

Work in progress: please do not quote without authors' permission

The price of control and the capital constraint paradox in micro and small family and non-family firms

Anders Bornhäll^a, Dan Johansson^b, and Johanna Palmberg^c

^a HUI Research, Stockholm, Sweden; Department of Economics, Dalarna University, Borlänge, Sweden and Örebro University School of Business, Örebro, Sweden. Email: anders.bornhall@hui.se

^b Örebro University School of Business, Örebro, Sweden and HUI Research, Stockholm, Sweden. Email: dan.johansson@oru.se (corresponding author)

^c Swedish Entrepreneurship Forum, Stockholm, Sweden and CESIS, Royal Institute of Technology, Stockholm, Sweden. Email: johanna.palmberg@entreprenorscapsforum.se

ABSTRACT

This paper discusses the effect on firm growth when formal institutions do not support entrepreneurial norms. We test hypotheses regarding the importance of independence, the control premium, and the use of external capital for financing firm growth in family and non-family firms. Based on 1,000 telephone interviews with Swedish micro and small firms, supplemented with register data, our analysis shows that independence is a prime motive for enterprising; more for family owners. Owners' value control highly; one third of the respondents prefer not to sell shares, when they are offered the market value plus 70-100 percent. Family owners are more prone to use own savings or loans from family and more reluctant to take in external equity capital. Our results point at a potential "capital constraint paradox"; there might be an abundance of external capital at the same time as firm growth is constrained by a lack of internally generated funds. We argue that policy makers need to recognize independence and control aversion as strong inherent values guiding entrepreneurial action and that small firm growth would profit from lowered personal and corporate income taxes compared to policy schemes that aim to increase the supply of external capital.

Key-words: Capital constrains, capital structure, control aversion, control premium, family firms, firm growth, pecking order theory.

Jel codes: G32, G34, E22.

1. Introduction

Institutions are fundamental for economic growth (North and Thomas, 1973; Rosenberg and Birdzell, 1986; Hodgson, 1988; Mokyr, 1990; Williamson, 2000; Berggren, 2003; Berggren et al., 2012; Acemoglu, et al., 2005; Chang, 2011; Berggren et al., 2012). They are of formal and informal character and economic development benefits from them being aligned and growth conducive. We apply these insights to discuss a matter of concern receiving considerable interest both from research and policy, namely that small firm growth is hampered by lack of capital causing large economic and social costs in the form of reduced growth and increased unemployment (Didier, et al., 2014). In particular, we are interested in family firms since they are estimated to be the most common business form around the world contributing notable to entrepreneurship, innovation, employment, and economic growth (Arregle, et al., 2007; Astrachan and Shanker, 2003; Andres, 2008; Barca and Becht, 2001; Claessens and Fan, 2002; La Porta, et al., 1999).

In order for firms to seize business opportunities and to grow they need access to capital. This is of particular importance for small firms growing fast (Lerner, 2009). Opening up the firm to external funding could be one way of getting the required capital (Dawson, 2011). However, asymmetric information may make external investors more reluctant to supply capital to smaller firms than to larger and more mature firms (Carpenter and Petersen, 2002; Hubbard, 1998; Kaplan and Strömberg, 2001; De Massis et al., 2013). A number of policy initiatives have therefore been implemented across the member countries of the European Union (EU) and the Organization for Economic Cooperation and Development (OECD) to facilitate the access to external finance to smaller firms, in particular to potential innovative and high-growth firms (Brown et al., 2014; Coad and Rao, 2010; European Commission, 2012; Mason and Brown, 2013; OECD, 2010).

Research, however, shows that small firms have governance attributes which influences the financing decision and restricts the demand for external capital (Davidsson, 1989; Gómez-Mejía, et al., 2007; Romano, et al., 2001). This particularly applies to family firms, for which the most important feature is family owners' quest for independence and maintenance of control over the firm (Cressy, 1995; Melin and Nordqvist, 2007). Hence, there may be a trade-off between independence and firm growth. Seizing a business opportunity and expanding the business may require external funding which might come at the cost of loss of control making the owner refraining from growth.

The purpose of this paper is to bring further insights into why and under what circumstances family firms may experience capital constraints. Our study is based on 1,000 telephone interviews with Swedish private micro and small firms, complemented with register data that enable us to distinguish family from non-family firms and explore differences between these two types of firms. We test three related hypotheses; i) independence is a stronger motivational force for enterprising among family owners than for non-family owners, ii) the control premium is higher in family firms compared to non-family firms, and iii) family firms are more reluctant than non-family firms to finance firm growth with external capital.¹

While previous research has examined motivational forces among business owners, the control premium of firms and attitudes toward external capital, there are few empirical investigations on these issues concerning smaller non-listed *family* firms. Empirical analysis of family firms are often more difficult to conduct since official register-based databases, in general,

¹ In line with Cressy (1995) and Cressy and Olofsson (1997) we refer to control as the right of decision over the firm without involvement from external stake holders and lenders. Similarly, we refer to control aversion to describe the aversion to bank control and to equity stake holding by outsiders. The term "control" is part of "independence", which can loosely be referred to as "being one's own boss" with respect to customers, suppliers and others (Davidsson, 1989; Wiklund et al., 2003).

do not recognize family ownership and the involvement of family in firm governance.² The poor availability of data has directed empirical research on family firms towards studies of large listed firms for which ownership data are more available and of better quality (Mazzi, 2011; Sciascia and Mazzola 2008; Dyer, 2006; Westhead and Howorth, 2006; Romano, et al., 2001).³ To the best of our knowledge, this is the first study that empirically investigates the control premium in micro and small family firms and that compares the motivational forces for enterprising, and the attitudes towards external capital among those firms.⁴

Our study confirms previous results that independence is the main motive for enterprising in general and also finds strong support for the “pecking-order theory”. Close to all respondents – 89 percent – answer that independence is an important or very important motive for enterprising. Family owners are significantly more likely to answer that they find independence “very important” as compared to non-family firms. Both family and non-family firms prefer to finance future growth foremost with profits and next with debt and private savings. Family firms, however, express a statistically significantly larger preference for these alternatives than non-family firms. Capital from external investors is less likely to be used for future growth and family firms are more unwilling to use this source of finance than non-family firms.

The control premium largely exceeds estimates for listed firms. About one third of respondents are unwilling to sell shares giving an external investor major influence, or the whole company, when they are offered the market value of the shares plus 70–100 percent.

² We use the definition of family firms proposed by the European Commission (2009) including both the control of the majority of decision-making rights and the involvement of family in firm governance (see section 3 for further discussion). Swedish register data identify family ownership but not family governance (Bjuggren et al., 2011).

³ De Massis et al., (2013) present an overview of the literature on the effect of family involvement on the performance of SMEs.

⁴ See Dyck and Zingales (2004a; 2004b) and Nenova (2003) for cross-country estimations of the control premium and private benefits of control in large listed firms. See Bird et al. (2002); Casillas and Acedo (2007); Dyer and Sánchez (1998); Zahra and Sharma (2004); Benavides-Velasco et al. (2013) for surveys and discussions on research on family ownership and control.

Unexpectedly, we find no statistically significant difference between family and non-family owners in terms of propensity to sell a controlling part of the shares or the whole firm to external investors. One explanation could be that both family and non-family owners value control very highly and that the scale should have been set even higher to detect potential differences.

We argue that smaller family firms might face a “capital constraint paradox”; the supply of external capital might be sufficient but the individual owner might sustain from accessing it due to fear of losing control over the company. Lack of retained cash-flows and private wealth would thus hinder investments in profitable projects and constrain firms’ growth potential.

