RATIO

Financing future job creators

Michel Elmoznino Laufer and Karl Wennberg

October 2014

Summary

Research has shown that young businesses with growth ambitions are important for job creation and innovation. A major obstacle to economic growth is the lack of financing for young firms. The Ratio Institute and the Swedish Federation of Business Owners have conducted a study to outline the financial sources of young and small businesses in Sweden and to investigate the challenges for financing the firms.

We use a sample of 380 limited liability firms in Sweden that are members of the Swedish Federation of Business Owners. The majority of the firms were founded 2010-2013. For our sample, the results show that the majority of the firms (87 %) use personal savings to finance their firms, while 28 % use bank loans which is the second most common type of finance. However, many of the firms that were approved bank loans report that they had to use personal assets as collateral and personal guarantees to back up their loans. Also, many entrepreneurs took a temporary employment elsewhere and didn't take out any salary at some time.

Our results suggest that economic policies should focus on measures that improve personal wealth accumulation. The results give further support to the findings of recent studies that have been conducted in Sweden that personal wealth accumulation is important and that it is difficult to obtain bank loans for young businesses.

The report is a part of the research program Financing of Innovations at the Ratio Institute.

Michel Elmoznino Laufer (PhD student) och Karl Wennberg (Associate professor):
Stockholm School of Economics & Ratio Institute

Content

1: Introduction

Several studies in Sweden and elsewhere have shown that the majority of new jobs are created by small growing businesses (Davidsson and Delmar, 2000; Delmar and Wennberg, 2010). New firms, especially fast-growing firms, are important for job creation and for generating economic growth, especially in times of de-industrialization in the Western world (Delmar and Wennberg, 2010; Henrekson and Johansson, 2010). Policies that stimulate the growth of new businesses are therefore crucial for increasing the employment rate and for innovation.

Lack of financing is a major obstacle for entrepreneurs who want to expand their businesses. In particular, recent studies and policy discussions have noted a lack of start-up capital and expansion capital. The role of venture capital in Sweden has decreased after the financial crisis (Söderblom, 2012). More strict bank regulations affects the risks that the banks are allowed to take in their lending policies to businesses, particularly for small firms (Weller, 2010). Recent studies in Sweden have shown that banks' interest rates on small business loans have increased while the terms, conditions and requirements on collateral have become tougher (Bornefalk, 2014). Banks have become more risk-averse and don't take any risks.

Because of the decline in venture capital and more restrictive bank regulations, the supply of external capital for small businesses in Sweden has decreased. Due to the lack of external financing, the personal savings of the entrepreneur becomes even more crucial for starting a new firm as well as policies that stimulate personal wealth accumulation.

Previous research has shown that entrepreneurs generally prefer to use their personal savings to finance their ventures. By doing so, they avoid being indebted and can maintain as large ownership control as possible. However, due to a lack of personal savings they might be forced to apply for external financing at the same time as they are struggling to operate and develop their firms. Previous studies have shown that personal savings is the most common type of finance for small businesses. At the same time, research has also pointed out that the percentage of firms using bank loans and other types of external finance differs depending on the country, the sample and time period that is being studied.

Drawing on a unique and more recent data sample, this report investigates how small and young businesses are financed in Sweden. Additionally, it explores some of the challenges entrepreneurs encounter with regard to financing. The survey has been conducted by the Ratio Institute and the Swedish Federation of Business Owners. The majority of the firms that we have studied were founded 2010-2013, i.e. after the financial crisis.

2: Entrepreneurial finance: Theory and recent Swedish studies

There is an extensive academic research on entrepreneurial finance, usually defined as how individuals finance their start-ups and what factors determine the mix of financing available (Denis, 2004; Söderblom, 2012). A central theory to explain the mix of financing available for small and young businesses is the *pecking order theory* of capital structure choice which is a hierarchical order of preferred types of finance for the entrepreneur. According to this theory, there is a problem of asymmetric information in which the agent seeking finance (e.g. the entrepreneur) has access to information about the viability of the start-up and his/her own entrepreneurial capacity that is less transparent to the agent considering granting finance (e.g. a bank, a business angel, or a venture capitalist). As a result, the agent considering granting finance will put a higher risk premium on the financing compared to e.g. investing in or lending to a firm noted on the stock exchange. Due to the high risks and uncertainties of how profitable the business will be, small and young businesses face challenges in accessing needed funding. According to the pecking order theory, entrepreneurs prefer to use personal savings to finance their start-ups, then turn to external lenders if their personal savings are insufficient to finance their firms, and finally to external equity (Myers, 1984). A number of recent studies in Sweden have examined how small and medium sized businesses are financed and if the pecking order theory seems to apply.

Venture capital for small and medium sized enterprises – supply or demand?

Johansson et al. (2013) conducted a study to examine if a lack of supply of venture capital is a major obstacle to economic growth for small firms in Sweden, or if there is a lack of demand on venture capital for small firms. The authors conducted telephone interviews with a random sample of 1000 small and medium-sized firms in Sweden. They used a stratified sample with limited liability firms in Sweden with 1-49 employees. The sample was selected from Posten's firm register (PAR). The telephone interviews were conducted in February 2013.

