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Entrepreneurial control aversion and bank financing in Swedish SMEs

Abstract

In this paper the authors argue that for the development of SME’s, the learning process is instrumental for an open approach towards external financiers, including new owners. The analysis shows that firms learn to handle control aversion step by step, as they gain competence and experience through their relationship with external financiers. In this paper a linear structural equation modelling program, Lisrel, is used to analyze a sample of 281 firms (out of an original sample of 545 firms, yielding a response rate of 51.2 percent). The firms have less than 200 employees, and the sample includes both manufacturing and service firms. The questionnaire includes both attitudinal and factual aspects of control aversion and financing.

Keywords: banks, entrepreneurship, control aversion, financing SMEs, loans.
JEL Classification: G21, G32, O16.

Introduction

A strand of research concerning the external financing of SME’s has focused on control aversion as a universal phenomena restricting the growth of smaller firms (see e.g. Cressy, 1995; Chittenden, Hall and Hutchinson, 1996; Berggren et al., 2000). To some extent these ideas have been elaborated upon in later research (Mac an Bhaird and Lucey, 2010; van Caneghem and van Campenhout, 2012; Ahmad et al., 2015). This paper seeks to reintroduce the concept of control aversion as an important concept in the discussion of entrepreneurial finance behavior. Control aversion is connected to the wider discussion of a pecking-order theory of finance (Leary and Roberts, 2010; La Rocca et al., 2011; Degryse et al., 2012; Shen, 2014). Pecking-order theory has maintained an interest in the research community since it was launched by Myers (1984). The reasons for the existence of the phenomena of control aversion can generally be attributed to two fundamental influences, environment-induced explanations and psychological, cognitive explanations.

The pecking-order theory suggests that most small businesses will initiate external financial relationships with banks, because this is the least intrusive sort of financing (Howorth, 2001). There has been a considerable debate during the last decades on the small business-bank relationship. The evolution of technology and an overall focus of banks towards growth markets on a global basis have strained this relationship. Small businesses are perceived out of an information asymmetry perspective more opaque than larger firms (Petersen and Rajan, 1994; DeYoung et al., 2008; Gruenert and Norden, 2012). This opacity, combined with the limited earnings commercial banks obtain from small businesses has increased transaction banking as an alternative for small businesses. In conjunction with this, collateral remains as one of the mainstays of small business-bank relationships. The distinction between transaction banking and relationship banking heavily influences the discussion on small business finance, even if the results sometimes are overly simplified (Berger and Udell, 2006).

For emerging knowledge intensive ventures there are distinct possibilities to decrease the importance of control aversion, as knowledge intensive ventures in general are more able to differentiate themselves from their competitors. A high level of intellectual capital signals better capabilities to attract venture capital on favorable terms (De Rassenfosse, 2012). It can thus be posited that intellectual capital has a direct relationship with the overall orientation of small businesses towards different types of financiers (Freel et al., 2012).

One added factor in obtaining a strong bargaining position is the relative financial stability of a new venture. In the U.K. commercial banks typically require small business owner to supply an equal amount of equity as the amount of capital they can borrow from the bank. In Sweden this relationship is not always that clear-cut. In general, the more equity to debt, the easier it will be for small businesses to obtain good conditions in financing the venture. The importance of the bargaining position of small businesses has been discussed by a number of researchers (Lam and Burton, 2006; Czakon, 2009; Gruenert and Norden, 2012). As small businesses lack hard information, equity becomes one avenue of approach to uphold a strong position at the negotiation table with financiers.

The purpose of this paper is therefore to analyze how the effects of learning, intellectual capital, financial stability and attitudes towards external financiers will affect the financial search behavior of small businesses.

1. Theoretical points of departure

1.1. The banking relationship. There is a general support for a pecking order theory indicating that banks usually will be the first alternative for a small firm subjected to the general control aversion (Howorth, 2001; Paul et al., 2007). Therefore it is con-
ceivable that the banking relationship will be the first learning experience for a developing firm. Unfortunately, the control aspects seem to be a severe hindrance to a favorable banking relationship environment. Collateral is plausibly the most significant and obvious mental hurdle to starting new enterprises (Block et al., 2013). Together with performance data and legitimacy, collateral has been argued to be one of the main constraints for new ventures (De Clerq et al., 2013; Ramlall, 2014).

