important for work satisfaction. First, entrepreneurs willing to contact more groups

for work-related help have a higher likelihood of high work satisfaction. For each additional group the likelihood increases by 15.3%. Second, entrepreneurs with (former) entrepreneurs among family member have an increased likelihood of high work satisfaction of 45.4%. Interestingly, the two related variables – the number of groups with frequent contact and having (former) entrepreneurs among friends – seem not to be important for work satisfaction. Hence, in accordance with theory, being extrovert when it comes to asking for help and being able to get moral and professional support from family role models seem to be very important factors, not just for new venture survival, but also for satisfaction as an entrepreneur.

The natural next step would be to compare the influence of having an entrepreneurial profile – measured by work values and personality traits – for work satisfaction in both entrepreneurship and employment; since these two coefficients are significant in both Table 7 and 8. However, comparing coefficients from logit and probit models (with statistical tests) is not straight forward as it is when dealing with OLS models. An easy solution implemented in Hoetker (2006) – with interpretive value for this study – is not to compare one coefficient between two groups, e.g. β_1^A with β_1^B, but to compare the ratio of two coefficients between two groups, e.g. β_1^A/β_2^A and β_1^B/β_2^B. This can be done by comparing the trade-off between earnings difference (predicted minus actual earnings) on the one side and work values and personality traits on the other side. The former has a negative effect on work satisfaction while the latter two have a positive effect on work satisfaction; both in Table 7 and 8[3]. For employees, the negative effect on work satisfaction of an increased earnings difference of 100% is just offset by having intrinsically work values (ratio=0.99). On the contrary, the negative effect of the increased earnings difference is more than offset by having intrinsically work values for entrepreneurs (ratio=3.5). Conducting the same analysis on personality traits, a similar pattern can be seen. For entrepreneurs, the negative effect of the increased earnings difference is just offset by having an additional entrepreneurial traits (ratio=1.0) while this is not the case for employees (ratio=0.4). Hence, comparing the size of the coefficients for work values and personality traits across the two groups could lead to a misleading conclusion: an entrepreneurial profile leads to more satisfaction in employment. This seems not to be the case but more research in this area is needed.

[3]The coefficient for earnings difference is not significant in Table 7 (employees) but in Model 5 (one of the two models of interest) it is very close to being significant on 10%-level (p=0.113). Based on the smaller sample size of employees and the need to include two coefficients from the same sample, the comparisons are conducted.

Discussion

Surprisingly, entrepreneurial characteristics are found not to have an influence on earnings in entrepreneurship but, nevertheless, to have a positive and significant influence on earnings in employment. Thus, Hypothesis 1a is rejected while 2b is not. Hence, entrepreneurial individuals are monetary rewarded in employment, although, initial findings show that entrepreneurial individuals are less likely to pursue job opportunities in established firms. On the contrary, it takes more than an entrepreneurial mindset to survive "the valley of death" as well as achieving a high income from the new venture. Only working hard, measured by possible work-family conflict, seems to be of great importance for survival. Nevertheless, the self-selection into venturing for entrepreneurial individuals could be justified by a better fit of these individuals as entrepreneurs. The results, however, show that although individuals with entrepreneurial traits and work values are more likely to be highly satisfied among the entrepreneurs, the same is evident among the employees. This supports Hypothesis 2a while 2b is rejected. Still, having entrepreneurial characteristics means being willing to forego more earnings in entrepreneurship than in employment, holding work satisfaction constant. Overall, it seems that entrepreneurial individuals are no worse off in working for an established business, although it is less likely that they will make this choice.

The only indicators for human capital that are generally significant in all analysis are years of further education and unemployment history. These indicators represent possibilities on the labour market where highly educated individuals often are in high demand while individuals with long periods of unemployment often lack the skills and abilities demanded. First, Hypothesis 3a and 3b, concerning earnings, can not be rejected. Although, the period of unemployment has a negative impact on earnings in both entrepreneurship and employment, more education only increases earnings for employees. Second, Hypothesis 4a can not be rejected as entrepreneurs with more education – possibly due to the higher opportunity cost measured in foregone earnings – are less satisfied than entrepreneurs with less education. Hypothesis 4b can be rejected for education while it can not for unemployment; employees with a longer history of unemployment are less likely to be satisfied. In general, the findings concerning human capital are as expected. If comparing these results with the decision to enter entrepreneurship, the higher likelihood of start-up for unemployed individuals can only be justified by work satisfaction. Furthermore, the likelihood of start-up is not dependent on education, even though individuals with more education ought to enter entrepreneurship to a lesser extent; assessing oppor-

tunity cost both in terms of earnings and work satisfaction.

