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# WORKING PAPER

# The impact of human and social capital on entrepreneurs' knowledge of finance alternatives*

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October 2009
2009/617

* We thank the Flemish Policy Research Centre for Entrepreneurship and International Entrepreneurship for financial support. This paper benefited from presentation at the 2009 Babson College Entrepreneurship Research Conference (Babson, MA). A preliminary version of this research is accepted for publication in the 2009 Frontiers of Entrepreneurship Research.

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D/2009/7012/69

# The impact of human and social capital on entrepreneurs' knowledge of finance alternatives[*]

*by Arnout Seghers, Sophie Manigart and Tom Vanacker*

*This paper examines how entrepreneurs' human and social capital influence their knowledge of finance alternatives. For this purpose, we use survey data from 125 Belgian start-ups. Results demonstrate that entrepreneurs with a business education and entrepreneurs with experience in accountancy or finance have a broader knowledge of finance alternatives. Having a strong network in the financial community further enhances the knowledge of finance alternatives. However, more generic human capital has almost no impact on the knowledge of finance alternatives. Overall, this study demonstrates how not only supply-side factors, but also demand-side factors may constrain entrepreneurs in their search for finance.*

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## *Introduction*

Finance is one of the necessary resources required for entrepreneurial ventures to form and subsequently develop (Gilbert et al. 2006). Finance decisions are hence key decisions made by entrepreneurs, which bear significant implications for the operations, risk of failure, performance and future growth potential of ventures (Michaelas et al. 1999; Cassar 2004). Traditional finance theory resorts to the framework of perfect capital markets (Modigliani and Miller 1958). This framework assumes that information is free and directly available to all entrepreneurs, which allows entrepreneurs to make comprehensive finance decisions with wealth maximization as their ultimate goal (Brealey and Myers 2000). Moreover, in this perspective, the supply and demand for finance are in equilibrium, which implies that all value-creating projects will find sufficient finance. Contrary to this image portrayed in traditional finance theory, entrepreneurial ventures are often confronted with finance constraints and are not able to raise sufficient outside finance necessary to conduct all their value-creating investment projects (Himmelberg and Petersen 1994; Hubbard 1998). As a result, the growth of entrepreneurial ventures is often restricted by internal finance (Carpenter and Petersen 2002).

Scholars studying finance constraints within entrepreneurial ventures have largely stressed supply-side arguments, thereby putting the decision-making process of investors in the foreground. Within this perspective, prior research

mainly focused on the role of information asymmetries and transaction costs in explaining why investors may refrain from investing in value-creating entrepreneurial ventures (Berger and Udell 1998). We argue that finance constraints may also be driven by demand-side factors, and more specifically by the characteristics of entrepreneurs. Research on demand-side arguments, which puts the decision-making process of entrepreneurs in the foreground, is more limited but growing rapidly. Entrepreneurs are the driving force of important decisions and entrepreneurial characteristics may hence play an important role in explaining finance decisions (Cassar 2004). For example, prior research demonstrates how many entrepreneurs have other goals besides value maximization. Entrepreneurs may be unwilling to raise outside equity because of fear of losing independence and control over their ventures (Manigart and Struyf 1997; Sapienza et al. 2003). Moreover, the limited risk tolerance of entrepreneurs may preclude them from raising outside debt finance.

This article focuses on another entrepreneurial characteristic that may restrain the finance alternatives considered by entrepreneurs, namely their knowledge of finance alternatives. Traditional finance theories implicitly assume that all entrepreneurs are fully aware of the existence of all potential finance alternatives and their respective advantages and disadvantages. However, recent studies indicate that entrepreneurs may also face finance constraints due to the existence of a knowledge gap. Van Auken (2001) showed that entrepreneurs of small

technology-based ventures are likely to consider only a restricted set of finance alternatives, due to their limited understanding of finance choices. The goal of this study is to expand this stream of research by explaining why some entrepreneurs have a higher knowledge of finance alternatives than others. More specifically, the impact of entrepreneurs' human and social capital on their knowledge of finance alternatives is explored. We propose and show that higher levels of specific human and social capital - that is more experience in accountancy or finance, business education and knowledgeable networks in the financial community - lead to a broader knowledge of finance alternatives. This may at least partially explain why entrepreneurs with high levels of human capital have less binding capital constraints when starting new businesses (Astebro and Bernhardt 2005).