This study generates a number of policy implications valid for the contemporary debate on capital as a constraint on firm growth. For instance, our results indicate that policy schemes that aim to increase the supply of external capital will be less effective, since there is little demand from business owners, compared to other programs that aim to increase internally generated funds. Business owners simply seem to be willing to forgo business opportunities not to lose control over their businesses. Our study suggests that firm growth would be enhanced by stimulating private savings and internally generated funds. Lowering personal and corporate income taxes are two such reforms that would increase internally generated funds which could be used to finance growth. Lower tax levels would also lead to a higher demand for external equity since the after-tax compensation for giving up independence and control would increase.

The rest of the paper is organized as follows. The next section presents the theoretical framework and develops the hypotheses tested in the empirical analysis. The third section presents the survey, the supplementary micro data and the empirical methodology. The results of the empirical analysis are reported in section four. The last section concludes the paper. Appendix A reports the questionnaire underlying the telephone interviews.

2. Theoretical framework

2.1 Institutions and growth

Institutions are recognized as fundamental for economic growth and development because they provide the basic rules of human interaction for people in their use of scarce resources. They can broadly be categorized into formal and informal ones. Formal institutions comprise constitutions, statutes, common law, and other governmental regulations while informal institutions are syntheses of traditions, customs, moral values, beliefs, religion, and other norms of behavior that have endured through time (Searle, 2005). Formal rules are much more easily altered than institutionalized informal rules. Changes in these laws are necessary for a society to adapt to changing circumstances. They are policy variables for the expression of collective preferences and the realization in political party programs. Informal institutions are much more persistent and may function as the ultimate constraints on behavior for several centuries. In contrast to formal rules, informal rules are not a policy variable over which the state has control. They are enforced by the society through sanctions, such as expulsion from the community, ostracism by friends and neighbors, loss of reputation, and acquisition of dishonor. These sanctions can be efficient enforcement mechanisms, as human beings are social creatures that are dependent on social networks. Economic development benefits from formal and informal institutions being aligned and growth conducive.

2.2 Independence and family ownership

Comprehensive research has shown that “independence” and “control” in general are strong inherited values – i.e., informal institutions – motivating and guiding entrepreneurs (Davidsson, 1989). In particular, family firms operate in a distinctive social and emotional context in which the interactions between family members enable the members to take part both in the family and

in the governance of the enterprise simultaneously; their personal and professional lives are mixed (Gómez-Mejía et al., 2011). This group of closely related individuals has both the ability and the incentives to influence the governance of the firm and thereby the use of resources, financing, and risk levels (Bjuggren and Palmberg, 2010; Romano et al., 2000; Melin and Nordqvist, 2007). Family ownership, hence, not only includes financial and juridical aspects; it also incorporates cultural, social, and emotional dimensions (Astrachan, 2010). One could therefore argue that family firms value independence more than non-family firms. Accordingly, we state the hypothesis:

H1: Independence is a stronger motivational force for enterprising for family owners than for non-family owners.

2.3 Families as controlling owners

Family owners receive both pecuniary and non-pecuniary benefits, i.e., amenity potentials, from being the controlling owner of a firm (see Burkart et al., 2003 for further discussion). The amenity potentials could be summarized into three categories: i) control is a necessary condition for independence, i.e., the extra utility for the owner gets from being “one’s own boss, ii) reputation, and iii) minority expropriation. The first two refer to the value added that the family gets without interfering with the profit of the firm. It includes for example political, cultural, or social recognition and influence that the family owner might gain from being a successful business owner.⁵ Minority expropriation refers to extraction of private benefits of control that affects firm value (Jensen and Meckling, 1976).⁶ The value of the amenity potentials corresponds to the control premium, i.e., the value that controlling shareholders put on being in control of the firm.

⁵ See for example Landes (2006) for a discussion of family dynasties’ economic and political influence, both in Europe and in the USA. In Sweden, the well-known Wallenberg-family serves as a good example (see for example Fogel et al., 2013; Henrekson and Jakobsson (2001, 2005); Högfeldt, 2005 for further discussions).

⁶ For firms with a single family owner this value equals zero, because there is no minority to expropriate.

For larger, often listed firms, there are two ways of estimating the control premium (Dyck and Zingales, 2004a). The first way is to estimate cross-country variations in the price of voting rights compared to cash-flow rights, given that the voting right stock does not have inferior dividend rights (Barclay and Holderness, 1989; Zingales, 1995, Villalonga and Amit, 2006). If there is a positive price difference, one can assume that investors put a value on control rights. That is, controlling investors identify a value of being in control that is not available for minority shareholders. Dyck and Zingales (2004b) find that the average value of control across countries ranges between 10 to 20 percent. The United States, Sweden, and the United Kingdom report relatively low values (5.4, 6.5, and 13.3 percent, respectively).⁷ Nenova (2003), reports even lower values. The average control premium is 13 percent for the investigated countries and the value for Sweden is 1 percent and 2 percent for the USA.

The second way to estimate the value of control, for listed firms, is to contrast the price of shares in the private negotiations on controlling blocks with the share price once the market has absorbed the knowledge of a new controlling owner. The difference in price should reflect the value that the new block owner puts on *both* cash-flows from the investment *and* the value of private benefits of control generated by being a block-holder. The market price, once the transaction is made public, only reflects the cash-flows that all shareholders receive from the firm.

Our study focuses on micro and small non-listed firms; hence we cannot observe the market value of the firm. We therefore measure the price of control as the price that the owner would be willing to sell shares giving an external investor a major influence in the company, or to sell the whole company to an external investor. We test the hypothesis:

⁷ See Dyck and Zingales, 2004a for a literature review and detailed information about the estimates for single-countries.

H2: The price of control is higher in family firms compared to non-family firms.

2.4 External financing versus control: effects on financing decisions and growth

According to the pecking-order theory of capital, firms prefer internally generated funds to external capital (debt, hybrid securities, and issuing of ordinary shares) when financing investments, because asymmetric information and other transaction costs raise the costs of external capital (Donaldson 1961; Myers, 1984; Myers and Majluf, 1984). Family owners, to keep the control over the firm, often seem to have a stronger aversion to external capital and are therefore more dependent on private savings and internally generated funds compared to non-family firms (Romano et al., 2001 Gomez-Mejia et al., 2007). They therefore might overlook investment and growth opportunities due to capital constraints caused by dependence on internally generated cash flows such as retained earnings and family wealth (De Massis et al., 2013). Many family firms are small and of close corporation type, which imply further limitations to access to external capital markets (De Massis et al., 2013; Beck and Demirguc-Kunt, 2006). As Sirmon and Hitt (2003: 343) write:

“family firms have limited sources of external financial capital because they avoid sharing equity with nonfamily members. Additionally, their size normally does not justify bond issues. As a result, these firms do not have access to the traditional equity or debt markets that are available to many nonfamily firms and to large family firms that have diluted intrafamily ownership.”

The discussion shows that, compared to other types of investors, family owners are unique in that they have a relatively large share of their financial portfolio and human capital tied up in one firm. Their primary concern often is to maintain control over the firm and eventually pass it on to their heirs. Thus, they might have stronger preferences for keeping control than non-family firms. Theory therefore argues that family owners to a larger extent prefer to rely on

internal financing and personal wealth for financing investments and firm growth. Hence, the main hypotheses:

H3: Family firms are more prone than non-family firms to use equity from the owners for financing growth.

H4: Family firms are more prone than non-family firms to use company profits for financing growth.

H5: Family firms are more reluctant than non-family firms to use external equity for financing growth.

3. Research design

3.1 Definition of family firms

There is no universal definition of what constitutes a family firm, most empirical studies, however, use a definition that take into account ownership, control and/or participation in the executive management (Miller, et al., 2007; Villalonga and Amit, 2006; 2009; Astrachan and Shanker, 2003).⁸

The European Commission (2009: 9) identifies more than 90 definitions, most of which are not operational, and hence not applicable in empirical research. In this paper, we use the definition proposed by European Commission (2009) and define non-listed family firms in the following way:⁹

”A firm, of any size, is a family business, if:

- i) The majority of decision-making rights is in the possession of the natural person(s) who established the firm, or in the possession of the natural person(s) who has/have acquired the share capital of the firm, or in the possession of their spouses, parents, child or children’s direct heirs. The majority of decision-making rights are indirect or direct.