The social network is assumed to be important for earnings both for entrepreneurs and employees. For entrepreneurs, the network is crucial for motivation, moral support, and getting access to vital resources for venturing (i.e. information, customers and suppliers, and capital and labour) while employees receive valuable information (e.g. about attractive job openings). Furthermore, both groups can benefit from including network ties in meeting work-related challenges. Surprisingly, Hypothesis 5a is rejected and 5b only weakly supported. None of the network indicators increase earnings for the entrepreneurs while only one, contact willingness, is significant and positive for employees. However, it should be noted that the prerequisite for high entrepreneurial earnings are surviving "the valley of death" which is positively influenced by all network indicators. The benefits of the network in entrepreneurship can also be seen when turning to work satisfaction. As expected, being willing to contact others for work-related help and having entrepreneurial role models among family members – giving access to both moral and professional support – increase the likelihood of high satisfaction among the entrepreneurs. These effects are not found among employees. Hence, Hypothesis 6a can not be rejected while Hypothesis 6b can. The strong link between social capital indicators and the likelihood of starting a business therefore seem to be justified; both when it comes to survival and satisfaction.

The main findings of this study are that entrepreneurship does seem to be a networking activity while individuals with entrepreneurial characteristics, contrary to conventional wisdom, seem to be better rewarded in employment. This has important policy implications as the focus often is on generating more new ventures by promoting entrepreneurial behaviour, intrinsic work values, and positive attitudes towards entrepreneurship. This seems not be a wrong strategy in innovation driven economies but more research is needed on how acting entrepreneurial affects society level outcomes – as well as firm and individual level outcomes – depending on whether the individual chooses to act entrepreneurial in their own firm or in an established firm. This also needs to be explored further for the role of education in light of the recent political focus on academic entrepreneurship. This study emphasises significant opportunity costs for highly educated entrepreneurs but opposite findings are present in the few existing studies.

The advantage of this study is the inclusion of indicators from all three categories of entrepreneurial means – personal characteristics, human capital,

and social capital – in analyses based on representative samples of both first-time entrepreneurs and employees with no previous entrepreneurial experience. However, because the survey uncovering personal characteristics and network is not longitudinal, conclusions about causality are questionable. The most notable example is the positive, although weak, relationship between having (former) entrepreneurs among friends and earnings for entrepreneurs. One explanation is that these friends possess valuable knowledge which causes better firm performance and, thus, higher earnings for the entrepreneur. However, the causality might be the opposite. Entrepreneurs behind high performing ventures are more attractive to other entrepreneurs than low performing entrepreneurs. This problem is recognised in the literature but studies of how the social network of the entrepreneur changes, depending on firm performance, are yet to be seen. Concerning the indicators for personal characteristics, reverse causality could also be present for values, which can change over time, but personality traits, however, are assumed to be stable; especially after the age at which the majority of individuals choose to start up a new venture. Finally, it should be noted that longitudinal data where the same individual is observed in both entrepreneurship and employment – regarding earnings, work satisfaction, and entrepreneurial means – would remedy the potential bias caused by unobservable individual characteristics.

Conclusion

Numerous studies within a broad range of disciplines have tried to establish a relationship between individual resources and founding, surviving, and growing a new venture. The current study contributes to this literature by assessing whether the decision to found a new venture for the first time is the right one based on individual resources and work-life success: earnings and work satisfaction. The general consensus is that entrepreneurs earn less than employees but, nevertheless, express higher work satisfaction. Accordingly, more individuals should found a new venture. Interpreting individual resources broadly by personal charectaristics, human capital, and social capital, this study initially finds that entrepreneurs differ from employees regarding personal characteristics and network. But surprisingly, individuals with entrepreneurial characteristics are found to be no worse of in employment in an innovation driven economy while individuals with more social capital, as expected, are better off in entrepreneurship. Finally, high education seems to provide a significant opportunity cost for entrepreneurship which should be explored further in future research.

References

Agarwal, R., Echambadi, R., Franco, A. M., and Sarkar, M. B. (2004). Knowledge transfer through inheritance: Spin-out generation, development, and survival. *Academy of Management Journal*, 47(4):501–522.

Aldrich, H. and Zimmer, C. (1986). Entrepreneurship through social networks. In *The Art and Science of Entrepreneurship*. Ballinger Publishing Company.

Andersen, E. S. (2007). Schumpeter's evolution - emergence and extension of a dramatic theory of economic and social evolution as reflected in his major books. Forthcoming book.

Blanchflower, D. G. and Oswald, A. J. (1998). What makes an entrepreneur? *Journal of Labor Economics*, 16(1):26–60.