Johansson et al. (2013) found that 90 % of the business owners thought that autonomy and ownership control were the main motives for operating their businesses. Personal savings was the most important type of finance while external equity was the least important. The major conclusion was that ownership control is important for the business founders and that economic policy should to a higher extent focus on making it easier to accumulate personal savings. The tax rates play an important role and future research and discussions should to a larger extent focus on the role of the tax system.

Which are the major obstacles to growth for small businesses in Sweden?

The Swedish Federation of Business Owners (2014) conducted a web survey in February 2014 in which 1200 of its member firms answered questions about the challenges related to financing their ventures. 80 % of the small firms in the survey reported that they would like to expand their business and grow but that the banks' high interest rates on small business loans and high requirements on collateral has made it difficult.

26.6 % of the respondents have mentioned that the banks' terms and conditions have become stricter during the last six months and that the banks have larger requirements on collateral. After the financial crisis the banks have increased the capital adequacy requirements and require that business owners who apply for funding use a larger share of personal savings than before. The interest rates on bank loans to small businesses have also increased. The smaller the firm is regarding the number of employees, the higher the interest rate on check credits are. On average, the interest rate on check credits is 8 % for firms without employees, 6.5 % for firms with 1-9 employees, 5.5 % for firms with 10-49 employees and 3.7 % for firms with over 50 employees.

How can small businesses in Sweden handle bank regulations?

Several studies indicate increased difficulties for new and small businesses to obtain bank loans in the recent years, in Sweden (Bornefalk, 2014a) as well as internationally (Weller, 2010). These difficulties have arguably contributed to the weak development of businesses in Sweden over the past years. This development has had an especially severe effect on individuals seeking to start their own firms and without sufficient personal savings (Fairlie and Krashinsky, 2012; Hurst and Lusardi, 2004; Nykvist, 2008).

A report by Bornefalk (2014a) for the Swedish Confederation of Enterprise discusses the major challenges facing small and medium sized businesses in Sweden by using data from several data sources. The report discusses how the possibilities to finance firms with bank loans and personal savings has evolved during 1998-2010 and how large share of the population in Sweden that has sufficient personal savings to start a limited liability firm. Bornefalk (2014a) writes that due to the lack of official statistics on firms' bank loans it has been difficult to evaluate how the loan possibilities have changed for different types of firms, especially during the financial crisis. For the report, a special statistical database that has been compiled by Per Weidenman at Bisnode is used. The database contains information on limitied liability firms in Sweden that were started 1998-2010. Bornefalk (2014a) writes that the share of bank loans decreased while the share of personal equity increased, particularly for small firms.

The report mentions several factors that have contributed to the increased difficulties to apply for bank loans, e.g. the financial crisis, the banks' work to decrease credit risks and tighter financial regulations. The report also mentions that there is a risk that small and new businesses are negatively affected by the new Basel III Framework since bank loans to small businesses are regarded as very risky. Bornefalk (2014a) suggests a number of pre-cautions to reduce the problems of financing: 1) An improved market for corporate bonds, 2) Lower marginal and capital tax rates, 3) Freer placement rules, and 4) Improved conditions for personal options.

Another report by Bornefalk (2014b) which also used a database on firms that were founded 1998-2010 shows that it has become more difficult for new firms to qualify for bank loans after the financial crisis. Further, the report illustrates that only a third of the adult population in Sweden has enough wealth to start a limited liability company of average size, which requires 150 000-200 000 SEK. This has made it especially difficult for young people and people living in areas with a high unemployment rate.

Which are the sources of capital for innovative start-ups?

Söderblom and Samuelsson (2014) studied 113 innovative start-ups in Sweden that were founded 2002-2012. The major objective of the study was to outline the financial sources used by the Swedish innovative start-up firms with growth ambitions. The data was collected from a web survey during the autumn 2013. The survey was sent to founders and/or CEOs for ventures that were identified via the Swedish Governmental Agency for Innovation Systems' (VINNOVA) grant-based program VINN NU. The program targets young innovative Swedish firms.

The authors used annual data for 212 firm specific observations. The scope for the study was limited to young firms and focused on firm age rather than firm size. The firms were classified into four groups depending on the firm's phase: 1) seed stage, which included firms that were younger than one year, 2) start-up, firms that were one year old, 3) early development, firms that were 2-4 years old, and 4) expansion phase, firms that were 5-12 years old.

The authors investigated which types of finance that the firms used, if there were differences in different phases of the firms' developments, how additional capital was being used, and the entrepreneur's view on different types of finance. Söderblom and Samuelsson (2014) found that capital from the founder was the primary source of funding and that funding from family and friends was almost non-existent. They also found that there were variations in the patterns of availability of different types of finance during the various stages of firm maturity with the highest average amounts of capital being allocated in the start-up phase and with a decreasing level of external financing at the later stages. The results show that it is important for the founders to invest their own money to signal commitment to external financiers and reduce moral hazard risk.

3: Method and sample

In ”The current state of the venture capital industry” (2012), Söderblom writes that venture capital investments in Sweden have decreased significantly after the financial crisis and that there is a need to look at different types of finance for start-ups.