⁸ See for example Garcia-Castroa and Aguilera (2014) for a recent overview of the literature of family firms and how they are defined.

⁹ “Listed companies meet the definition of family enterprise if the person who established or acquired the firm (share capital) or their families or descendants possess 25 percent of the decision-making rights mandated by their share capital.” The requirement of family involvement however makes it impossible to identify family firms in the official statistics, since this information is not collected.” (European Commission, 2009: 9)

- ii) At least one representative of the family or kin is formally involved in the governance of the firm.”

3.2 Survey and sample

The empirical analysis is based on a telephone interview survey with owners of Swedish limited liability firms (*aktiebolag*) with 1-49 employees. Employees are defined as anyone who receives salary from the company, including the owners. The upper limit of 49 employees comes from the fact that smaller firm in general have greater problems of finding external capital and that we, for comparative reasons, want to follow the EU (2003) definition of micro (0-9 employees) and small (10-49 employees) firms. Corporations with no employees are excluded because they report low economic activity, if any.

The survey data is matched with firm level data (accounting and financial) from Bureau van Dijks database ORBIS. The database provides company information on both private and public firms throughout the world and is often used in research. A total of 3,984 firm owners were contacted in order to ensure 1,000 complete responds to our survey.¹⁰ The sample is stratified over the following groups: 918 of the interviews were done with firms with 1-9 employees and 82 with companies with 10-49 employees. All interviews were conducted in February 2013 by TNS SIFO, a professional market research firm in Sweden. The largest controlling owner was asked to respond to the survey.

Studies on the attitudes towards external funding, control aversion and the propensity to use external capital for financing investments in Swedish small firms have previously been published in scientific journals by Cressy and Olofsson (1997) and Berggren et al. (2000). Both studies, survey firms with 5 to 199 employees by a postal questionnaire; more than 500 firms were included in the sample and the response rate was about 50 percent. The two studies

¹⁰ A number of 1,000 interviews were required to get precise estimates.

conclude that the business owners value control highly, the demand for external capital is low, and that internally generated funds are preferred when making new investments. However, neither of these studies distinguished family from non-family firms and neither do they estimate the value of control. Some of our questions are based on their questionnaire to make future comparisons possible.

3.3 The survey – independent and dependent variables

The survey consists of nine questions regarding the owner's attitudes toward independence, control and the firm's past and future financing strategies (see appendix A for an English version of the survey). It also includes questions regarding background facts about the firms and the owners, e.g., the number of owners and their shares of decision-making rights. The following three dependent variables correspond to the hypotheses formulated in the previous section.

Dependent variable 1:

To investigate whether family owners value independence higher than non-family owners we asked (question 7): "To be independent is very important to me." We use two different measures based on the respondents' reply. Model one has a response variable that equals one if the respondent has answered "agree" or "fully agree". Model 2 uses a stricter dependent variable, taking the value one only if the respondent answered "fully agree".

Dependent variable 2:

To test the second hypothesis we asked two interrelated questions (8 and 9) regarding selling shares of the company giving an external investor a major influence in the company or selling the whole company to an external investor. "To which price would you be willing to sell shares of

your company giving an external investor a major influence in the company?” and “To which price would you be willing to sell the whole company to an external investor?” The fictitious example offers the interval between the company’s market value and an additionally 10 percent up to 70-100 percent on top of the market value.

Dependent variables 3:

The third dependent variable is “regardless of whether your company has plans to expand or not, how likely is it that you would use any of these sources to finance the expansion?” The answer ranges from “not likely”=1 to “very likely”=5 (question 6). Respondents could choose between equity from the owners, company profits, equity from new family owners, equity from new external owners, loans from family, and loans from banks and others. A similar question regarding past financing decision was also included (question 5). Both these questions are used as dependent variables in the empirical analysis to test hypotheses 3-5. In accordance with the first dependent variable for independence, these two variables are used as dummy variables taking the value one if the respondent has answered “likely” or “very likely”, otherwise zero.

Independent variables

As explanatory variables we use owner- and firm-specific data from both the survey and from the ORBIS-database. The firm data are from year 2012 and the survey was conducted in February January 2013.

The key variable of interest is a dummy variable that equals one if the firm is defined as a family firm. It is a combination of equity ownership and active participation in the management. We also include control variables for owner characteristics such as owner’s age, education, gender, and nationality. Firm variables relate to size of the firm, firm age, and financial control

variables such as profitability and measures of capital structure (gearing ratio, and solvency ratio) are also included. Table 1 presents a detailed description of the included control variables.

Table 1: Definition of control variables

Variables	Definition
<i>Panel A: Firm characteristics</i>	
Family firm	i) The majority of decision-making rights are in the possession of the natural person(s) who established the firm, or in the possession of the natural person(s) who has/have acquired the share capital of the firm, or in the possession of their spouses, parents, child or children's direct heirs. The majority of decision-making rights are indirect or direct. ii) At least one representative of the family or kin is formally involved in the governance of the firm.
Firm age	Number of years of incorporation.
Firm size	Number of employees.
Total assets	Total value of the firm's assets (1000 USD).
Profit margin	Net profit divided by revenues (%).
EBIT	Earnings before interest and tax (%).
Operational revenue	Revenue generated by everyday business activity (1000 USD)
Solvency ratio	Shareholder funds / total assets (%)
Gearing ratio	(Non-current liabilities + Loans) / Shareholders funds (%)
High- and medium-high-tech^a	High- and medium-high-tech manufacturing as defined by Eurostat (2014).
Medium-low-tech	As defined by Eurostat (2014).
Low-tech	As defined by Eurostat (2014).
KIS	Knowledge-intensive services as defined by Eurostat (2014).
Less-KIS	As defined by Eurostat (2014).
Other industries	Industries not included in the Eurostat (2014) classification KIS or less-KIS
<i>Panel B: Owner-manager characteristics</i>	
Number of owners	Number of owners including family owners.
Education	A set of dummy variables that takes the value one for primary education (<i>grundskola</i>), two for secondary education (<i>gymnasium</i>), three for tertiary education (<i>högskolestudier</i> and <i>forskarutbildning</i>).
Owner's age	Controlling owner's age.
Female	A dummy variable that equals one if the controlling owner is female.
Nationality	A set of dummy variables for place of birth of the controlling shareholder that equals zero for Sweden one for Nordic country exclusive Sweden, one for Europe exclusive Nordic countries, and one for Africa and Asia. There are no controlling shareholders from America or Australia in the sample reflecting the immigration to Sweden from these continents.

Note: See Appendix B for a detailed description of the Eurostat definition of the industry classification.

Table 2 presents descriptive statistics for the dependent and explanatory variables. The sample consists of 53 percent family firms. The firms are relatively young, with an average age of 14 years. The oldest firm is 100 years and the youngest firm is one year old.