Borjas, G. J. (2005). *Labor Economics*. McGraw-Hill.

Bosma, N., Hessels, J., Schutjens, V., Praag, M. V., and Verheul, I. (2011a). Entrepreneurship and role models. *Journal of Economic Psychology*, pages 1–15.

Bosma, N. and Nieuwenhuijsen, H. (2002). Turbulence and productivity; an analysis of 40 dutch regions in the period 1988-1996. SCALES-paper N200205, Zoetermeer, August 2002.

Bosma, N. S., Stam, E., and Wennekers, S. (2011b). Intrapreneurship versus independent entrepreneurship: A cross-national analysis of individual entrepreneurial behavior. *Discussion Paper Series/Tjalling C. Koopmans Research Institute*, 11(04):1–32.

Brüderl, J. and Preisendörfer, P. (1998). Network support and the success of newly founded businesses. *Small Business Economics*, 10(3):213–225.

Burt, R. (2000). The network entrepreneur. In *Entrepreneurship - The Social Science View*. Oxford University Press.

Carree, M., van Stel, A., Thurik, R., and Wennekers, S. (2002). Economic development and business ownership: An analysis using data of 23 oecd countries in the period 1976-1996. *Small Business Economics*, 19(3):271–290.

Carree, M. A. and Thurik, A. R. (2003). *Handbook of Entrepreneurship Research - An Interdisciplinary Survey and Introduction*, chapter The Impact on Entrepreneurship on Economic Growth. Springer.

Caves, R. E. (1998). Industrial organization and new findings on the turnover and mobility of firms. *Journal of Economic Literature*, 36(4):1947–1982.

Cromie, S. (2000). Assessing entrepreneurial inclinations: Some approaches and empirical evidence. *European Journal of Work and Organizational Psychology*, 9(1):7–30.

Dahl, M., Jensen, P., and Nielsen, K. (2009). *Jagten på fremtidens nye vækstvirksomheder*. Jurist- og Økonomforbundets Forlag.

de Vries, M. F. R. K. (1977). The entrepreneurial personality: A person at the crossroads. *Journal of Management Studies*, 14(1):34–57.

Dubini, P. and Aldrich, H. (1991). Personal and extended networks are central to the entrepreneurial process. *Journal of Business Venturing*, 6(5):305–313.

Fagin, L. and Little, M. (1984). *The forsaken families: The effects of unemployment on family life*. Harmondsworth: Penguin Books.

Furnham, A. (1990). *The Protestant Work Ethic: The Psychology of Work-Related Beliefs and Behaviours*. Routledge.

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *The American Journal of Sociology*, 91(3):481–510.

Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6):1360–1380.

Granovetter, M. S. (1995). *Getting a job - A study of contacts and careers (2nd edition)*. The University of Chicago Press.

Haltiwanger, J., Jarmin, R. S., and Miranda, J. (2010). Who creates jobs? small vs. large vs. young. US Census Bureau Center for Economic Studies Paper No. CES-WP-10-17.

Hamilton, B. H. (2000). Does entrepreneurship pay? an empirical analysis of the returns to self-employment. *Journal of Political Economy*, 108(3):604–631.

Hanlon, D. and Saunders, C. (2007). Marshaling resources to form small new ventires: Toward a more holistic understanding of entrepreneurial support. *Entrepreneurship Theory and Practice*, 31(4):619–641.

Hartog, J., van Praag, C. M., and van der Sluis, J. (2010). If you are so smart, why aren't you an entrepreneur? returns to cognitive and social ability: Entrepreneurs versus employees. *Journal of Economics and Management Strategy*, 19(4):947–989.

Hisrich, R., Peters, M., and Shepherd, D. (2005). *Entrepreneurship*. McGraw-Hill.

Hoetker, G. (2006). Do modular products lead to modular organizations? *Strategic Management Journal*, 27:501–518.

Hornsby, J. S., Naffziger, D. W., Kuratko, D. F., and Montagno, R. V. (1993). An interactive model of the corporate entrepreneurship process. *Entrepreneurship Theory and Practice*, 17:29–37.

Hundley, G. (2001). Why and when are the self-employed more satisfied with their work? *Industrial Relations*, 40(2):293–316.

Ibsen, R. and Westergaard-Nielsen, N. (2011). Job creation by firms in denmark. IZA Discussion Paper No. 5458.

Kalleberg, A. (1977). Work values and job rewards: A theory of job satisfaction. *American Sociological Review*, 42(1):124–143.

Kirby, D. (2003). *Entrepreneurship*. McGraw-Hill.

Landström, H. (1999). The roots of entrepreneurship research.

Landström, H. (2010). *Pioneers in Entrepreneurship and Small Business Research*. Springer.