In the following section, the theoretical arguments and hypotheses on the impact of human and social capital on an entrepreneur's knowledge of finance alternatives are developed. Next, the empirical strategy used to test the hypotheses is explained; the data and variables employed in this study are further described. Thereafter, the empirical findings are presented, followed by concluding remarks and avenues for future research.

## *Theoretical development*

While entrepreneurs are key decision makers shaping the entrepreneurial strategy within their ventures, the literature exploring the relationship between

entrepreneurial characteristics and finance strategies in entrepreneurial ventures is only emerging. In this paper, we explore the role of entrepreneurs' human and social capital. Prior research demonstrates how human capital and finance strategies are linked. First, human capital is positively related with the wealth of entrepreneurs. Hence, entrepreneurs with more human capital can use more of their personal funds to mitigate their venture's finance constraints (Holtz-Eakin et al. 1994; Lindh and Ohlsson 1996; Xu, 1998). Second, the human capital of entrepreneurs serves as a quality signal, which is valuable in an environment with high levels of information asymmetry (Hallen 2008). Both effects explain why ventures established by entrepreneurs with higher human capital generally have less binding capital constraints (Astebro and Bernhardt 2005).

We argue that the human capital of entrepreneurs may not only be associated with their personal wealth and quality signals, but also with their knowledge of finance alternatives. Financial theory typically assumes that entrepreneurs are fully aware of all finance alternatives and their characteristics. However, not all entrepreneurs have an equally broad understanding of the finance options that are available, leading to a knowledge gap (Gibson 1992). Hence, entrepreneurs are unaware of particular finance alternatives, limiting the set of finance options considered by entrepreneurs (Van Auken 2001). This may lead to suboptimal finance decisions and ultimately to finance constraints.

According to human capital theory, the ability to accumulate new knowledge provides individuals with superior cognitive abilities, which make them more productive and efficient in a range of activities (Becker 1964; Schultz 1980). The ability to accumulate new knowledge is positively related to the existing stock of knowledge (Cohen and Levinthal 1990), including both knowledge formally acquired through education, and knowledge tacitly acquired while accumulating experience in a particular domain (Dimov and Shepherd 2005).

A distinction is further made between generic and specific human capital (Becker 1975; Colombo and Grilli 2005; Dimov and Shepherd 2005). Generic human capital refers to the general knowledge acquired by entrepreneurs through both formal education and professional experience. Specific human capital relates to knowledge and capabilities that entrepreneurs can directly apply to the task at hand (Colombo and Grilli 2005; Dimov and Shepherd 2005).

We propose that entrepreneurs with higher levels of generic human capital will experience a lower knowledge gap of finance alternatives, compared to their peers with lower levels of generic human capital. More specifically, we expect a positive association between the level of education of entrepreneurs and their knowledge of finance alternatives. Highly educated entrepreneurs are expected to have a higher knowledge base, enabling them to easily acquire specific knowledge of finance alternatives. Furthermore, entrepreneurs with higher levels of prior experience may also have a greater knowledge of finance alternatives.

Entrepreneurs with prior work experience in the same industry of the new firm, for example, may have been confronted with industry-related finance practices. This leads to our first hypothesis:

H1: Entrepreneurs with higher levels of generic human capital have a greater knowledge of finance alternatives than entrepreneurs with lower levels of generic human capital.

Not all human capital has the same effects, however. An entrepreneur's specific human capital may be more valuable than his or her generic human capital in entrepreneurial start-ups (Cohen and Levinthal 1990; Colombo and Grilli 2005). In our research context, it is likely that entrepreneurs with a business education have a higher relevant knowledge base compared to entrepreneurs with higher non-business education or compared to entrepreneurs with less education. The broader knowledge base of entrepreneurs with a business education further enables them to more easily acquire other relevant knowledge. Further, entrepreneurs with previous work experience in accountancy or finance are more likely to have a broader and deeper knowledge of finance alternatives compared to entrepreneurs without experience in accountancy or finance. This leads to our second hypothesis:

H2: Entrepreneurs with higher levels of context specific human capital have a greater knowledge of finance alternatives than entrepreneurs with lower levels of context specific human capital.