Table 2: Summary statistics – all firms

Variable	Mean	Std. Dev.	Min	Max	Obs
<i>Panel A: Dependent variables</i>					
Independence (important or very important) (%)	89	32	0	1	1000
Independence (very important) (%)	69	46	0	1	1000
<i>Panel B: Firm characteristics</i>					
Family firm (%)	53	50	0	1	1000
Firm age (years)	13.92	12.84	1	100	1000
Firm size (# employees)	4.54	6.06	1	47	1000
High- and medium-high-tech (%)	2	15	0	1	1000
Medium-low-tech (%)	4	21	0	1	1000
Low-tech (%)	4	19	0	1	1000
KIS (%)	29	45	0	1	1000
Less-KIS (%)	43	50	0	1	1000
Other industries (%)	18	38	0	1	1000
Number of owners	1.44	0.58	1	3	1000
Gearing (%)	87.50	161.95	0	998.08	776
Total Assets (1000 USD)	1360.80	10901.36	10	295329	833
Operational revenues (1000 USD)	1394.13	4097.38	0	90429	834
Profit margin (%)	6.02	15.50	-86.68	99.16	819
Solvency (%)	41.20	28.79	-84.90	99.24	828
EBIT (%)	6.55	15.77	-86.38	82.97	823
<i>Panel C: Owner characteristics</i>					
Owner age (year)	49.97	11.18	21	85	1000
Female (%)	19	39	0	1	1000
Foreign (%)					
Nordic	2	14	0	1	1000
Europe	4	19	0	1	1000
Africa/Asia	2	15	0	1	1000
Education (%)					
Primary	10	30	0	1	1000
Secondary	48	50	0	1	1000
Tertiary	42	49	0	1	1000

Note: See Table 1 for definitions. The number of observations decreases when the survey data is matched with firm specific data from Bureau van Dijk's database Orbis.

The average firm size in terms of assets is 1,361 thousand USD and has five employees. The variance is quite high, with the largest firm having 47 employees and total assets of 295 million

USD. The profitability measures show that the sample firms, on average, are profitable. Relatively few (2.3 percent) of the surveyed firms are high- and medium-high-tech manufacturing firms whereas a larger share (28.7 percent) are active in knowledge intensive services.

The average owner in the sample is a 50 years old male who is born in Sweden with a secondary school education. Only 18 percent of the firms have a female as the largest owner. Eight percent of the business owners are non-Swedish; 3.7 percent comes from Europe, 2.4 percent from Africa and 2 percent from other Nordic countries. Forty-eight percent of the responders have a secondary education and 41 percent have tertiary education.

Table 3 presents descriptive statistics comparing mean-values for family and non-family firms, including t-values to measure if there is any statistical difference between the two types of firms. The descriptive statistics show that family firms are slightly older than non-family firms on average (14.04 and 13.78 years, respectively). The difference is not statistically significant. The average family firm has fewer employees but is larger in terms of total asset. All the three measures of profitability show that family firms are less profitable than non-family firms, however, only the difference in mean operating revenues are statistical significant. Moreover, the average family firm has higher levels of debt (gearing ratio is significantly higher in family firms) and lower levels of solvency ratio (i.e., the probability to meet debt obligations is lower in family firms). There is no statistically significant difference in terms of the level of firms operating in high-tech industries. Family firms are slightly less likely to be active in KIS industries (t-value is equal to 1.96). Further, the shares of firms that are part of a chain are also similar between the two groups of firms.

The descriptive statistics show interesting features in terms of governance structures. Family firms have fewer owners (1.38 compared to 1.51 for non-family firms). Moreover, there

is a large difference in how active the owners are between the groups. Family owners by definition take an active part in governance. Only 6.4 percent in non-family firms replies that someone from their family takes active part in the governance of the firm. Given that we study micro and small firms this is a relatively low value.

The share of female owners is statistically significantly higher in family firms than in non-family firms, 22 and 15 percent, respectively. The comparison shows that non-family owners are more well-educated compare to family-owners. Owners of family firms are less likely to have a tertiary degree and more likely to only have a secondary school degree (both differences are statistically significant). There are no differences in nationality between family and non-family firms.

Table 3: Summary statistics family and non-family firms

Variable	Family firms			Non-family firms			Diff. in mean	t-value
	Mean	Std. Dev.	Obs	Mean	Std. Dev.	Obs		
<i>Panel A: Dependent variables</i>								
Independence (“Agree”) (%)	92	0.28	533	0.85	0.36	467	0.07***	(3.26)
Independence (“Fully agree”) (%)	73	0.45	533	0.65	0.48	467	0.08***	(2.64)
<i>Panel B: Firm characteristics</i>								
Firm age (# year)	14.04	12.49	533	13.78	13.25	467	0.26	(0.32)
Firm size (# empl.)	4.03	4.97	533	5.14	7.07	465	-1.11***	(-2.90)
High- and medium-High-tech (%)	2	0.15	533	0.02	0.15	467	-0.00	(-0.11)
Medium-low-tech (%)	4	0.19	533	0.05	0.22	467	-0.01	(-1.07)
Low-tech (%)	4	0.19	533	0.03	0.18	467	0.00	(-0.28)
KIS (%)	26	0.44	533	0.32	0.47	467	-0.06*	(-1.96)
Less-KIS (%)	45	0.50	533	0.41	0.49	467	0.04	(1.31)
Other industries (%)	19	0.39	533	0.16	0.37	467	0.03	(1.11)
Number of owners	1.38	0.52	533	1.51	0.63	467	-0.12***	(-3.32)
Gearing (%)	100.99	167.16	404	72.86	155.01	372	28.13**	(2.43)
Total Assets (1000 USD)	1560.10	14484.47	436	1141.93	4373.76	397	418.17	(0.55)
Operational revenues (1000 USD)	1111.87	2571.62	436	1703.34	5272.27	398	-591.47**	(-2.09)
Profit margin (%)	5.81	15.73	431	6.25	15.25	388	-0.44	(-0.41)
Solvency (%)	39.95	30.37	435	42.59	26.91	393	-2.64	(-1.32)
EBIT (%)	6.21	16.41	433	6.93	15.04	390	-0.72	(-0.65)
<i>Panel C: Owner characteristics</i>								
Owner age	50.56	11.14	525	49.30	11.20	464	1.26	(1.77)
Female	0.22	0.42	533	0.15	0.36	467	0.07***	(3.00)
Foreign								
Nordic	0.02	0.14	533	0.02	0.14	467	-0.00	(-0.30)
Europe	0.03	0.18	533	0.04	0.20	467	-0.01	(-0.91)
Africa/Asia	0.02	0.15	533	0.02	0.15	467	0.00	(0.09)
Education								
Primary	0.10	0.30	533	0.10	0.30	467	-0.00	(-0.06)
Secondary	0.51	0.50	533	0.45	0.50	467	0.06**	(1.99)
Tertiary	0.39	0.49	533	0.45	0.50	467	-0.06*	(-1.90)

Note: See Table 1 for definitions. The number of observations decreases when the survey data is matched with firm specific data. *** indicates significance on a 1 percentage level, **significance on a 5 percentage level.

4. Empirical results

In order to test hypothesis one, stating that family owners value independence higher than non-family owners, we estimate a logit model in accordance with equation 1.

$$\Pr(\textit{independence} = 1) = \alpha + \beta\textit{family} + \gamma X + \delta Z_{t-1} + \epsilon \quad (1),$$

where, *family* is a dummy variable taking the value one for family firms, *X* denotes a vector of owner and firm characteristics whereas *Z* is a set of financial control variables; β and γ are the corresponding set of coefficient vectors and ϵ the error term.

Model 1 in Table 4 shows the average partial effects from a logit estimation using the wider definition of independence, i.e., the dependent variable equals one if the respondent “agree” or “fully agree” that independence is very important. Model 2 uses the more strict definition, taking the value one if the owner has answered “fully agree”. Financial control variables are included in the even numbered columns. The results show that family firm owners are more likely to state that independence over the firm’s decisions and activities are important. This, together with number of owners, is also the only explanatory variable that is significant regardless of model specification or inclusion of financial control variables or not. Table 4 indicates that family owners are 6-7 percent more likely to answer “agree” or “fully agree” that independence is important. The effect increases in magnitude when using the second model specification, meaning that family firm owners are around 6-9 percent more likely to answer “fully agree”. In line with expectations, firms with a larger number of owners are less likely to agree with the statement.