One of the most common aspects traditionally, has been for banks to substitute trust in a firm’s capacity and willingness to repay loans with demands for collateral arrangements. The fundamental idea of the bank is to increase the commitment of the small business owner to the well-being of the firm (Brannon et al., 2013). Since the advent of the lazy bank hypothesis, in which it is stated that banks rely on collateral simply because it is an easy way of handling SMEs, instead of being an effective measure against bankruptcy (Manove et al., 2001). Giving up collateral will undoubtedly be seen by the firm as a mechanism of control for the firm, as the bank retains the right to cancel a loan at any time, and therefore can seriously disrupt the operations of a business enterprise. Providing collateral can actually be perceived and seen as threatening to the long term survival of a business idea.

There seems to be two general groups of firms; firms that choose not to have a very active banking relationship, and firms that pursue an active relationship with the bank, and actually benefit from that cooperation. The difference between these two groups of firms can arguably be located in their view of the bank as a potential enemy, or as an ally. Partly the outcome of such a strategy is dependent on if the bank is willing to pursue a relationship banking strategy (Baas and Schrooten, 2006; Uchida et al., 2012). In such a strategy the bank-firm relationship will replace to an extent the need for significant personal collateral.

The group including firms that are not very active obviously fail to see advantages in co-operating closely with the bank, or perceive the bank as a possible threat. The group including firms that do co-operate closely with the bank will see the relationship as an opportunity. In addition, there are two major benefits for firms in an active, positive banking relationship. The services provided by the bank will better match the actual needs, and greater participation means that firms attain more realistic expectations about the outcomes of a banking relationship. The second reason is vital for this study. It actually stipulates that firms learn through the close relationship with the bank; they learn more about the general financial system, and more specifically, they learn how to take advantage of that system.

\[ H1: \text{The more a firm learns about the financial system and its actors, through an active relationship with a bank, the more positive the firm is towards all kinds of external financiers.} \]

1.2. Intellectual capital. With the ever increasing number of service firms many researches are focusing on the intellectual capital and training of the employees of the small and medium sized firms (Storey, 1994). The idea of intellectual capital as a resource is especially obvious when measuring knowledge intensive firms (Cohen and Kaimenakis, 2007). Ingrained with the idea of intellectual capital is social capital, which also provides an added intangible resource for the growing firm (Partanen et al., 2008).

There is an entire strand of research in knowledge management that focuses solely on intellectual capital (McAdam and Reid, 2001). In past research it has often been claimed that the employees in knowledge intensive firms to a greater extent are seen as the most valuable resource in knowledge intense firms, than in manufacturing firms. However, even manufacturing firms are undergoing huge transformations, where each employee is expected to provide a greater flexibility in their respective work tasks, and also in handling problems emanating from areas outside their ordinary routine workload. By focusing on processes, manufacturing firms are using their “wissenskapital” to improve production sequences in SMEs (Edvinsson and Kivikas, 2007).

In general, the average worker needs to be well educated in a diverse selection of areas to manage the increased complexity in their environment. Needless to say, this increased complexity holds true also for entrepreneurs. Studies have shown that the likelihood of survival might be enhanced if the entrepreneurs have a higher education (Robinson and Sexton, 1994). It should also be emphasized that the entrepreneur also needs a diverse set of skills in order to manage financing, marketing, purchasing and other vital functions in the small firm.

The probability that a person starts a new firm in the first place is also correlated to education (Evans and Leighton, 1990). The correlation is U-shaped, indicating that the persons with the highest education are less likely to start a new venture, as well as those persons with very low levels of education. This has spawned the vast, but rather inconclusive research on education of entrepreneurship at universities (see e.g. von Graevenitz et al., 2010; Neck and Green, 2011; Higgins and Elliot, 2011).

During the early stages of the firms’ development, highly educated employees are increasingly needed in order to maintain momentum in the growth process. As a firm grows, the firm is in many ways more dependent on its ability to organize work tasks, and to
produce efficiently, than it is on the virtues of the original business idea. This requires knowledge that usually is beyond the capacities of any, one founder. The constant influx of knowledge is therefore arguably the most important task in the continued growth of any business enterprise. Therefore, it is possible to conclude that if a firm is able to secure up-to-date intellectual capital, it will also be able to understand the financial market, which in turn leads to a less control aversive posture.