In the US, the Kauffman Foundation has collected detailed information on young businesses. The Kauffman Firm Survey started to gather information from almost 5000 firms that were started in 2004. These firms receive a survey each year in which they answer detailed questions about the background of the business founders, the sources and amounts of financing, firm strategies, sales and profits. The firms have been surveyed 2004-2011.

Inspired by the Kauffman Firm Survey, we wanted to gather information about small and young businesses in Sweden. We wanted to gather information about the characteristics of the business founders, the firms, how they are financed and their perceived challenges to finance their firms. Our aim was to get a large sample which is relatively representative of young and small businesses in Sweden.

The Swedish Federation of Business Owners is Sweden’s largest organization for business owners. It is an interest organization that is working to make it easier to start new firms and to improve the conditions for enterprises more generally. The organization represents about 75 000 entrepreneurs of which 50 000 are direct members and 25 000 members of trade associations. The Swedish Federation of Business Owners has a large number of registered firms from all over Sweden and has the e-mail adresses to many of them. While there are many small and young businesses in Sweden that are not members of the organization, it can nevertheless provide access to many small and young businesses in Sweden in a cost efficient manner. We chose to conduct a web survey by using Survey Monkey since we would be able to reach many potential respondents simultaneously and at a relatively low cost compared to e.g. telephone interviews. Also, Survey Monkey makes it more convenient to download and analyze the information provided by the respondents. A drawback with using web surveys is the relatively low response rate which might affect the representativeness of our results.

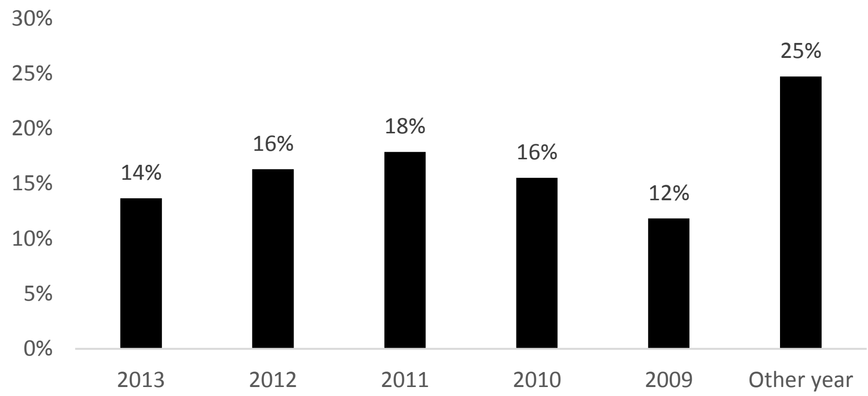
A web survey was e-mailed to about 3800 limited liability firms in Sweden during spring 2014. All of the firms were registered members of the Swedish Federation of Business Owners. The firms were founded 2006-2013 (the majority were founded 2010-2013). The survey consisted of about 30 questions related to the characteristics of the business founder, the characteristics of the firm and the firm’s capital structure decisions. In total, the survey was e-mailed three times and 380 firms answered the survey (yielding a response rate of around 10 %).

4: Financing of small and young businesses 2014: Data from the Swedish Federation of Business Owners

1) What does the distribution of small and young businesses look like in terms of type of firm, industry and expansion plans?

In total, 380 limited liability firms in Sweden answered the survey which was e-mailed during spring 2014. The majority of the firms were founded 2010-2013 (64 %) while the other firms were founded 2006-2009.

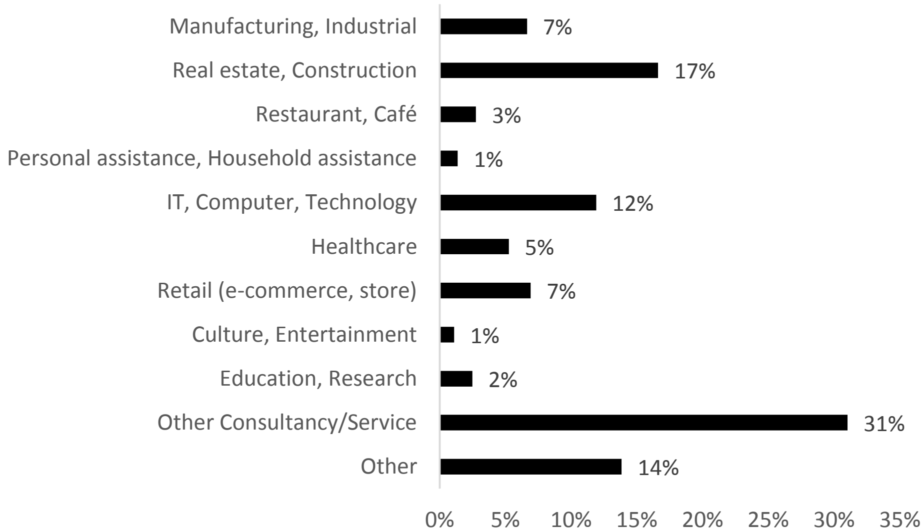
Figure 1. The distribution of the year the firms were founded.