Table 4: Regression results, dependent variable: to be independent is very important to me

VARIABLES	Model 1		Model 2	
	(1)	(2)	(3)	(4)
Family firm	0.061*** (0.015)	0.073*** (0.014)	0.062** (0.028)	0.086*** (0.024)
Firm age	-0.000 (0.001)	-0.000 (0.001)	0.002* (0.001)	0.003** (0.001)
Firm size	-0.001 (0.001)	0.001 (0.002)	-0.003 (0.002)	-0.002 (0.002)
High- and medium-high-tech	-0.084 (0.111)	-0.055 (0.092)	0.023 (0.110)	0.055 (0.089)
Medium-low-tech	-0.024 (0.078)	-0.025 (0.070)	0.042 (0.090)	0.050 (0.076)
KIS	-0.035 (0.066)	-0.081 (0.073)	0.062 (0.072)	0.053 (0.066)
Less-KIS	0.016 (0.050)	0.012 (0.048)	0.109* (0.066)	0.119** (0.059)
Other industries	-0.003 (0.057)	-0.029 (0.060)	0.070 (0.070)	0.096 (0.059)
Number of owners	-0.034** (0.017)	-0.031** (0.016)	-0.059** (0.025)	-0.052** (0.022)
Owner age	-0.000 (0.001)	0.001 (0.001)	-0.001 (0.001)	0.001 (0.001)
Female	-0.002 (0.027)	-0.026 (0.028)	0.055 (0.036)	0.008 (0.035)
Nordic	0.021 (0.061)	0.001 (0.061)	0.013 (0.101)	0.020 (0.086)
Europe	0.051 (0.042)	0.080** (0.032)	0.086 (0.070)	0.152** (0.060)
Africa/Asia	0.054 (0.055)	0.007 (0.079)	0.069 (0.092)	0.133 (0.090)
Primary	-0.806 (4.861)	-0.789 (5.068)	-0.645 (15.306)	-0.625 (9.442)
Secondary	-0.517 (25.594)	-0.510 (24.201)	-0.509 (79.418)	-0.497 (46.766)
Tertiary	-0.561 (20.969)	-0.573 (18.560)	-0.535 (68.385)	-0.553 (39.088)
Observations	987	755	987	755
Financial controls	NO	YES	NO	YES

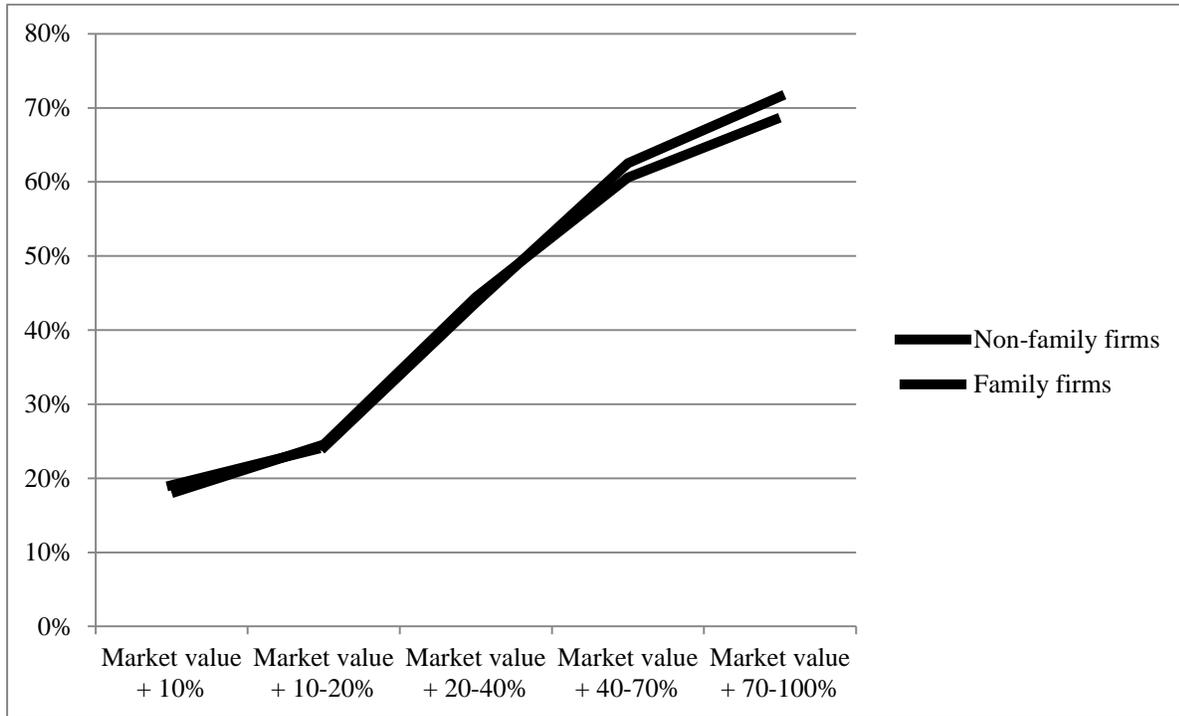
Note: Standard errors in parentheses. Model 1 show the average partial effects from a logit estimation where the dependent variable equals one if the respondent “agree” or “fully agree” to the statement that independence is very important. In model 2 the dependent variable takes the value 1 if the owner has answered “fully agree”. *** indicates significance at the 1 percentage level, **significance at the 5 percentage level.

The results also indicate that owner's born in Europe, excluding the Nordic countries, are more likely to find independence important. Business owners operating in KIS are less likely to value independence highly. These effects are only statistically significant when controlling for financial variables.

In order to test whether family firms and non-family firms put a different premium on control, the respondents are given a hypothetical offer to sell shares giving an external investor major influence of the company or the whole company. The offer varies in magnitude from market value plus an additional 10 percent up to a market value plus 70-100 percent. The analysis reveals three interesting features. First, owners of micro and small firms are highly reluctant to sell to external investors. Figure 1 shows that around 30 percent of the owners are unwilling to sell the firm despite the hypothetical offer of market value plus 70-100 percent. Second, there is no statistically significant difference in firm owners' attitude to sell shares giving an external investor major influence or the whole company to an external investor. This supports previous research, that independence and control are important attributes of entrepreneurship; if the owner decides to sell shares giving an external investor major influence of her/his firm (s)he might just as well sell the whole company. Third, there is no statistically significant difference in the willingness to sell neither shares nor the entire firm between family firms and non-family firms.¹¹ Given the support for hypothesis one (that family firm owners, value independence higher than non-family firm owners) and the theoretical discussion, we would expect that family firm owners would be more reluctant to sell shares giving an external investor major influence than non-family firms. The same reasoning applies to selling the whole firm. The results do not support hypothesis 2, and we reject the hypothesis.

¹¹ The willingness to sell the entire firm shows a similar pattern and there is no statistically significant difference in propensity to sell between family and non-family firms.

Figure 1: The share of owners that are willing to sell shares of the company giving an external investor a major influence in the company (%)



In the survey, the respondents were asked to specify how important different sources of finance have been during the last three years. In connection to that, they were also asked to state their preferences with regards to financing future expansions. Again, the respondents are divided into two groups: family firms and non-family firms. This allows for a two group mean comparison test in order to find significant differences between the two groups. Table 5 summarizes the results.

Table 5: Two groups mean comparison tests for family and non-family firms.

Panel A: How important have the following sources of finance been for financing the company's operations during past three years?				
	Family (%)	Non-family (%)	Difference (ppt ^a)	t-value
Equity from the owners	37.33	31.04	6.29**	2.1
Company profits	50.28	48.39	1.89	0.60
Equity from new <i>family</i> owners	4.31	2.78	1.53	1.31
Equity from new <i>external</i> owners	2.44	4.71	-2.27*	-1.91
Loans from family	14.07	6.21	7.86***	4.19
Loans from banks and others	31.33	29.55	1.78	0.61
Panel B: regardless of whether your company has plans to expand or not, how likely is it that you would use any of these sources to finance the expansion?				
	Family (%)	Non-family (%)	Difference (ppt ^a)	t-value
Equity from the owners	38.65	30.19	8.46***	2.82
Company profits	80.11	76.66	3.45	1.32
Equity from new <i>family</i> owners	10.13	5.78	4.35**	2.56
Equity from new <i>external</i> owners	12.01	14.56	-2.56	-1.18
Loans from family	12.57	5.35	7.22***	4.06
Loans from banks and others	45.97	41.11	4.86	1.54

Note: *** indicates significance at the 1 percentage level, **significance at the 5 percentage level, * significance at the 10 percent level. ^a Percentage points.