**H2: The higher a firm’s intellectual capital base is, the more positive the firm will be towards external financiers.**

### 1.3. Financial stability

One of the most important aspects in the development of small and medium sized enterprises is their ability to accumulate financial stability. The survival ratio of SMEs is typically around 60-70 percent after the first three years in most OECD countries. The survival ratio is argued to increase based on a number of factors, such as technology (Lee et al., 2012) and cluster effects (Wennberg and Lindqvist, 2010). David Storey is one of the pioneers in studying mortality of SMEs and after having tested a number of hypotheses, including learning and networking, it is suggested that there are in fact a number of reasons why small firms survive (Storey, 2011; Chang and Wu, 2014). Instead of focusing on one single approach we chose to focus on what is essentially a sum of these approaches. That is the operational revenue amassed by the firm and thereby on financial stability. The overarching assumption being that the stronger a small firm is financially the more likely that firm is to find itself at an advantageous bargaining position vis-à-vis their financiers.

One of the most important, and classic, definitions of measuring stability in this sense is the equity to debt ratio (Deakins and Hussain, 1994). This ratio is important as a measure for financiers to evaluate a firm’s capability to repay its debts (Shanmugam and Bourke, 1992). If the equity to debt ratio is low, the owners bear a relatively small share of the risks in a business venture (Bates et al., 2011). For a financier this is a sign that an owner may be less prepared to act decisively in order to save the firm in a crisis, unless the financier has managed to take the defensive precaution of requesting personal collateral, which is a way to circumvent the problem. In cases where the equity to debt ratio is high the financier can be reasonably assured about the willingness of an owner to actually fight for survival in a critical situation.

Financial stability is therefore an important tool for the firm in gaining an advantageous position in negotiations with financiers. Hernández-Cánovas and Martinez-Solano (2010) have shown that SMEs able to have a good bargaining position will be awarded with lower interest rate costs for their loans. When the negotiation process starts, the firm will automatically assume a position of strength if they can claim that the firm’s financial situation is stable, and that they will take their share of the losses if necessary. In accordance, Landström and Winborg (1995) come to the conclusion that attitudes towards external financiers depend on the financial status of the firm. Consequently, firms with a poor financial situation will probably try to avoid negotiations with external financiers, either because it will prove to be wasted time or worse because the external financiers may want to withdraw earlier arrangements with the firm. An equity to debt ratio may also be heavily influenced by certain traits of a certain industry at a certain time (Meggison, 1997), which also means that perception is a better measure in analyzing the effects of financial stability on control aversion.

**H3: The more stable a firm’s financial situation is, the more positive the firm will be towards external financiers.**

### 1.4. Pecking order theory and control aversion

A conclusion from Donaldson’s research from the 1960s implies that managers do not always prefer the source of finance that has the lowest interest rate (Donaldson, 1961; 1969). Later research (Donaldson, 1984; Myers, 1984) has shown that there seems to be a stable preference order towards different sources of finance among firms. Internally generated funds are preferred to bank loans, which in turn are preferred to new equity. This stable preference order is called a pecking-order by Myers (1984). Both Donaldson and Myers studied large listed American enterprises, which operate under different circumstances than SMEs do. Several studies have showed that the pecking-order framework is a fruitful approach to study financial decision-making in small firms (Vanacker and Manigart, 2010; Degryse et al., 2012; Alon and Rottig, 2013).

Earlier results indicate that the SMEs follow a financial pecking-order. The internally generated funds are most important, followed by bank loans and new equity from external partners. In essence, the more a firm is likely to lose control to external financiers, the less likely they are to submit to that type of financing. This also leads to the conclusion that if small and medium sized enterprises are forced, due to different circumstances, to seek external financing, they will seek to follow the pecking-order theory, as evidenced by Berggren et al. (2000). This is evidently particularly true for family owned businesses (mac an Bhaird and Lucey, 2010). Under certain conditions such as the need to grow in order to gain a large market share, new ventures will be more likely to seek to break that financial pecking-order pattern (van Caneghem and van Campenhout, 2012; Ab Razak and Rosli, 2014;
Serrasqueiro and Caetano, 2015), possibly even altering the pattern to the extent that they even chose private equity in preference to other types of financing.