A majority of 323 out of 374 firms are close corporations (86 %) while slightly less than half of all firms, 162 out of 373, are family businesses (43 %).

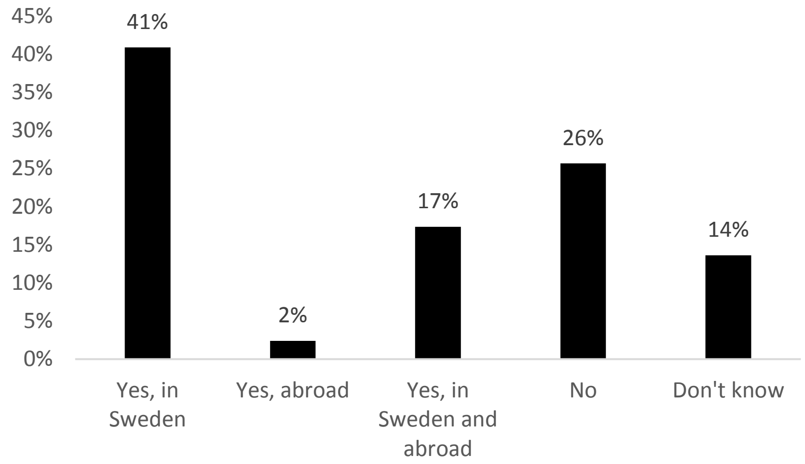
There is a relatively large variation regarding the type of industry. A relatively large share of the firms has been started within "Consultancy-/Service" industry (at least 31 %). Other common industries are "Construction/Real Estate" totaling 17 % and "IT/Computer/Technology" at 12 %.

Figure 2. Distribution of industries.



60 % of the firms have expansion plans (most of them nationally), 26 % don't have expansion plans while 14 % have answered that they don't know. There seems to be a mixture between growth-oriented entrepreneurs and necessity entrepreneurs in our sample.

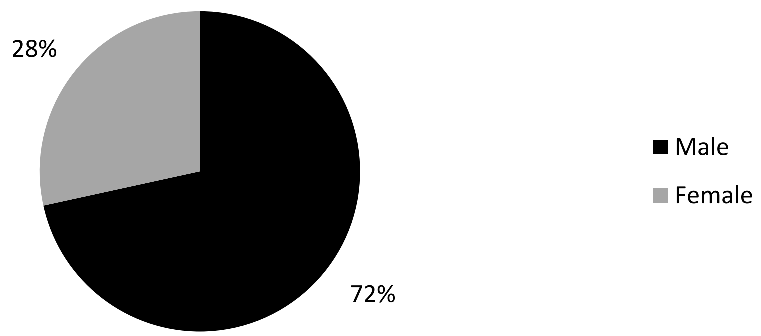
Figure 3. Answers on the question "Do you have expansion plans for your current firm?"



2) What does the distribution of small business owners look like in terms of gender, nationality, age, work experience, education and previous start-ups?

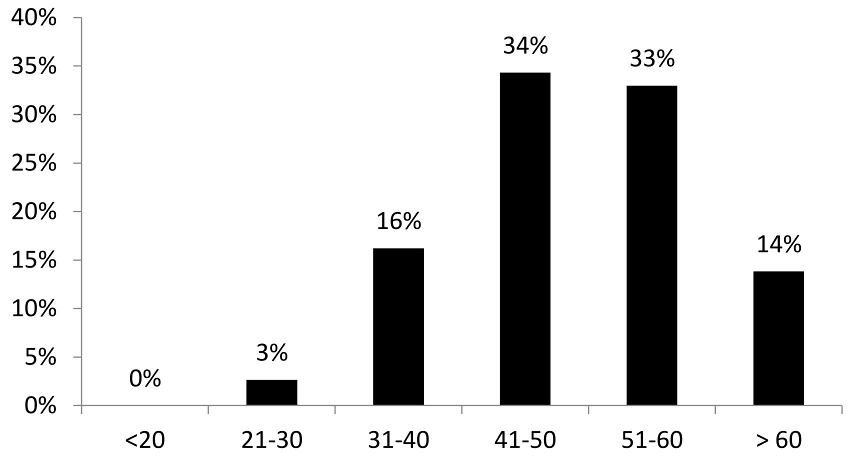
Previous research has shown that the majority of the firms in Sweden are founded by men. In our survey, 71 % are men and 29 % are women. A majority of 91 % of the business founders were born in Sweden while 9 % were born abroad.

Figure 4. The percentage of male and female business owners.