The results from the two groups mean comparison t-tests show that family firms have, to larger extent, used equity from the owners during the last three years. They also consider the use of equity from the owners in case of a future expansion to be more likely than non-family firms. The results supports hypothesis 3. Family firms are more willing to include new owners from family in order to finance an expansion than non-family firms. Loans from family have been more important for family firms and are considered to be a more likely source of finance in case of a future expansion. Table 3 shows that there are differences in family and non-family firms gearing ratio (debt over equity), family firms have statistically significantly higher gearing ratio compared to non-family firms. In line with hypothesis 4, table 5 shows that family firms to a larger extent has both used and consider to use bank loans as a financing source, the differences in mean values are, however, statistically insignificant. Table 5 also shows that financing through

new external owners has been less important for family firms than for non-family firms and that they are less likely to use this source of funding in case of a future expansion. The results supports hypothesis 5.

5. Concluding remarks

External financing may imply a trade-off between independence and seizing business opportunities. This should in particular apply to family firms with their concentrated ownership, mixture of family and business life and incorporation of other goals than financial in decision making. Analyses of financing decisions in family firms are desirable to improve the understanding of which family features yield or constrain investments, and thus firm growth. Identifying and understanding the demand for external capital in family firms will allow us to better explore those family idiosyncratic resources and competences that may improve family owners' ability to take advantage of current and future opportunities (Habbershon, Williams, and MacMillan, 2003). Previous research has shown that family firms significantly differ from non-family firms in terms of corporate governance, financing decisions, and capital structure (Dawson 2011). Research suffers, however, from not being able to identify family ownership and family involvement in firm governance in official statistics – the criteria suggested by the European Commission (2009) – and which we apply. Previous research has, therefore, in general focused on larger firms by necessity. We contribute to contemporary literature by making it possible to distinguish and compare family and non-family firms among micro and small firms. Our analysis is based on a representative sample of the total population of micro (1-9 employees) and small (10-49 employees) limited stock companies. The sample consists of 1,000 telephone interviews where we ask questions that make it possible to study the influence of family ownership on financial and investment decisions controlling for personal features of the owner (e.g., gender,

education and age), firm characteristics (e.g. size, age and industry affiliation) and capital structure (e.g., gearing and profitability).

Overall, our study aims at understanding why and under what circumstances family firms may experience capital constraints. Is it a problem of supply or demand of external capital, and/or access to internal funds? We are interested in the attitudes towards independence and source of funding among family and non-family owners. The survey includes questions regarding attitudes to various types of internal and external funding, such as company profits, bank loans, new external equity owners, and issuing of new equity. One novelty of our study is that we estimate the control premium in micro and small family and non-family firms. Our analysis integrates lessons from family business research and institutional economics. Our findings have a bearing on other research fields that have started to show an increasing interest in family business, for instance small business economics, finance and corporate governance.

The present study shows that both family and non-family owners seize independence as the main motivational force for enterprising; family owners to a statistically significantly larger extent than non-family owners. Owners of family as well of non-family firms also value control highly, measured as the price for selling shares giving an external investor a major influence in the company or the whole company to an external investor. In this case, the analysis shows no statistical differences between family and non-family firms. In line with the pecking-order theory a majority of the firms, family and non-family, would prefer to use company profits, bank loans and own equity to finance future expansion. Few would consider using equity financing from new owners. There are statistically significant differences between the two types of firms: family firms to a larger extent than non-family firms prefer own equity, loans from family and equity from new family owners. Our findings underline the importance of informal and formal

institutions being aligned, i.e., that formal institutional support and strengthen informal institutions such as the inherent values of independence.

The present study shed light on the current policy debate about capital constraints hampering small firm growth. Our findings suggest that the formal institution of policy schemes directed towards increasing the supply of external capital is largely an ineffective policy because it conflicts with the informal institution independence as an inherent value, because the policy transfers control of the owner to the external investor. Rather, our results point in the direction that there may exist a *capital constraint paradox*: there may exist a surplus of external capital at the same time as firms – family firms to a larger extent than non-family firms – forgo growth opportunities because lack of internally generated funds and own equity. A more effective policy could then be to increase the supply of own equity and internal funds – the most preferred sources of funding for investment and growth – by reducing capital income taxes. This would make formal and informal institutions more aligned. Also, the capital tax that shields the price of the shares that a new investor is prepared to pay and the amount that the incumbent entrepreneur receives would be reduced. Given that the incumbent entrepreneur can be compensated adequately for the lost control over the corporation, welfare generating transactions can take place. In fact, small losses of tax revenues could finance substantial tax cuts as capital taxes contribute little to total tax revenues, especially in high tax countries like Sweden.

Acknowledgement

We gratefully acknowledge Confederation of Swedish Enterprise for financing the telephone survey. Financial support for Johanna Palmberg from the Smelink foundation and for Dan Johansson from Ragnar Söderberg Foundation is also gratefully acknowledged. We are grateful

for comments on an earlier version from Per-Olof Bjuggren, and seminar participants at CESIS, The Royal Institute of Technology.

References

- Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). Institutions as a fundamental cause of long-run growth, *Handbook of Economic Growth*, 1, 385–472.
- Amit, R. & Villalonga, B. (2014). Financial performance of family firms. In *The SAGE Handbook of Family Business*, Melin, L., Nordqvist, M., & Sharma, P., ch. 9, SAGE Publications Ltd.: London.
- Andres, C. (2008). Large shareholders and firm performance - an empirical investigation of founding-family ownership. *Journal of Corporate Finance*. 14, 431–445.
- Arregle, J. L., Hitt, M. A., Sirmon, D. G., & Very, P. (2007). The Development of Organizational Social Capital: Attributes of Family Firms. *Journal of management studies*. 44(1), 73–95.
- Astrachan, J. H. (2010). Strategy in family business: Toward a multidimensional research agenda. *Journal of Family Business Strategy*. 1(1), 6–14.
- Astrachan, J. H., & Shanker, M. C. (2003). Family businesses' contribution to the U.S. economy: A closer look. *Family Business Review*. 16(3), 211–219.
- Barca, F., & Becht, M. (2001). *The control of corporate Europe*. Oxford University Press.
- Barclay, M.J., & Holderness, C.G., (1989). Private benefits from control of public corporations. *Journal of Financial Economics*, 25, 371–395.
- Beck, T., & Demirguc-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, 30(11), 2931–2943.
- Benavides-Velasco, C. A., Quintana-García, C., & Guzmán-Parra, V. F. (2013). Trends in Family Business Research. *Small Business Economics*, 40 (1), 41–57.
- Berggren, N., (2003). The Benefits of Economic Freedom: A Survey. *The Independent Review*, 8(2), 193-211.
- Berggren, N., Bergh, A., & Bjørnskov, C. (2012). The growth effects of institutional instability. *Journal of Institutional Economics*, 8(02), 187-224.
- Berggren, B., Olofsson, C., & Silver, L. (2000). Control aversion and the search for external financing in Swedish SMEs. *Small Business Economics*, 15(3), 233–242.
- Bird, B., Welsch, H., Astrachan, J. H., & Pistrui, D. (2002). Family business research: The evolution of an academic field. *Family Business Review*, 15(4), 337–350.
- Bjuggren, P. O., & Palmberg, J. (2010). The impact of vote differentiation on investment performance in listed family firms. *Family Business Review*, 23(4), 327–340.
- Bjuggren, C-M., Johansson D., & Sjögren, H. (2011). A Note on Swedish Family-Owned Businesses, Employment, and GDP: A Descriptive Analysis. *Family Business Review*, 24(4), 362–371.