Therefore, when firms’ perceptions are shaped by control aversion in order to obtain new capital, they will do so with control aversion as one of the primary reasons for selecting financial sources. This in turn leads to the hypothesis that when capital-seeking control avert firms choose financiers, they will to a large degree actually choose bank financing. According to the pecking-order theory, however, it seems feasible to assume that banks will be preferred to new owners. On the other hand when non-control avert firms chose between different financial sources this might not be the case.

Based on the assumption that firms actually do learn as they go along, we posit that firms will, as a second stage in its learning process, more and more abandon loan financing in favor of more sophisticated financing options. Hence we posit that the non-control avert firms might not follow the pecking-order theory, rather they will choose the financier that contributes most to the development of the firm, irrespective of the control imposed.

**H4:** The more positive the firm’s attitude towards external financiers (including investors) is, the more unlikely is it that the firm will seek financing from a bank.

### 2. Methodology

#### 2.1. Sample and response rate.

In our statistical sample the term small and medium sized enterprises is restricted to only include firms with less than 200 employees and who are not part of a corporate group. Firms with less than five employees were excluded due to quality problems in the data from Statistics Sweden. All Swedish manufacturing sectors are included in the definition of manufacturing, excluding newspapers/publishing houses. Business services sectors include computer consultancy and software and other technical services; consultancy services in the corporate organization/rationalization; and corporate security services.

There are three different size groups, 5-19 employees, 20-49 employees and 50-199 employees within the two business sectors. The sample extraction was made with the help of Statistics Sweden. The total sample consisted of 600 firms. After exclusion of firms outside the target group the sample consisted of 545 firms. The questionnaire that was sent to these firms resulted in a response rate of 281 firms or 51.2 percent. The distribution of response rate between different strata is good (48-52 percent).

**2.2. Non-respondents.** A problem with survey studies has to do with non-respondents. If the ratio of non-respondents to respondents is large there is risk of distortion, which limits the possibility to make generalizations from the study. To reduce the risk of distortion we have made a test to see whether the non-respondents differed from respondents in terms of industry and size since these variables have been shown to have an impact on financial search behavior (Cressy and Olofsson, 1997). The analysis indicated no significant differences between respondents and non-respondents regarding the variables main business, second business, geographical location, number of branches and size. The p-values varied between 0.29-0.95.

According to some researchers there are similarities between late respondents and non-respondents (Armstrong and Overton, 1977). We divided the sample in two halves, one with early respondents and one with late respondents and tested whether there were any differences between the two groups. Of the more than 100 variables we have collected we found that five differed significantly between the early and late respondents. However, we were not able to see any pattern in the differences.

#### 2.3. Testing the hypotheses and developing the model.

The data have been analyzed using the LISREL method, a linear structural equations modelling method (Bentler and Chou, 1987). Validity is in LISREL models are estimated using three different levels of testing (Bollen, 1989). Nomological validity is the validity of the entire model. Discriminant validity checks for the independence of constructs from interference from other constructs. Finally, convergent validity concerns the coherence of the latent variables in a given construct (Anderson and Gerbing, 1988).

The nomological validity of a LISREL model is assessed by measuring the distance between data and the model using the degree of freedom and a significance test, in the form of a probability estimate (p-value). The discriminant and convergent validity is measured by studying the t-values and R2 values of each relation in the model (Bollen and Long, 1993). The R2 value provides a measurement of the strength in a linear relationship estimate and the t-values provide a test of significance (Jöreskog and Sörbom, 1993). The original model included the hypotheses that three variables: bank relationship, intellectual capital, and financial stability are all directly correlated to a change in control aversion. Control aversion, in turn, will be negatively correlated to actual loan applications.
During testing of this model it appeared as if the three independent variables did have a correlation with control aversion, although the variable intellectual capital was somewhat weaker than the other two. There were, however, significant problems in finding the concluding correlation between control aversion and bank loan applications. It was obvious from an analysis of the underlying statistical material that there in fact were two groups of firms showing the lack of control aversion we were looking for. One group was, as we hypothesized, not at all anxious to use bank loan financing. There were, however, another group that actually showed an inclination of using bank loan financing, even though they otherwise appeared more likely to choose other forms of financing. The main question therefore proved to be why the two groups of firms had different approaches towards bank financing, especially since they both appeared relatively satisfied with their banking relationship.