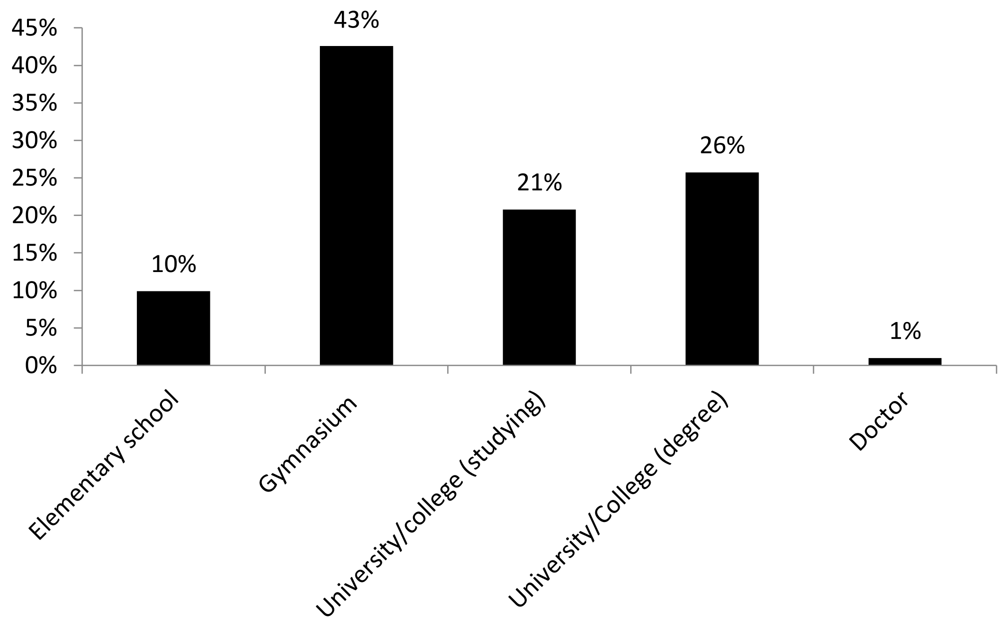
The average age for business owners in our sample is 50 years old. 67 % are 41-60 years old while a very small share (3 %) are under 30 years old.

Figure 5. Age distribution of the business owners.



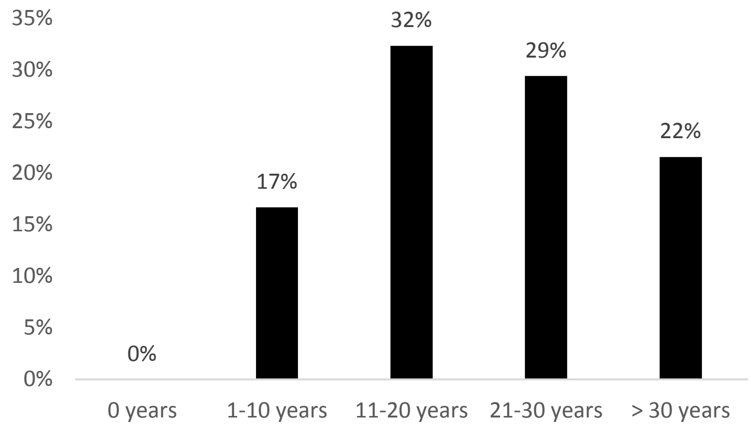
The level of education varies. The most common education levels are university level degree (45 %) and a gymnasium level degree (35 %).

Figure 6. The distribution of education for all of the respondents.



The majority of the respondents have many years of work experience before they started their current firm. In total, 85 % have more than 10 years of work experience with an average of 23 years of work experience. The years of work experience varies between 0 to 55 years.

Figure 7. Previous years of work experience for all of the respondents before they started their current firm.



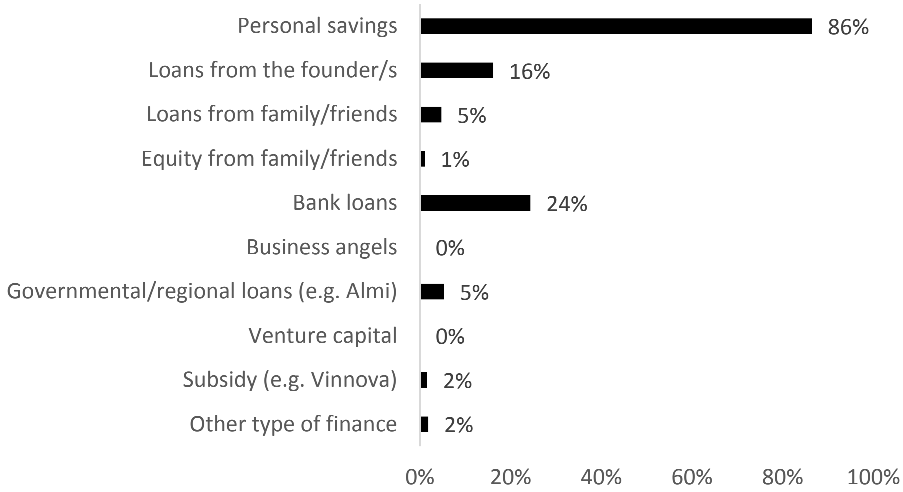
The number of firms that the participants have started prior to the current venture varies. 40 % has not started any company previously while 30 % have started one company and 30 % have started two or more companies.

> The "typical" business owner in our survey is a Swedish, middle-aged male with about 20 years of work experience who has not started any firm previously or who has started one firm. The educational background varies.

3) How are small and young businesses financed in Sweden?