- Brown, R., Mason, C. & Mawson, S. (2014). Increasing ‘The vital 6 percent’: designing effective public policy to support high growth firms. *NESTA Working Paper* No. 14/01. National Endowment for Science, Technology and the Arts (NESTA), London
- Burkart, M., Panunzi, F., & Shleifer, A. (2003). Family Firms. *Journal of Finance*, 58(5), 2167–2201.
- Carpenter, R.E. & Petersen, B.C. (2002). Capital Market Imperfections, High-Tech Investment and New Equity Financing. *Economic Journal*, 112, F54-F72.
- Casillas, J., & Acedo, F. (2007). Evolution of the intellectual structure of family business literature: A bibliometric study of FBR. *Family Business Review*, 20(2), 141–162.
- Chang, H. J. (2011). Institutions and economic development: theory, policy and history. *Journal of Institutional Economics*, 7(04), 473-498.
- Claessens, S., Djankov, S., Fan, J. P., & Lang, L. H. (2002). Disentangling the incentive and entrenchment effects of large shareholdings. *The Journal of Finance*, 57(6), 2741–2771.
- Claessens, S., & Fan, J. P. (2002). Corporate governance in Asia: A survey. *International Review of Finance*, 3(2), 71-103.
- Coad, A. & Rao, R. (2010). Firm growth and R&D expenditure. *Economics of Innovation and New Technology*, 19(2), pp. 127–145.
- Cressy, R. (1995). Business Borrowing and Control: A Theory of Entrepreneurial Types. *Small Business Economics* 7, 291–300.
- Cressy, R., & Olofsson, C. (1997). The Financial Conditions for Swedish SMEs: Survey and Research Agenda. *Small Business Economics*, 9(2):179–192.
- Davidsson, P. (1989). Entrepreneurship – and After? A Study of Growth Willingness in Small Firms. *Journal of Business Venturing*, 4(3), 211–226.
- Dawson, A. (2011). Private equity investment decision in family firms: The role of human resources and agency costs. *Journal of Business Venturing*, 26(2), 189–199.
- De Massis, A., Kotlar, J., Campopiano, G., & Cassia, L. (2013). The impact of family involvement on SME’s performance. Forthcoming *Journal of Small Business Management*.
- Didier, T., Levine, R., & Schmukler, S.L., (2014). Capital Market Financing, Firm Growth, Firm Size Distribution. No. w20336. *National Bureau of Economic Research*.
- Donaldson, G. (1961). *Corporate Debt Capacity*. Boston: Harvard University Press.
- Dyck, A., & Zingales, L. (2004a). Control premiums and the effectiveness of corporate governance systems. *Journal of Applied Corporate Finance*, 16(2-3), 51–72.
- Dyck, A., & Zingales, L. (2004b). Private benefits of control: An international comparison. *The Journal of Finance*. 59(2), 537–600.
- Dyer, W. G. (2006). Examining the “family effect” on firm performance. *Family Business Review*, 19(4), 253-273.

- Dyer, W. G., Jr., & Sánchez, M. (1998). Current state of family business theory and practice as reflected in Family Business Review 1988–1997. *Family Business Review*, 11(4), 287–296.
- European Commission (2009). Final Report of the Expert Group: Overview of Family-Business-Relevant Issues: Research, Networks, Policy Measures and Existing Studies., retrieved 2014-08-26; http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/family-business/family_business_expert_group_report_en.pdf.
- European Commission (2012). Supporting small and medium-sized enterprises in 2012 A joint report of the European Commission and the EIB Group, retrieved 2014-08-26; http://ec.europa.eu/enterprise/policies/finance/files/joint-report_en.pdf
- Eurostat (2014). Eurostat indicators of high-tech industry and knowledge-intensive services, retrieved: 2014-08-26; http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/Annexes/htec_esms_an3.pdf
- EU recommendation (2003). Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises/361, retrieved 2014-08-26; <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:124:0036:0041:EN:PDF>
- Fogel, K., Lee, K., Lee, W., & Palmberg, J. (2013). Foreign Direct Investors as Change Agents: The Swedish Firm Experience. *Corporate Governance: An International Review*, 21(6), 516–534.
- Garcia-Castroa, R. & Aguilera, R. (2014). Family involvement in business and financial performance: A set-theoretic cross-national inquiry. *Journal of Family Business Strategy* 5(1), 85–96.
- Gómez-Mejía, L., & T. Haynes, et al. (2007). Socioemotional Wealth and Business Risks in Family-controlled Firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, 52,106-137.
- Gomez-Mejia, L. R., Cruz, C., Berrone, P., & De Castro, J. (2011). The bind that ties: Socioemotional wealth preservation in family firms. *The academy of management annals*, 5(1), 653–707.
- Gompers, P.A., & Lerner, J. (1998). What Drives Venture Capital Fundraising?, *Brookings Papers on Economic Activity: Microeconomics*, July, 149–204.
- Habbershon, T. G., Williams, M., & MacMillan, I. C. (2003). A unified systems perspective of family firm performance. *Journal of business venturing*, 18(4), 451–465.
- Henrekson, M., & Jakobsson, U. (2001). Where Schumpeter Was nearly Right -- The Swedish Model and Capitalism, Socialism and Democracy. *Journal of Evolutionary Economics*, 11(3): 331–358.
- Henrekson, M., & Jakobsson. (2005). The Swedish Model of Ownership and Corporate Control in Transition. In Harry Huizinga and Lars Jonung, eds., *Who Will Own Europe? The Internationalisation of Asset Ownership in Europe*. Cambridge: Cambridge University Press, pp 207–247.

- Hodgson, Geoffrey M. (1988). Economics and Institutions. *Journal of Economic Issues*, 1(1): 1-25.
- Hubbard, R. G. (1998). Capital-Market Imperfections and Investment. *Journal of Economic Literature*, 36, 193–225.
- Högfeldt, P. (2005). The History and Politics of Corporate Ownership in Sweden. In R. Morck (Ed.), *A History of Corporate Governance Around the World*. Chicago and London: The University of Chicago Press.
- Jensen, M. C. & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and capital structure. *Journal of Financial Economics*, 3, 305–360.
- Kaplan, S.N. & Strömberg, P. (2001). Venture Capitals as Principals: Contracting, Screening, and Monitoring. *American Economic Review*, 91, 426–430.
- Landes, D. S. (2006). Why Europe and the West? Why Not China?. *The Journal of Economic Perspectives*, 3-22.
- La Porta, R., Lopez-de-Silanes, F., & Schleifer, A. (1999). Corporate Ownership around the World, *The Journal of Finance*, 54(2), 471–517.
- Lerner, J. (2009). *Boulevard of Broken Dreams: Why Public Efforts to Boost Entrepreneurship and Venture Capital have Failed – and what to do about it*. Princeton University Press.
- Mason C., & Brown, R. (2013). Creating good public policy to support high-growth firms. *Small Business Economics*, 40(2), pp. 211–225.
- Mazzi, C. (2011). Family business and financial performance: Current state of knowledge and future research challenges. *Journal of Family Business Strategy*, 2(3), 166–181.
- Miller, D., Le Breton-Miller, I., Lester, R. H., & Cannella Jr, A. A. (2007). Are family firms really superior performers?. *Journal of Corporate Finance*, 13(5), 829-858.
- Myers, S. C. (1984). The Capital Structure Puzzle. *The Journal of Finance*, 39(3): 575–592.
- Myers, S. C. & Majluf, N.S. (1984). Corporate Financing and Investment Decisions when Firms have Information that Investors do not have. *Journal of Financial Economics*, 13(2): 187–221.
- Melin, L. & Nordqvist, M. (2007). The Reflexive Dynamics of Institutionalization: The Case of the Family Business. *Strategic Organization*, 5, 321-333.
- Mokyr, J., (1990). *The Lever of Riches: Technological Creativity and Economic Progress*. Oxford: Oxford University Press.
- Nenova, T. (2003). The value of corporate voting rights and control: A cross-country analysis. *Journal of Financial Economics*, 68(3), 325-351.
- North, Douglass C. & Thomas, R. (1973). *The Rise of the Western World: A New Economic History*. Cambridge: Cambridge University Press.
- OECD (2010). *High-Growth Enterprises: What Governments Can Do to Make a Difference*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing.