The final clue was the reasoning we used in arguing for the relationship between bank relationship and control aversion. Ennew and Binks (1996) argued that the firm through a close relationship gain more realistic expectations about the outcomes of banking relationships. In essence, this means that firms learn through interacting closely with their bank, they learn how external financing works, and how to take advantage of it. What our results showed is that the firms that are not control aversive have learned to use bank financing. However, it also showed that the lessons learned are applied differently. Our focus then became to find out whether firms not only learn how to use external financing as a two step process where a firm simply learns to use bank financing and then advance on to use other, more advanced forms of financing instead. Instead the learning process could involve a three step process where firms first learn to use different financing forms, but then also learn how to use a mixture of financing solutions, ranging from bank financing to venture capital financing, in order to more efficiently use the different options provided by the different actors on the financial field. The reasoning led into thoughts regarding the governance structure of the financial field in the Swedish economy.

In the survey there were actually questions related to the general knowledge of the different actors on the financial field in Sweden. The most significant related to whether a firm was actually satisfied with the options available in the financial field. The satisfaction with options available is a good measure of whether the firm has a thorough knowledge about potential financiers, especially for firms with an otherwise good financial situation that should be able to receive financing if they only could find a partner to work with. By including a variable related to the governance structure on the financial field it could conceivably be possible to find out whether the notion of the two step learning process was relevant.

The governance structure in a field is dependent on arrangements over time that is put in place by institutional actors and is supported by institutional logics. The governance processes of a field are the result of interaction between both public and private actors, and are enforced by the legal system, as well as codification in the field. The governance structure in the financial field in Sweden consists of a number of institutional actors, ranging from commercial banks, state owned institutional lenders, to business angels and venture capital firms. Undoubtedly, this array of different actors is hard to monitor for the small and medium sized enterprise. There is a large amount of research regarding government initiatives supporting SMEs around the globe. This research shows that there usually are a large number of initiatives in each country (see e.g. Carpenter and Petersen 2002; Beck and Demirguc-Kunt, 2006). In addition, there is a substantial critique as to what ventures are supported (Mason and Brown, 2013). The prevalence of many
options in turn creates asymmetric information on the market, preventing a firm from utilising the most optimal solutions without extensive knowledge of the different institutional actors. Therefore, it is plausible to add two hypotheses to the earlier four.

**H5**: The more positive the firm is towards external financiers, the more knowledge it will gain about the different institutional actors in the governance structure of the financial field.

**H6**: The more knowledgeable a firm is about the different institutional actors in the governance structure of the financial field, the more likely it is that they will use bank financing to supplement other financial solutions.

As it turned out the altered model did find support in the material. There seemed to actually be two types of firms in the sample. Firstly, the firms that have learned to use more advanced financial options available in the market. These firms have according to our notion of learning reached the second stage. Secondly, the firms that have grasped all the options available and therefore finds out how to best use bank financing in conjunction with other financial alternatives. The firms that have been able to use this balanced mixture has reached the third stage in the learning process.

![Fig. 2. The re-specified, final model on the effects of control aversion on financial search behavior](image)

3. Results

The results indicate that not only is the nomological validity secured through a good fit, giving a $p$-value of 0.052. In addition, the concepts seem to be strongly correlated within the model, providing discriminant and convergent validity. Bank relationship is correlated to control aversion (coefficient -0.40, $t$-value -3.71), indicating the effects of learning through the relationship with the bank on the firms attitudes towards external finance. Thus, an understanding of how the banks operate and function seems to influence the attitudes towards other financial intermediaries.

Financial stability also seems to be strongly correlated to control aversion (coefficient -0.58, $t$-value -4.57). This is not surprisingly a negative correlation, meaning that the more stable a firm’s financial situation is perceived to be, the more open-minded the owners will to be towards external financiers.

Satisfaction of investment needs in intellectual capital is also correlated to control aversion (coefficient 0.18, $t$-value 2.07). This is in line with our hypothesis, which states that the higher a firm’s intellectual capital base is perceived to be, the more positive the firm will be towards external financiers. The fourth relationship, between control aversion and bank loan application is also supported in the model (coefficient -0.20, $t$-value 2.35). This is a vital clue to the understanding of the effects of control aversion. Firstly, it proves that changing attitudes do in fact lead to an actual change in behavior.