Next to human capital, entrepreneurs can also learn about finance alternatives through their social capital. The central proposition in social capital theory refers to the ability of actors to extract benefits, for example information, from their social structures, networks and memberships (Lin et al. 1981; Portes 1998; Granovetter 1985; Adler and Kwon 2002; Putnam 2000). A high level of social capital of the entrepreneur in the form of relationships between individuals is useful in obtaining information that would otherwise be unavailable or costly to locate (Granovetter 1985). Relationships with relevant individuals and organizations provide an advantage to entrepreneurs through access to private information (Podolny 1994). We claim that knowledgeable relationships in the financial community, established before start-up, may also reduce information problems experienced by entrepreneurs, as they enable information transfer to entrepreneurs about potential finance alternatives and investor characteristics. For example, entrepreneurs that have relationships with bankers are able to discuss their specific financial needs with them, allowing entrepreneurs to gain a deeper understanding of finance alternatives. Relationships hence now reduce information asymmetries on the demand side of the market. This leads to our third hypothesis:

H3: Entrepreneurs with more ties in the financial community have a greater knowledge of finance alternatives than entrepreneurs with less ties in the financial community.

## *Research method*

### Data collection strategy

A random sample of 450 Flemish ventures founded between April 2008 and September 2008 was selected from the records of business incorporation as provided by the Flemish government. Given the homogeneous sample frame, non measured variance in terms of geographical location and age is reduced. Moreover, survivorship and recollection biases are limited by sampling ventures close to the period of formation (Cassar 2004).

Between mid November 2008 and mid January 2009, all ventures were telephoned in order to identify whether or not they fulfilled the conditions of our research. As the focus of the research is on real start-ups, 118 subsidiaries or companies that merely changed their legal form were excluded. Further, 44 start-ups were not interested in participating to our research. This resulted in a sample of 288 independent start-ups which were mailed a questionnaire. Several possibilities to complete and return the questionnaire were offered, including e-mail, fax, post, and web-survey. A total of 125 usable questionnaires were returned after telephone recalls (response rate of 38 percent). Comparing

characteristics of early and late respondents (for example, management experience, experience in the same industry and level of education) with Mann-Whitney tests and T-tests showed no significant differences between the two groups. This indicates that the sample does not suffer from nonresponse bias. The majority of respondents (84 percent) completed the questionnaire using the web-survey.

The questionnaire was developed based on previous research **(**Van Auken 2001) and was organized in three main sections. It was pretested through face-to-face interviews with entrepreneurs and slightly adapted to make it comprehensible for the target population. The first section collected information about the venture while the second section asked respondents to what degree they are familiar with finance alternatives. The third section of the questionnaire asked questions about prior experience, education and ties with finance experts of the entrepreneurs.

**Variables**

*Dependent variables.* A list of finance alternatives was composed based on the finance sources listed by Van Auken (2001) and government programs specific for the Flemish region. The knowledge of the respondent with respect to the different finance alternatives was measured on a six-point Likert scale ranging from -3 = unaware of the existence of a particular finance alternative to 3 = very extensive knowledge, with 0 indicating an average knowledge. Hence, negative

values represent below average knowledge of finance alternatives and positive values represent above average knowledge of finance alternatives.

An exploratory factor analysis allowed identifying groups of finance alternatives (see Table 1). The Kaiser-Meyer-Olkin measure is 0.868 and Bartlett's Test 0.000, implying that a factor analysis is meaningful. Only factors with an eigenvalue larger than one are included in further analysis. This procedure yields three factors, capturing 69 percent of the total variance after varimax rotation. The factors are broadly consistent with those identified by Van Auken (2001). Factor one captures the knowledge of five traditional and commonly used finance alternatives: Loans, Credit lines, Trade credit, Leasing and Friends and Family financing (Cronbach Alpha = 0.875). Factor two (Advanced finance alternatives for the start-up phase) captures the knowledge of four special finance alternatives specifically targeted towards start-ups (Cronbach's Alpha = 0.742). Besides Business Angels financing, three specific government measures (IWT-subsidy, Vinnof and ARKimedes) are included. Factor three captures the knowledge of five advanced finance alternatives specifically targeted towards growth oriented ventures: Public and Private equity, Bonds, Factoring and Venture capital (Cronbach Alpha = 0.887). Given the high Cronbach Alpha's of the three factors, these factors are used as variables in the multivariate analyses. The variables were calculated by adding the values for the items that compose the variables and dividing by the number of items.

**Insert Table 1 about here**

Table 2 gives the basic statistics of and correlations between the dependent, independent and control variables used in the multivariate analyses.