Levenson, H. (1973). Multidimensional locus of control in psychiatric patients. *Journal of Consulting and Clinical Psychology*, 41(3):397–404.

Levy, P. S. and Lemeshow, S. (2008). *Sampling of populations: Methods and applications*. Wiley.

McClelland, D. C. (1961). *The Achieving Society*. Princeton NJ: Van Nostrand.

Nanda, R. and Sørensen, J. B. (2010). Workplace peers and entrepreneurship. *Management Science*, 56(7):1116–1126.

Nielsen, S. L., Klyver, K., Evald, M., and Bager, T. (2009). *Entreprenørskab i teori og praksis - Paradokser i spil*. IDEA.

Parasuraman, S. and Simmers, C. A. (2001). Type of employment, work-family conflict and well-being: A comparative study. *Journal of Organizational Behavior*, 22(5):551–568.

Parker, S. C. (2004). *The Economics of Self-Employment and Entrepreneurship*. Cambridge University Press.

Phillips, D. J. (2002). A genealogical approach to organizational life chances: The parent-progeny transfer among Silicon Valley law firms, 1946-1996. *Administrative Science Quarterly*, 47(3):474–506.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80(1):1–28.

Sarasvathy, S. D. (2004). The questions we ask and the questions we care about: reformulating some problems in entrepreneurship research. *Journal of Business Venturing*, 19(5):707–717.

Schumpeter, J. A. (1962 [1934]). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Cambridge: Harvard University Press.

Shane, S. (2003). *A general theory of entrepreneurship: The individual-opportunity nexus*. Northampton, MA: Edward Elgar.

Simon, H. A. (1996). *The Sciences of the Artificial*. MIT Press Ltd.

van Praag, C. M. (2005). *Successful Entrepreneurship*. Edward Elgar.

Indicator	Description	Imputations
Personal characteristics		
Intrinsic motivation	Dummy: The value 1 if the respondent finds more intrinsic values "very important" compared to extrinsic values if the respondent were to say yes to a new job. 8 intrinsic values (e.g. "the work entails responsibility", "the work tasks are varying", "you can work independently", and "you can strengthen skills and abilities") and 8 extrinsic values (e.g. "the work provides a high income", "the work is a good stepping stone for my further career", "the work tasks are tailored to the working hours", and "the colleagues show a personal interest in me" are included. The extrinsic values covers the financial, career, convenience, and co-worker dimension with two values for each.	79 - 6%
Value-orientation	Dummy: The value 1 if the respondent disagrees with the statement "Work is mainly an economic necessity" and furthermore agrees with at least one of the following three statements: "Work is the best way to develop skills and abilities", "Without work you often become lazy", or "You identify with your work".	44 - 4%
Work-Family conflict	Dummy: The value 1 if the respondent "regularly" (compared to "occasionally", "rarely", and "never") within the last 5 years because of their work have done at least one of the following three things: "Neglected family gatherings", "Neglected your work tasks at home", or "Worked in your vacation or on days off".	29 - 2%
Entrepreneurial traits	Discrete: The number of entrepreneurial traits that the respondent posses derived from 12 mixed and reversed statements related to the six traits: Tolerance of ambiguity (e.g. "I often pursue the attractive but uncertain opportunities"), need for achievement (e.g. "I prefer result-oriented and innovatory tasks"), locus of control "I think that success is the result of hard work", optimism (e.g. "I always expect the best outcome of a situation", desire for autonomy ("I like to determine myself how tasks are completed"), and creativity or innovativeness ("I often think of new ideas and ways to solve tasks"). The value 1 is given for each trait if there is agreement and disagreement with the two reversed statements.	48 - 4%
Human capital		
Further education	Discrete: Highest achieved education in 2007 measured in years (based on the minimum number of years possible to achieve the education). The present compulsory number of years in elementary school is deducted (i.e. nine years). The variable can range from -X (i.e. less than present compulsory elementary school) to 11 (i.e. doctoral degree). For the entrepreneurs (start-up in 2004) the year used is 2003.	0 - 0%
Industry experience - Years	Discrete: The number of years in the period 1997-2006 that the individual worked in the same industry as the present in 2007. Hence, the variable can range from 0 to 10. For the entrepreneurs (start-up in 2004) the period is 1994-2003.	0 - 0%
Industry experience - Number	Discrete: The number of different industries (6 digit level) in the period 1997-2006 that the individual has worked in. Hence, the variable can range from 0 to 10. For the entrepreneurs (start-up in 2004) the period is 1994-2003.	0 - 0%
Unemployment - Number	Continuous: The natural logaritm to the total weeks of unemployment in the period in the period 1997-2006. For the entrepreneurs (start-up in 2004) the period is 1994-2003.	0 - 0%
Networks		
Contact frequency	Discrete: The number of different groups that the respondent talks to every or almost every week (including over telephone, mail, social network software, etc.). The four different groups included are: "Present colleagues or business relations outside of the work place", "Persons mainly known as former colleagues or business relations", "Persons mainly known as former schoolmates or fellow students", and "Persons mainly known from associations (e.g. sport and leisure).	36 - 3%
Contact willingness	Discrete: The number of different groups that the respondent "to a great extent" (compared to "some extent" and "not at all") would be willing to contact for work-related help (i.e. "Would you contact one of these persons if that person could help you with an important work task") . The four different groups included are: "Present colleagues or business relations outside of the work place", "Persons mainly known as former colleagues or business relations", "Persons mainly known as former schoolmates or fellow students", and "Persons mainly known from associations (e.g. sport and leisure).	22 - 2%
Family entrepreneurs	Dummy: The value 1 if the respondent if one or more of the following family member are running, or have been running, their own business as their main occupation: Close family (i.e. spouse/partner, parents, siblings, and children) or other family.	27 - 2%
Friends entrepreneurs	Dummy: The value 1 if the respondent if one or more among the following groups of friends are running, or have been running, their own business as their main occupation: Present colleagues, former colleagues, or other friends/acquaintances.	53 - 4%