Previous studies by the Swedish Confederation for Enterprise (Bornefalk, 2014a) and the Swedish Federation of Business Owners (2014) have shown that a majority of firms are financed through personal savings. In our study, personal savings is also the most common type of financing. 86 % of the 377 respondents who have answered the survey question about financing have stated that their firm was financed by personal savings when they were founded. Bank loans is the second most common (24 %), loans from the founder/s is the third most common (16 %) while other types of finance vary between 0 % (business angels and venture capital) and 5 % (loans from families and friends).

Figure 8. How the firms were financed when they were founded.



87 % of the 373 firms have answered that they are financed by personal savings which is the most common type of financing. The second most common type of financing is bank loans which 29 % of the firms use and the third most common is loans from the founder/s on 15 %. Other types of finance are not as common and vary from 1 % to 7 %.

Figure 9. How the firms were financed when they answered the survey (Spring 2014).

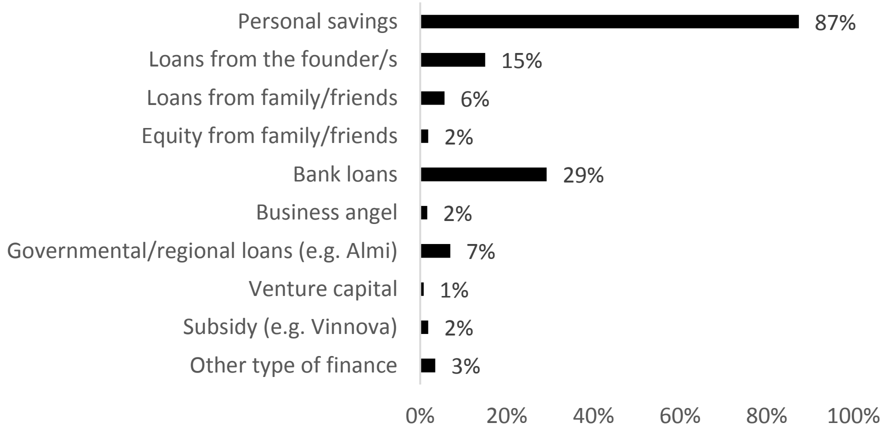
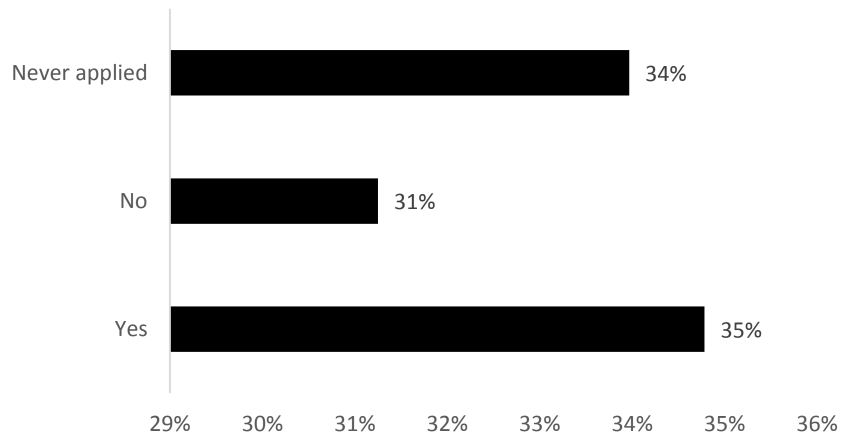


Figure 10. Answer on the question if the respondent has ever abstained from or been denied bank loan because he/she has experienced that the requirements from the bank have been too strict.

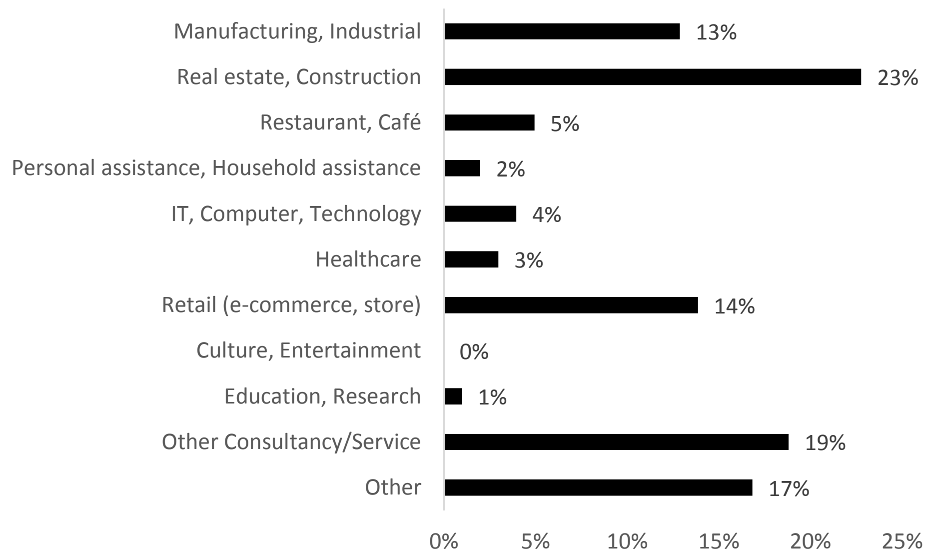


In the continued analysis we have chosen to look at the 105 firms in the survey that have answered that they use bank loans as a type of finance.