**Insert Table 2 about here**

The entrepreneurs' knowledge of all types of finance alternatives is limited to very limited: the three aggregated variables have a negative value. The best known financing methods are common finance alternatives such as bank loans and credit lines, but entrepreneurs feel insecure about their knowledge about these basic finance alternatives. The knowledge of the advanced finance alternatives is even worse. In particular, the advanced finance alternatives for the start-up phase are the least known by the entrepreneurs. It is worrying that most of the entrepreneurs are even unaware of the existence of the specific government programs targeted towards start-ups.

*Independent variables.* The key independent variables are correlates of the human and social capital of the founding entrepreneur. Specific human capital relates to the entrepreneur's education and experience that is valuable for the situation at hand (Dimov and Shepherd 2005), that is knowledge of finance. Following variables proxy for specific human capital: business education (dummy variable equal to one if the entrepreneur has a degree in business and zero otherwise) and number of years of work experience in accountancy or finance. Following variables proxy for generic human capital: higher education (dummy

variable equal to one if the entrepreneur has a university-level or equivalent degree and zero otherwise), number of years of work experience in the same industry, number of years of work experience in other industries, management experience (dummy variable equal to one if the entrepreneur previously held a management position in a company employing more than 100 people and zero otherwise), self-employment experience (dummy variable equal to one if the entrepreneur has prior self-employment experience and zero otherwise), start-up experience (dummy variable equal to one if the entrepreneur has prior start-up experience and zero otherwise).

Almost 72 percent of the entrepreneurs have a university-level or equivalent degree and 37 percent have a degree in the field of business. The average entrepreneur in our sample has approximately 9 years of previous work experience in the same industry and 6.5 years of previous work experience in other industries. Only 17 percent of the entrepreneurs have previous work experience in the field of accountancy or finance. Approximately one in five entrepreneurs have prior experience as a manager and about one in three entrepreneurs have previous self-employment or start up experience.

The social capital variable is measured with a six-item five-point Likert scale ranging from -2 = strongly disagree to +2 = strongly agree, about network ties between the entrepreneur and finance experts, based on the items of Shane and Cable (2002). A finance expert is each individual with correct and reliable

information about finance alternatives. The items are: “Prior to the company’s start-up, I had a professional relationship with at least one finance expert”; “Prior to the company’s start-up, at least one finance expert was someone with whom I had engaged in informal social activity (for example, playing tennis, going to the movies)”; “Prior to the company’s start-up, at least one finance expert was a personal friend”; “Someone whom I trust to discuss important confidential matters knew at least one finance expert”; “A third party whose judgement I trust can bring me in contact with a finance expert”; “Through my network of contacts, I could obtain information from a finance expert”.

An exploratory factor analysis is undertaken in order to identify whether all items were measuring the same construct. The Kaiser-Meyer-Olkin measure is 0.819 and Bartlett’s Test 0.000, implying that a factor analysis is meaningful. Only one factor with an eigenvalue larger than one was extracted, capturing 60 percent of the total variance. As a result, the six items above are measures for the same construct (Cronbach’s alpha = 0.863). The social capital variable is calculated by taking the average of the values for the six items.

*Control variables.* As entrepreneurs with high growth ambitions may have more thoroughly prepared the start-up of their venture and hence have acquired a better knowledge of finance alternatives, the expected growth rate is included as a control variable. This is measured as the target number of employees (in full time equivalents) 5 years after start-up. The average employment target equals

approximately 5 employees with a maximum of 90 employees. In order to further control for preparation, a dummy variable measures whether or not the entrepreneur performed formal financial planning before start-up. Almost all entrepreneurs (93 percent) claim that they performed formal financial planning before start-up. In addition, we distinguish between start-ups with and without external shareholders, with a dummy variable equal to one if there are external shareholders and 0 otherwise. If external shareholders are involved, the knowledge base is likely to be broader. Only 12 percent of the start-ups have external shareholders. In order to account for the initial size of the company, the natural logarithm of the start-up capital is included. Entrepreneurs setting up larger start-ups, may have a higher knowledge of finance alternatives. Finally, we control for industry effects. We created two industry dummy variables, “Wholesale and retail” and “Professional, scientific and technical activities”. Almost 60 percent of the start-ups are active in these two industries. The other industries represent each less than 10 percent of the sample. The correlations between the independent and control variables are not sufficiently large for multicollinearity to cause problems in the multivariate regressions.