Table 1: Indicators for human capital and start-up strategy from IDA and the survey.

	Number of individuals in:		
Strata	Population	Sample	Respondents (rate)
Entrepreneurs	7,250	4,389	1,384 (32%)
Non-entrepreneurs	2,712,525	1,514	606 (40%)
Total	2,719,775	5,903	1,990 (34%)

Table 2: Survey population, sample, and response population.

Variable	Coefficient
Age	0.045**
	(0.004)
Age2	-0.000**
	(0.000)
Female	-0.210**
	(0.014)
Non-Danish	-0.184**
	(0.029)
Married	0.030*
	(0.013)
21 Region D	YES
10 Industry D	YES
R-squared	0.07
Observations	10000

Note: **, *, and † is significant at the 1%, 5%, and 10% level, respectively.

Table 3: OLS regression with the natural logaritm to 2007 earning as dependent variable. Negative values are set to 0. Control variables included (but not shown) are 21 labour market regions and 10 industries.

	Model 1	**Model 2**	**Model 3**	**Model 4**
Education Y*	0.039			
	(0.031)			
Experience Y*		-0.173**		
		(0.019)		
Experience N*			0.196**	
			(0.058)	
Unemployment*				0.099*
				(0.045)
Controls	YES	YES	YES	YES
Pseudo R^2	0.06	0.12	0.07	0.06
Log-likelihood	-629	-587	-624	-627
Observations	1254	1254	1254	1254
	Model 5	**Model 6**	**Model 7**	**Model 8**
Intrinsic	0.636**			
	(0.153)			
Value		0.725**		
		(0.158)		
Conflict			1.076**	
			(0.154)	
Traits				0.324**
				(0.050)
Controls	YES	YES	YES	YES
Pseudo R^2	0.07	0.07	0.10	0.09
Log-likelihood	-621	-618	-603	-607
Observations	1254	1254	1254	1254
	Model 9	**Model 10**	**Model 11**	**Model 12**
Frequency	0.160*			
	(0.075)			
Willingness		0.304**		
		(0.062)		
Family E			1.013**	
			(0.156)	
Friends E				1.257**
				(0.171)
Controls	YES	YES	YES	YES
Pseudo R^2	0.06	0.08	0.09	0.10
Log-likelihood	-627	-616	-609	-603
Observations	1254	1254	1254	1254

Note: **, *, and † is significant at the 1%, 5%, and 10% level, respectively.

Table 4: Logistic regression for the likelihood of starting a business for the first-time in 2004. Control variables (2004) included (but not shown) are Female, Age, Age2, Non-Danish, Married, Income (ln 2003).