Of the 101 firms who have been approved bank loans 77 % are close corporations and 43 % of 103 firms who have been approved bank loans are family firms.

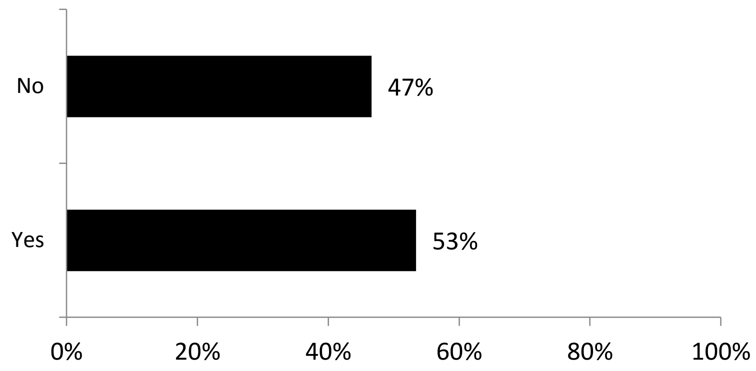
The distribution of industries for these firms differs somewhat from the survey as a whole. Still, a relatively large share of the firms operate within the "Consultancy-/Service" industry (19 % compared to 31 % for the whole sample) while we can see a larger share of firms within the "Manufacturing- and construction" industries (13 % and 23 % respectively compared to 7 % and 17 % respectively).

Figure 11. The distribution of industries for firms who have been approved bank loans.



About half of the firms who have been approved bank loans (53 %) have answered that they have previously abstained from or been denied bank loans for their current firm because of too strict requirements from the bank.

Figure 12. Answers on the question if the respondent has ever abstained from or been denied bank loans because he/she has experienced too strict requirements from the bank (for those who have been approved bank loans).



Over half of the firms (62 %) have been approved loans with personal assets as collateral and 69 % had to use personal guarantees.

Figure 13. Loan with personal assets as collateral for those who have been approved bank loans.

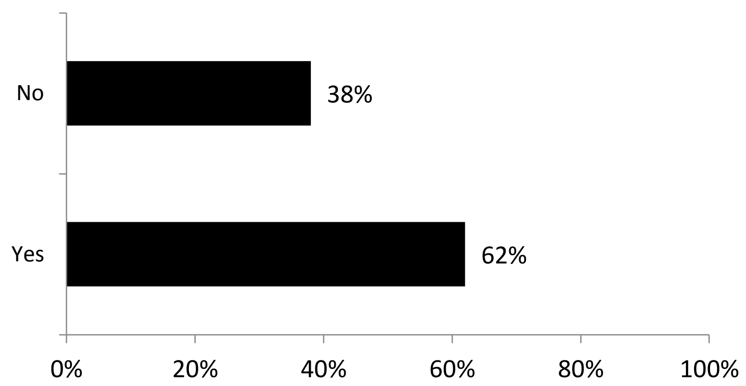
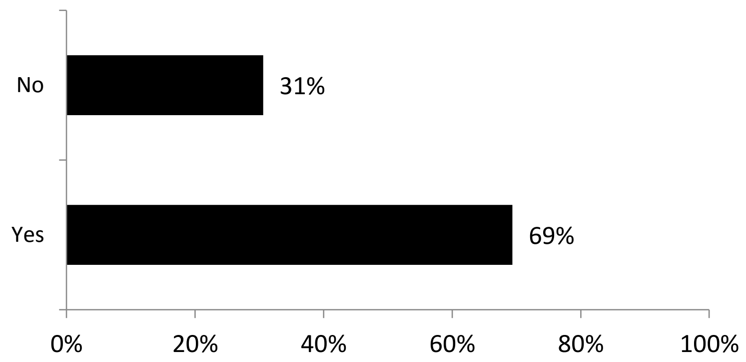


Figure 14. Loans with personal guarantees for those who have been approved bank loans.



Regarding the largest challenges related to bank loans or other types of external finance, the respondents mention requirements on collateral and personal guarantess, high interest rates, and difficulties to convince lenders of the business idea and budget. These results support the previous findings from the Swedish Federation of Business Owners (2014). We included an open-ended question on the largest challenges in applying for external finance.

Some quotes related to the following question: "What do you experience as the largest challenges with applying for external finance, e.g. bank loans?"

"The interest rates are more than twice as high as for private loans"

"It is too expensive to borrow from other than banks, and there are too large requirements when borrowing from banks"

"That the banks can't take any risks. There should be more venture capital available"

"To find the right contact person at the bank who believes in you and your idea"

"Banks look more at the past than at the future. They require that the owners have personal savings or owns an appartment etc. It is difficult to obtain bank loans even if the business idea is great and has a very large potential if the business owner lacks capital or real estate. It is only those who already have capital who can borrow. The bank is only with you when it goes well, not when you need help.

We have also included a question in the survey on how large percentage of the firms that have ever used stock options or other types of convertibles for their employees. Only 3 % of the firms report that they have used stock options or other types of convertibles.