## *Results*

The multivariate relationships between the independent and dependent variables are analyzed with Tobit regressions, as the dependent variables are censored (see Table 3). Panel A reports the model with the knowledge of common finance

methods as dependent variable, panel B reports the model explaining the knowledge of advanced start-up finance methods and panel C reports the model explaining the knowledge of advanced growth finance methods.

The coefficients of the control variables show that entrepreneurs with higher growth aspirations have a significantly higher knowledge of all finance alternatives. A higher level of start-up capital leads to a significantly higher knowledge of common finance techniques (Panel A; $p<0.05$). Interestingly, entrepreneurs of companies active in the industry of "Wholesale and retail" have a significantly lower knowledge of common finance techniques (Panel A; $p<0.1$) and advanced finance methods for the growth phase (Panel C; $p<0.05$). Entrepreneurs of companies active in the industry of "Professional, scientific and technical activities" have a significantly higher knowledge of advanced finance methods for the start-up phase (Panel B; $p<0.1$).

Specific human capital leads to a significantly higher knowledge of finance alternatives, especially of common finance alternatives and of advanced finance alternatives for the growth phase. More specifically, both business education and experience in accountancy or finance lead to significantly higher knowledge of common finance alternatives (Panel A; $p<0.05$) and advanced finance alternatives for the growth phase (Panel C; $p<0.001$). These results strongly support hypothesis 1.

The impact of general human capital is weaker. Experience in the same industry has a no impact on the knowledge of finance alternatives, but experience in other industries has a positive impact on the knowledge of common finance alternatives (Panel A; $p<0.05$). Unexpectedly, entrepreneurs with previous start-up experience have a lower knowledge of common finance alternatives (Panel A; $p<0.05$). Experience as a self-employed and overall management experience have no impact on an entrepreneur's knowledge of finance alternatives. Support for hypothesis 2 is hence weak.

**Insert Table 3 about here**

The effect of entrepreneurs' social capital is significant in several model specifications. Specifically, an entrepreneur having network ties with finance experts has a greater knowledge of the common finance alternatives (Panel A; $p<0.01$) and the advanced finance alternatives for the growth phase (Panel C; $p<0.05$). These findings provide support for hypothesis 3.

## *Discussion and conclusion*

While it is widely acknowledged that financial resource acquisition is a key process in the start-up and growth of new businesses, our understanding of this process is largely rooted in economic theories emphasizing wealth maximization as an overarching goal, rational behavior of all actors and information asymmetries. Theories building on the existence of information asymmetries

typically assume that (potential) investors are informationally constrained, which influences their selection processes. This paper highlights a second information asymmetry problem, namely the fact that entrepreneurs do not have full information of finance alternatives. This knowledge gap leads entrepreneurs to select these finance alternatives they are familiar with, potentially leading to suboptimal finance structures.

The main contribution of this paper lies in the finding that entrepreneurs with higher levels of specific human and social capital experience lower knowledge gaps. Especially specific human capital, that is a business education or previous experience in accountancy or finance, increases an entrepreneur's knowledge of finance alternatives. Generic human capital in the form of higher education or general experience has a more modest, but also positive impact. The impact of an entrepreneur's social capital at start-up is positive as well. Overall, we contribute to a further socializing of the finance acquisition process in entrepreneurial ventures, by demonstrating the key role of entrepreneurial characteristics on finance decisions in start-ups.

We have shown that entrepreneurs' knowledge of finance alternatives in general is rather limited. Even the knowledge of commonly used finance methods is limited. More complex finance options, specifically targeted towards growth-oriented ventures, are even less understood. The knowledge of finance methods targeted at start-ups is the least understood category. Moreover, the lack of

knowledge on specific government measures for start-ups is worrying, as these are specifically targeted towards the entrepreneurs represented in the sample. These findings are broadly consistent with Van Auken (2001) for U.S. entrepreneurs.

A methodological strength of this study is that all social and human capital variables are measured at start-up, hence eliminating survival and recall biases. It would be interesting to add a longitudinal dimension to the current research. This would allow understanding how the initial knowledge gap influences subsequent finance and growth processes. Is the knowledge gap of an entrepreneur at start-up a major hindrance in the development of the start-up, or is the entrepreneur able to overcome this liability through subsequent learning and experience? These are important avenues for future research.

The study suggests implications for policy makers and for entrepreneurs. The role of business education is highlighted. Strengthening life-long education for entrepreneurs on business in general and on financial matters in particular is warranted. Further, when new policy initiatives are developed, frequent and clear communication with the target group and their advisors is key. This study suggests that well-designed initiatives often fail to capture the attention of their target group.