	Model 1	Model 2	Model 3	Model 4
Predicted	0.766**	0.886**	0.877**	0.794**
	(0.113)	(0.121)	(0.121)	(0.116)
Education Y	0.046**			
	(0.007)			
Experience Y		-0.002		
		(0.005)		
Experience N			0.001	
			(0.014)	
Unemployment				-0.055**
				(0.012)
Constant	2.859*	1.553	1.656	2.755†
	(1.422)	(1.525)	(1.536)	(1.475)
R^2	0.27	0.16	0.16	0.22
Observations	282	282	282	282
	Model 5	**Model 6**	**Model 7**	**Model 8**
Predicted	0.851**	0.862**	0.891**	0.830**
	(0.119)	(0.117)	(0.116)	(0.114)
Intrinsic	0.077*			
	(0.036)			
Value		0.135**		
		(0.039)		
Conflict			0.153**	
			(0.038)	
Traits				0.063**
				(0.012)
Constant	1.937	1.807	1.432	2.136
	(1.501)	(1.477)	(1.467)	(1.439)
R^2	0.18	0.20	0.21	0.24
Observations	282	282	282	282
	Model 9	**Model 10**	**Model 11**	**Model 12**
Predicted	0.875**	0.876**	0.879**	0.865**
	(0.119)	(0.117)	(0.119)	(0.118)
Frequency	0.013			
	(0.018)			
Willingness		0.048**		
		(0.015)		
Family E			-0.016	
			(0.036)	
Friends E				0.071†
				(0.037)
Constant	1.668	1.615	1.636	1.761
	(1.506)	(1.482)	(1.509)	(1.499)
R^2	0.16	0.19	0.16	0.17
Observations	282	282	282	282

Note: **, *, and † is significant at the 1%, 5%, and 10% level, respectively.

Table 5: OLS regression with the natural logaritm to 2007 earning as dependent variable. Negative values are set to 0. Sample of 282 full-time equivalent employees.

	Model 1	Model 2	Model 3	Model 4
Predicted	2.914**	2.970**	2.993**	2.728**
	(0.584)	(0.573)	(0.573)	(0.576)
Education Y*	0.034			
	(0.038)			
Experience Y*		0.030		
		(0.024)		
Experience N*			-0.042	
			(0.062)	
Unemployment*				-0.150**
				(0.049)
Constant	-24.819**	-25.468**	-25.557**	-22.081**
	(7.392)	(7.285)	(7.304)	(7.341)
R^2	0.04	0.04	0.04	0.06
Observations	635	635	635	635
	Model 5	**Model 6**	**Model 7**	**Model 8**
Predicted	3.015**	3.002**	3.001**	2.896**
	(0.574)	(0.572)	(0.572)	(0.579)
Intrinsic	0.001			
	(0.209)			
Value		0.196		
		(0.173)		
Conflict			-0.228	
			(0.170)	
Traits				0.071
				(0.054)
Constant	-25.957**	-25.855**	-25.639**	-24.609**
	(7.287)	(7.276)	(7.276)	(7.348)
R^2	0.04	0.04	0.04	0.04
Observations	635	635	635	635
	Model 9	**Model 10**	**Model 11**	**Model 12**
Predicted	3.014**	3.013**	2.992**	2.891**
	(0.573)	(0.573)	(0.574)	(0.575)
Frequency	-0.018			
	(0.088)			
Willingness		0.017		
		(0.063)		
Family E			-0.158	
			(0.234)	
Friends E				0.486†
				(0.271)
Constant	-25.907**	-25.956**	-25.519**	-24.811**
	(7.287)	(7.283)	(7.309)	(7.292)
R^2	0.04	0.04	0.04	0.05
Observations	635	635	635	635

Note: **, *, and † is significant at the 1%, 5%, and 10% level, respectively.

Table 6: OLS regression with the natural logaritm to 2007 earning as dependent variable. Negative values are set to 0. Sample of 635 first-time entrepreneurs.

	Model 1	**Model 2**	**Model 3**	**Model 4**
Difference	-1.061*	-0.874†	-0.867†	-0.621
	(0.504)	(0.468)	(0.467)	(0.480)
Education Y	-0.070			
	(0.063)			
Experience Y		0.019		
		(0.035)		
Experience N			-0.066	
			(0.107)	
Unemployment				-0.244*
				(0.119)
Constant	-0.834**	-1.217**	-0.965**	-0.913**
	(0.285)	(0.246)	(0.275)	(0.170)
Pseudo R^2	0.01	0.01	0.01	0.02
Log-likelihood	-161	-161	-161	-159
Observations	282	282	282	282
	Model 5	**Model 6**	**Model 7**	**Model 8**
Difference	-0.748	-0.759	-1.094*	-0.559
	(0.473)	(0.476)	(0.493)	(0.489)
Intrinsic	0.738*			
	(0.313)			
Value		0.316		
		(0.305)		
Conflict			-0.594†	
			(0.337)	
Traits				0.217*
				(0.101)
Constant	-1.611**	-1.186**	-0.988**	-1.495**
	(0.271)	(0.167)	(0.161)	(0.240)
Pseudo R^2	0.03	0.01	0.02	0.02
Log-likelihood	-159	-161	-160	-159
Observations	282	282	282	282
	Model 9	**Model 10**	**Model 11**	**Model 12**
Difference	-0.828†	-0.763	-0.871†	-0.819†
	(0.468)	(0.475)	(0.466)	(0.470)
Frequency	0.211			
	(0.136)			
Willingness		0.127		
		(0.121)		
Family E			0.286	
			(0.288)	
Friends E				0.263
				(0.303)
Constant	-1.372**	-1.238**	-1.297**	-1.290**
	(0.230)	(0.194)	(0.242)	(0.258)
Pseudo R^2	0.02	0.01	0.01	0.01
Log-likelihood	-160	-161	-161	-161
Observations	282	282	282	282