Other interesting results is that 75 % of the business owners in our sample have been taking a part-time employment elsewhere while working at their current firm, and that 25 % of the business owners haven't been taking out any salary at some time.

5: Discussion and Conclusion

The purpose of our study was to investigate how small and young limited liability firms in Sweden are financed. Our results show that the majority of the firms use personal savings to finance their firms (88 %) while only 28 % use bank loans which is the second most common type of finance. A relatively large share of the firms that have been approved bank loans had to use personal assets as collateral and personal guarantees while many of the business founders have been denied or abstained from bank loans because they perceived the requirements to be too large. Other interesting results are that only trickle of the firms use stock options for personnel and that many took a part-time employment outside of their firm and didn't pay themselves any salary. The ”typical” business founder in our sample is a Swedish, middle-aged male who has about 20 years of work experience. There is a relatively large variation in the types of industries of firms' surveyed, a large share consist of various types of consultancy and service firms.

It is important to stress that our sample is not representative of all new firms and small businesses in Sweden, partly due to the response rate and partly because firms of other forms than limited liability and not members of the Swedish Federation of Business Owners might differ from our sample. Even if our results should be interpreted with some caution regarding their generalizability we can see that our findings confirm some of the results from previous studies. Our results support the findings from previous studies by the Swedish Federation of Business Owners (2014) and the Swedish Confederation of Enterprise (Bornefalk, 2014) that personal savings is the most important type of finance for the majority of young businesses. Our results also indicate that bank loans do not seem to be a viable alternative for the majority of the new businesses and small businesses, e.g. because of the high requirements on collateral and personal guarantees as well as high interest rates.

Our results show that personal savings is by far the most common type of financing for young incorporated firms in Sweden. Less than a third of all firms report using bank loans, somewhat lower than in international studies (Binks and Ennew, 1996; Colombo and Grilli, 2007; Huyghebaert *et al.*, 2007; Reid, 1996). A reason for this is suggested in respondent business owners' statement that bank are perceive as having too large requirements regarding e.g. collateral assets, personal guarantees and the terms and conditions of the loans and too high interest rates.

References

Binks MR and Ennew CT. 1996. Growing firms and the credit constraint. *Small Business Economics* **8**: 17-25.

Bornefalk, A. 2014a. Företagandet och kapitalförsörjningen – Hur näringslivet kan klara stramare bankregler. *Svenskt Näringsliv.*

Bornefalk, A. 2014b. Kapital på krita? En ESO-rapport om företagandets finansiering. *Rapport till Expertgruppen för studier i offentlig ekonomi 2014:4.*

Colombo MG and Grilli L. 2007. Funding Gaps? Access to Bank Loans by High-Tech Start-Ups. *Small Business Economics* **29**(1/2): 25-46.

Davidsson P and Delmar F. 2000. På jakt efter de nya arbetstillfällena: de snabbväxande företagens roll. *Ekonomisk Debatt* **28**(3): 267-276.

Delmar F and Wennberg K. 2010. *The Birth, Growth, and Demise of Entrepreneurial Firms in the Knowledge Intensive Economy*. Edward Elgar: Cheltenham.

Denis J. 2004. Entrepreneurial Finance: an overview of the issues and evidence. *Journal of Corporate Finance* **10**(2004): 301-326.

Fairlie RW and Krashinsky HA. 2012. Liquidity constraints, household wealth, and entrepreneurship revisited. *Review of Income and Wealth* **58**(2): 279-306.

Henrekson M and Johansson D. 2010. Gazelles as job creators: a survey and interpretation of the evidence. *Small Business Economics* **35**(2): 227-244.

Hurst E and Lusardi A. 2004. Liquidity constraints, Household Wealth, and Entrepreneurship. *Journal of Political Economy* **112**(2): 319-437.

Huyghebaert N, Van de Gucht L and Van Hulle C. 2007. The choice between bank debt and trace credit in business start-ups. *Small Business Economics* **29**(4): 435-452.

Johansson, A., Palmberg, J. and Bornhäll, A. 2013. *Riskkapitalförsörjning i små och medelstora företag – utbud eller efterfrågan?* Svenskt Näringsliv.

Myers, S.C. 1984. The Capital Structure Puzzle. *The Journal of Finance* **39**(3): 575-592.

Nykvist J. 2008. Entrepreneurship and liquidity constraints: Evidence from Sweden. *The Scandinavian Journal of Economics* **110**(1): 23-43.

Reid GC. 1996. Financial Structure and the Growing Small Firm: Theoretical Underpinning and Current Evidence. *Small Business Economics* **8**(1): 1-7.

Swedish Federation of Business Owners. 2014. Småföretagarna vill växa – men kan de det? Småföretagens finansieringskällor mars 2014.

Söderblom, A. (2012). The current state of the venture capital industry.

Söderblom, A. and Samuelsson, M. (2014). *Sources of capital for innovative startup firms – An empirical study of the Swedish situation*. Entrepreneurship Forum.

Weller C. 2010. Have Differences in Credit Access Diminished in an Era of Financial Market Deregulation? *Review of Social Economy* **68**(1): 1-34.