Entrepreneurs should understand that finance is a key resource for their business; failure to understand the finance alternatives and their characteristics

may seriously hamper the development of their ventures. Most entrepreneurs, however, have a limited knowledge of finance options, even if they have a broad business experience. They may enhance their understanding of finance through training. Further, they should understand that links to financial experts are valuable in reducing the knowledge gap. If they do not have ties in to finance experts yet, they should actively seek to establish them. If they have links to experts, they should activate them and tap their knowledge.

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**Table 1**
**Rotated Orthogonal Factor Analysis for Knowledge of Finance Alternatives (*n*=120)**

| | Factor | | |
|---|---|---|---|
| **Finance alternatives** | **1** | **2** | **3** |
| ***Common finance alternatives*** | | | |
| Loans | 0.902 | 0.036 | 0.155 |
| Credit lines | 0.855 | 0.116 | 0.151 |
| Trade credit | 0.716 | 0.149 | 0.391 |
| Leasing | 0.702 | 0.105 | 0.327 |
| Friends and Family financing | 0.663 | 0.090 | 0.277 |
| ***Advanced finance alternatives for the start-up phase*** | | | |
| Vinnof | -0.030 | 0.806 | 0.165 |
| IWT-subsidy | 0.120 | 0.792 | 0.012 |
| ARKimedes | 0.127 | 0.781 | 0.176 |
| Business Angels | 0.368 | 0.529 | 0.446 |
| ***Advanced finance alternatives for the growth phase*** | | | |
| Public Stock | 0.189 | 0.078 | 0.882 |
| Private stock | 0.202 | 0.111 | 0.851 |
| Bonds | 0.288 | 0.154 | 0.725 |
| Factoring | 0.422 | 0.198 | 0.647 |
| Venture capital | 0.424 | 0.397 | 0.630 |
| Eigenvalue: | 6.511 | 1.839 | 1.271 |
| Percent variance explained | 46.505 | 59.639 | 68.716 |