Note: **, *, and † is significant at the 1%, 5%, and 10% level, respectively.

Table 7: Logistic regression with high work satisfaction in 2008 as dependent variable. Sample of 282 full-time equivalent employees.

	Model 1	Model 2	Model 3	Model 4
Difference	-0.126**	-0.116**	-0.118**	-0.110*
	(0.045)	(0.044)	(0.044)	(0.044)
Education Y*	-0.079*			
	(0.036)			
Experience Y*		0.025		
		(0.023)		
Experience N*			-0.013	
			(0.058)	
Unemployment*				-0.073
				(0.047)
Constant	0.515**	0.093	0.197	0.269*
	(0.181)	(0.103)	(0.172)	(0.105)
Pseudo R^2	0.02	0.01	0.01	0.01
Log-likelihood	-432	-434	-434	-433
Observations	635	635	635	635
	Model 5	**Model 6**	**Model 7**	**Model 8**
Difference	-0.118**	-0.115**	-0.117**	-0.112*
	(0.044)	(0.044)	(0.044)	(0.044)
Intrinsic	0.414*			
	(0.198)			
Value		0.429**		
		(0.166)		
Conflict			-0.121	
			(0.162)	
Traits				0.116*
				(0.052)
Constant	-0.164	-0.001	0.232†	-0.123
	(0.177)	(0.103)	(0.122)	(0.151)
Pseudo R^2	0.01	0.02	0.01	0.02
Log-likelihood	-432	-431	-434	-432
Observations	635	635	635	635
	Model 9	**Model 10**	**Model 11**	**Model 12**
Difference	-0.120**	-0.118**	-0.122**	-0.119**
	(0.044)	(0.044)	(0.045)	(0.045)
Frequency	0.133			
	(0.084)			
Willingness		0.142*		
		(0.061)		
Family E			0.374†	
			(0.222)	
Friends E				-0.050
				(0.258)
Constant	-0.031	-0.050	-0.151	0.209
	(0.147)	(0.122)	(0.204)	(0.244)
Pseudo R^2	0.01	0.02	0.01	0.01
Log-likelihood	-433	-432	-433	-434
Observations	635	635	635	635

Note: **, *, and † is significant at the 1%, 5%, and 10% level, respectively.

Table 8: Logistic regression with high work satisfaction in 2008 as dependent variable. Sample of 635 first-time entrepreneurs.

	Model 1	**Model 2**	**Model 3**	**Model 4**
Education Y*	0.023			
	(0.042)			
Experience Y*		0.014		
		(0.025)		
Experience N*			-0.063	
			(0.066)	
Unemployment*				-0.176**
				(0.051)
Constant	8.790**	8.802**	9.120**	8.387**
	(2.148)	(2.147)	(2.166)	(2.130)
Controls	YES	YES	YES	YES
R^2	0.12	0.12	0.12	0.14
Observations	635	635	635	635
	Model 5	**Model 6**	**Model 7**	**Model 8**
Intrinsic	0.025			
	(0.211)			
Value		0.199		
		(0.178)		
Conflict			-0.235	
			(0.173)	
Traits				0.060
				(0.057)
Constant	8.812**	8.623**	9.137**	8.682**
	(2.154)	(2.153)	(2.155)	(2.150)
Controls	YES	YES	YES	YES
R^2	0.12	0.12	0.12	0.12
Observations	635	635	635	635
	Model 9	**Model 10**	**Model 11**	**Model 12**
Frequency	-0.046			
	(0.091)			
Willingness		-0.006		
		(0.064)		
Family E			-0.168	
			(0.235)	
Friends E				0.267
				(0.278)
Constant	8.896**	8.841**	8.946**	8.709**
	(2.150)	(2.149)	(2.152)	(2.149)
Controls	YES	YES	YES	YES
R^2	0.12	0.12	0.12	0.12
Observations	635	635	635	635

Note: **, *, and † is significant at the 1%, 5%, and 10% level, respectively.