The fifth relationship, that between control aversion and governance structure, is positive as hypothesized (coefficient 0.30, $t$-value 3.58). The more positive the firm is towards external financiers, the more knowledge it will gain concerning the surrounding governance structure. The more knowledge the firm gains about the governance structure, the more it will appreciate the same structure. We can also conclude that the more the firm appreciates the surrounding governance structure, the more likely it is that the firm applies for a loan at the bank (coefficient 0.31, $t$-value 4.84).

3.1. Construct validity. As can be seen in Table 1 below, the bank relationship is a measure of the firms’ perception of the banks focus on collateral in the credit risk assessment process.
Intellectual capital shows how well the firm is ready to face an uncertain future development as this most certainly leads to new demands in the skill of the workforce. The construct consists of one indicator, which is the perceived satisfaction of investments in employee education.

Financial stability is the perception of the owner how well the firm can handle long term financial difficulties. The indicator is a single variable construct.

The control aversion concept consists of two indicators. The stronger indicator concerns the owners’ attitudes whether it is better to sell the entire firm rather than to take on new owners. The somewhat weaker indicator shows the degree that external financiers generally are a positive influence in the development of the firm.

Governance structure is also a single variable construct and measures the owner’s attitude towards the surrounding financial system.

Finally, the construct called bank loan application measures whether a loan application to a bank has actually been made by the firm. It is therefore obviously also a single indicator construct.

### 4. Analysis

The results indicate that small firms develop their financial relationships over time. This process seems to include at least three stages. In the first stage the firm uses only those sources of funds that present the lowest intrusion in the control of operations, in accordance with both the pecking order theory and the control aversion literature. As the firm develops to use external financing, reaches a maturity in intellectual capital, and financial stability, the likelihood of using other sources of financing increases. During this the second stage the firm will develop a deeper understanding of financing based on their relationship as to how to balance external funding between different sources of capital. In the final stage the firm will therefore develop a mixture of funding in order to prosper.

Currently, much of the literature on entrepreneurship concerns entrepreneurial orientation and how this orientation will lead to growth. Financing has always been an important topic for small businesses. There are numerous studies developing theories of why small businesses have a hard time finding sufficient financing. Lacking hard facts from annual reports, in need of legitimacy and a general opaqueness all poses difficulties for small firms seeking financing. Less emphasis has been placed on the demand side of financing. Small firms may in fact choose to avoid external financing and thereby growth due to factors that normally are not included in theories such as the principal-agency theories. Pecking-order theory provides a template for financing of small business. This theory argues that small businesses in general are averse to losing control. Therefore they are in many cases prepared to avoid external financing, even if this financing provides added business opportunities.

### Conclusions and implications

This paper provides evidence of three items of importance in explaining how small businesses can overcome control aversion. Firstly, by having experience of relationship oriented financing, businesses are not pressed into a financial contract based strictly on collateral. Secondly, the intellectual capital is a measurement of the overall confidence a small business can have based on unique resources, which will provide leverage against financiers. Thirdly, the growing financial stability of a business provides a more reasonable climate for a functioning relationship with an external financier.

In an addition to the original model it was determined that the entrepreneurs overall outlook on the financial climate also influences the firm as they develop their ambitions in terms of financing. In retrospect the article provides ideas as to how small businesses develop their financial routines over time. It is therefore an important lesson for entrepreneurs to learn how to make the most of the surrounding financial system with its different types of actors.

As for future research, control aversion has still not been explored to a great extent. There are several possible avenues of future research. It would be interesting to find out the differences between different types of ownership, different types of intellectual capital and geographical concerns as well as how different stages of the business cycle influences the financial search behavior (cf. Harrison and Widjaja, 2014).
The results of these studies have implications on the overall policies regarding SME development. It is apparent that collateral is an item of importance, both for start-ups as well as for growing firms. But also that there are other factors in play as small businesses develops. One question is of course if this learning process might potentially lead to an increased interest in co-operation from the small business perspective as well as from the investors’ perspective.

References