# Table 2
## Statistics and correlations of the dependent, independent and control variables [a]

| Variables | N | Min | Max | Mean | Std.Dev. | Corr. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DEPENDENT VARIABLES** | | | | | | | | | | | | | | | | | | | |
| Knowledge of common financing alternatives | 125 | -2.80 | 2.00 | -0.14 | 1.02 | | | | | | | | | | | | | | |
| Knowledge of advanced financing alternatives for the start-up phase | 125 | -3.00 | 2.00 | -2.43 | 0.79 | | | | | | | | | | | | | | |
| Knowledge of advanced financing alternatives for the growth phase | 125 | -3.00 | 1.40 | -1.34 | 1.15 | | | | | | | | | | | | | | |
| **INDEPENDENT VARIABLES** | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Human Capital | | | | | | | | | | | | | | | | | | | |
| Specific human capital | | | | | | | | | | | | | | | | | | | |
| 1. Business education (dummy) | 121 | 0.00 | 1.00 | 0.37 | 0.48 | | | | | | | | | | | | | | |
| 2. Number of years of work experience gained by founders in the industry of accountancy or finance | 121 | 0.00 | 40.00 | 1.36 | 4.90 | **0.279** | | | | | | | | | | | | | |
| Generic Human capital | | | | | | | | | | | | | | | | | | | |
| 3. Higher education (dummy) | 121 | 0.00 | 1.00 | 0.72 | 0.45 | **0.215** | 0.092 | | | | | | | | | | | | |
| 4. Number of years of work experience gained by founders in the same industry | 121 | 0.00 | 40.00 | 8.88 | 7.81 | **-0.190** | -0.034 | -0.024 | | | | | | | | | | | |
| 5. Number of years of work experience gained by founders in other industries | 121 | 0.00 | 20.00 | 6.46 | 6.74 | 0.113 | 0.133 | 0.057 | **-0.276** | | | | | | | | | | |
| 6. Founder with a prior management position in a large or medium company (i.e., number of employees greater than 100) (dummy) | 121 | 0.00 | 1.00 | 0.21 | 0.41 | 0.072 | 0.071 | **0.274** | **0.336** | 0.065 | | | | | | | | | |
| 7. Founder with a previous self-employment experience (dummy) | 121 | 0.00 | 1.00 | 0.37 | 0.48 | 0.151 | 0.051 | -0.052 | 0.086 | 0.120 | **-0.182** | | | | | | | | |
| 8. Founder with previous start up experience (dummy) | 121 | 0.00 | 1.00 | 0.31 | 0.46 | 0.120 | 0.134 | -0.064 | 0.139 | 0.173 | -0.073 | **0.677** | | | | | | | |
| Social Capital | | | | | | | | | | | | | | | | | | | |
| 9. Relationships in the financial community | 120 | -1.00 | 1.00 | 0.32 | 0.46 | -0.017 | 0.038 | 0.010 | 0.044 | -0.144 | -0.124 | 0.128 | 0.087 | | | | | | |
| **CONTROL VARIABLES** | | | | | | | | | | | | | | | | | | | |
| 10. Targeted number of employees after 5 years | 112 | 0.00 | 90.00 | 4.96 | 12.62 | 0.036 | 0.033 | 0.083 | 0.114 | -0.145 | 0.157 | 0.017 | 0.036 | -0.063 | | | | | |
| 11. Financial planning (dummy) | 124 | 0.00 | 1.00 | 0.93 | 0.26 | 0.155 | 0.067 | 0.102 | -0.068 | 0.099 | 0.068 | -0.041 | -0.015 | -0.070 | 0.067 | | | | |
| 12. External shareholders (dummy) | 121 | 0.00 | 1.00 | 0.12 | 0.32 | 0.011 | -0.010 | 0.176 | 0.061 | -0.071 | -0.134 | 0.011 | 0.072 | 0.117 | -0.181 | 0.094 | | | |
| 13. Ln (Level of start-up capital ) | 110 | 8.01 | 17.13 | 10.68 | 2.99 | **0.214** | 0.183 | 0.125 | -0.031 | -0.037 | -0.134 | -0.002 | 0.049 | 0.120 | 0.104 | 0.148 | 0.024 | | |
| 14. Wholesale and retail (dummy) | 121 | 0.00 | 1.00 | 0.31 | 0.47 | 0.001 | 0.013 | -0.119 | -0.133 | 0.141 | -0.172 | -0.037 | -0.027 | 0.114 | -0.094 | **0.190** | 0.071 | 0.101 | |
| 15. Professional, scientific and technical activities (dummy) | 121 | 0.00 | 1.00 | 0.29 | 0.45 | 0.121 | 0.051 | **0.254** | **0.196** | -0.065 | **0.315** | -0.072 | **-0.193** | 0.176 | -0.056 | -0.096 | 0.053 | -0.048 | **-0.432** |

[a] Correlation coefficients significant at $p < 0.05$ are shown in bold

**Table 3**
**Multivariate Tobit Regression Models (*n*=103)**

| | Common | Start-up Advanced | Growth Advanced |
|---|---|---|---|
| Constant | -1.943*** | -1.879*** | -1.655*** |
| ***CONTROL VARIABLES*** | | | |
| Number of Employees | 0.014* | 0.016† | 0.019** |
| Financial Planning (dummy) | 0.308 | -0.026 | 0.517 |
| External shareholders (dummy) | -0.330 | -0.209 | -0.570† |
| Start-up Capital | 0.067* | -0.013 | -0.000 |
| Wholesale and retail (dummy) | -0.363† | -0.229 | -0.507* |
| Professional, scientific and technical activities (dummy) | 0.084 | 0.637† | 0.056 |
| ***INDEPENDENT VARIABLES*** | | | |
| Human Capital | | | |
| Specific HC | | | |
| Business Education (dummy) | 0.480* | 0.367 | 0.866*** |
| Experience in Accountancy or Finance | 0.070* | 0.035 | 0.052** |
| Generic HC | | | |
| Higher Education (dummy) | 0.158 | 0.340 | 0.230 |
| Experience Same Industry | -0.005 | 0.005 | 0.016 |
| Experience Other Industry | 0.035* | -0.000 | 0.026† |
| Management Experience (dummy) | -0.063 | 0.080 | 0.185 |
| Experience Self-Employment (dummy) | 0.126 | 0.562 | 0.062 |
| Experience Start-up (dummy) | -0.507* | -0.076 | -0.172 |
| Social Capital | | | |
| Relationships in Financial Community | 0.615** | 0.318 | 0.538* |
| Mc Fadden's Pseudo- $R^2$ | 0.214 | 0.112 | 0.197 |
| Prob > chi2 | 0.000 | 0.013 | 0.000 |

†<0.1
*<0.05;
**<0.01;
***<0.001;