Table 9: OLS regression with the natural logaritm to 2007 earning as dependent variable. Negative values are set to 0. Control variables included (but not shown) are Female, Age, Age2, Non-Danish, Married, Labour market region (21 categories), and Industry (10 categories). Sample of 635 first-time entrepreneurs.

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	Model 1	**Model 2**	**Model 3**	**Model 4**
Education Y*	0.023			
	(0.041)			
Experience Y*		0.014		
		(0.025)		
Experience N*			-0.063	
			(0.064)	
Unemployment*				-0.177**
				(0.050)
Constant	8.726**	8.738**	9.056**	8.312**
	(2.114)	(2.114)	(2.128)	(2.095)
Controls	YES	YES	YES	YES
Log-likelihood	-1903	-1902	-1902	-1896
Observations	972	972	972	972
	Model 5	**Model 6**	**Model 7**	**Model 8**
Intrinsic	0.030			
	(0.206)			
Value		0.199		
		(0.173)		
Conflict			-0.215	
			(0.185)	
Traits				0.060
				(0.056)
Constant	8.731**	8.557**	9.024**	8.622**
	(2.119)	(2.118)	(2.140)	(2.116)
Controls	YES	YES	YES	YES
Log-likelihood	-1902	-1902	-1888	-1902
Observations	972	972	972	972
	Model 9	**Model 10**	**Model 11**	**Model 12**
Frequency	-0.042			
	(0.092)			
Willingness		-0.003		
		(0.064)		
Family E			-0.162	
			(0.236)	
Friends E				0.273
				(0.274)
Constant	8.842**	8.770**	8.903**	8.656**
	(2.136)	(2.122)	(2.135)	(2.125)
Controls	YES	YES	YES	YES
Log-likelihood	-1898	-1900	-1900	-1901
Observations	972	972	972	972

Note: **, *, and † is significant at the 1%, 5%, and 10% level, respectively.

Table 10: Main equations from a Heckman selection model. The natural logaritm to earnings 2007 is dependent variable in the main equation and survival 2004-2008 is dependent variable in the selection equation. Control variables included (but not shown) are Female, Age, Age2, Non-Danish, Married, Labour market region (21 categories), and Industry (10 categories). Sample of 972 first-time entrepreneurs in the selection equation and 635 survived entrepreneurs in the main equation.

	Model 1	**Model 2**	**Model 3**	**Model 4**
Wealth - ln	0.015*	0.015†	0.015†	0.015†
	(0.008)	(0.008)	(0.008)	(0.008)
Education Y*	-0.004			
	(0.021)			
Experience Y*		0.010		
		(0.013)		
Experience N*			-0.014	
			(0.034)	
Unemployment*				-0.027
				(0.026)
Constant	-0.538	-0.539	-0.464	-0.566
	(1.071)	(1.072)	(1.085)	(1.073)
Controls	YES	YES	YES	YES
Log-likelihood	-1903	-1902	-1902	-1896
Observations	972	972	972	972
	Model 5	**Model 6**	**Model 7**	**Model 8**
Wealth - ln	0.015*	0.015*	0.016*	0.015*
	(0.008)	(0.008)	(0.008)	(0.008)
Intrinsic	0.141			
	(0.107)			
Value		-0.020		
		(0.092)		
Conflict			0.475**	
			(0.092)	
Traits				-0.004
				(0.030)
Constant	-0.664	-0.514	-1.117	-0.525
	(1.075)	(1.077)	(1.084)	(1.075)
Controls	YES	YES	YES	YES
Log-likelihood	-1902	-1902	-1888	-1902
Observations	972	972	972	972
	Model 9	**Model 10**	**Model 11**	**Model 12**
Wealth - ln	0.015†	0.015*	0.015†	0.015†
	(0.008)	(0.008)	(0.008)	(0.008)
Frequency	0.152**			
	(0.047)			
Willingness		0.089*		
		(0.035)		
Family E			0.280*	
			(0.116)	
Friends E				0.247†
				(0.132)
Constant	-0.839	-0.781	-0.724	-0.703
	(1.079)	(1.074)	(1.077)	(1.073)
Controls	YES	YES	YES	YES
Log-likelihood	-1898	-1900	-1900	-1901
Observations	972	972	972	972

Note: **, *, and † is significant at the 1%, 5%, and 10% level, respectively.

Table 11: Selection equations from a Heckman selection model. The natural logaritm to earnings 2007 is dependent variable in the main equation and survival 2004-2008 is dependent variable in the selection equation. Control variables included (but not shown) are Female, Age, Age2, Non-Danish, Married, Labour market region (21 categories), and Industry (10 categories). Sample of 972 first-time entrepreneurs in the selection equation and 635 survived entrepreneurs in the main equation.