- Romano, C.A., & Tanewski, G.A., & Smyrniotis, K.X. (2001). Capital Structure Decision Making: A Model for Family Business. *Journal of Business Venturing*, 16(3): 285–310.
- Rosenberg, N., & Birdzell, L. E. (1986). *How the West Grew Rich: The Economic Transformation of the Industrial World*. New York: Basic Books.
- Sciascia, S., & Mazzola, P. (2008). Family involvement in ownership and management: Exploring nonlinear effects on performance. *Family Business Review*, 21(4), 331-345.
- Searle, J. R. (2005). What is an institution? *Journal of institutional economics*, 1(1), 1-22.
- Sirmon, D. G. & Hitt, M. A. (2003). Managing Resources: Linking Unique Resources, Management and Wealth Creation in Family Firms. *Entrepreneurship Theory and Practice*. 27(4), 339-358.
- Short, J., Payne, G.T. Birgham, K.H., Limpkin, G.T. & Broberg, J.C. (2009). Family firms and entrepreneurial orientation in publicly traded firms. *Family Business Review*, 22(1), 9-24.
- Villalonga, B., & Amit, R. (2009). How are US family firms controlled?. *Review of Financial Studies*, 22(8), 3047-3091.
- Villalonga, B., & Amit, R. (2006). How do Family Ownership, Control and Management Affect Firm Value? *Journal of Financial Economics*, 80(x): 385–417.
- Westhead, P., & Howorth, C. (2006). Ownership and management issues associated with family firm performance and company objectives. *Family Business Review*, 19(4), 301-316.
- Zahra, S. A., & Sharma, P. (2004). Family business research: A strategic reflection. *Family Business Review*, 17(4), 331–346.
- Zingales, L., (1995). What determines the value of corporate votes. *Quarterly Journal of Economics*, 1047–1073.
- Williamson, O. E. (2000). The New Institutional Economics: Taking stock, looking ahead. *Journal of Economic Literature*, 38(3), 595-613.

Appendix A:

Phone Survey (the survey was conducted in Swedish)

1. a) Does your company have one or several owners?

- One owner
- 2-4 owners
- 5 - Owners
- No answer

b) Are you employed by the company, i.e., do you receive salary from the company?

- Yes
- No
- Don't know/No answer
- Don't want to answer

2. How many employees does your company have, excluding the owner/owners?

- ___ Employees
- Uncertain/don't know
- Don't want to answer

3. What percentage of the decision-making rights is in the possession of the natural person(s) who established the firm, or in the possession of the natural person(s) who has/have acquired the share capital of the firm, or in the possession of their spouses, parents, child or children's direct heirs? The majority of decision-making rights are indirect or direct.

- _____Percentage
- Uncertain/don't know
- Don't want to answer

4. Is at least one representative of the family or kin formally involved in the governance of the firm?

- Yes
- No
- Uncertain/don't know
- Don't want to answer

5. How important have the following sources of finance been for financing the company's operations during the past three years?

- 1= Not important at all
- 2= Fairly small importance
- 3= Neither large nor small importance
- 4= Fairly large importance
- 5= Really large importance
- 6= Uncertain/don't know

- a) Equity from the owners
- b) Company profits
- c) Equity from new family owners
- d) Equity from new external owners
- e) Loans from family
- f) Loans from banks and others
- g) Any other source of capital that has had any significance?

6. Regardless of whether your company has plans to expand or not, how likely is it that you would use any of these sources to finance the expansion?

- 1= Not at all likely
- 2= Not very likely

- 3= Neither
- 4= Pretty likely
- 5= Very likely
- 6= Don't know

- a) Equity from the owners
- b) Company profits
- c) Equity from new family owners
- d) Equity from new external owners
- e) Loans from family
- f) Loans from bank and others
- g) Any other source of capital that has had any significance? _____

7. Does the following statement apply to you as an entrepreneur or not.

- 1=Do not agree at all
- 5=Totally agree
- 6=Uncertain/Don't know

To be independent is very important to me

8. Assume that you get an offer on a controlling stake in your company. To which price would you be willing to sell shares of your company giving an external investor a major influence in the company?

- Yes
- No
- Uncertain/Don't know
- Don't want to answer

- Estimated market value – estimated market value +10%
- Estimated market value +10% – estimated market value +20%
- Estimated market value +20% - estimated market value +40%
- Estimated market value +40% - estimated market value +70%
- Estimated market value +70% - estimated market value +100%

9. Assume that someone lays an offer on your company. To which price would you be willing to sell the whole company to an external investor?

- Yes
- No
- Uncertain/no answer
- Don't want to answer

- Estimated market value – estimated market value +10%
- Estimated market value +10% – estimated market value +20%
- Estimated market value +20% - estimated market value +40%
- Estimated market value +40% - estimated market value +70%
- Estimated market value +70% - estimated market value +100%

Background questions

10. Gender?

- Female
- Male

11. How old are you?

-- years

Don't want to answer

12. What is your highest completed education?

- Preliminary education
- Secondary education
- Tertiary education
- No answer

13. Where are you born?

- a. Sweden
- b. Another Nordic country than Sweden, including Iceland
- c. Another European country that is a member of EU
- d. Another European country that is not a member of EU (Croatia, Montenegro, Macedonia, Russia, Serbia, Turkey, Bosnia & Herzegovina, Albania, Kosovo)
- e. Africa
- f. Asia
- g. North America
- h. South America
- i. Oceania
- j. Don't want to answer

Appendix B: Eurostat Industry Classification

Manufacturing industries

High-tech manufacturing (High-tech) includes:

- 21 Manufacture of basic pharmaceutical products and pharmaceutical preparations
- 26 Manufacture of computer, electronic and optical products

Medium-high-tech manufacturing includes:

- 20 Manufacture of chemicals and chemical products
- 27 to 30 Manufacture of electrical equipment, manufacture of machinery and equipment n.e.c., manufacture of motor vehicles, trailers and semi-trailers, manufacture of other transport equipment. High-tech and medium-high-tech are combined due to few observations in the high-tech group

Medium-low-tech includes:

- 19 Manufacture of coke and refined petroleum products
- 22-25 Manufacture of rubber and plastic products, manufacture of other non-metallic mineral products, manufacture of basic metals, manufacture of fabricated metal products, except machinery and equipment;
- 33 Repair and installation of machinery and equipment

Low-tech manufacturing includes:

- 10-18 Manufacture of food products, beverages, tobacco products textiles, wearing apparel, leather and related products, wood and products of wood, paper and paper products, printing and reproduction of recorded media
- 31 to 32 Manufacture of furniture, other manufacturing

Knowledge based services

Knowledge-intensive services (KIS) includes:

- 50 to 51 Water transport, Air transport
- 58 to 63 Publishing activities, Motion picture, video and television program production, sound recording and music publishing activities, Programming and broadcasting activities, Telecommunications, Computer programming, consultancy and related activities, Information service activities (section J)
- 64 to 66 Financial and insurance activities (section K)
- 69 to 75 Legal and accounting activities, Activities of head offices, management consultancy activities, Architectural and engineering activities; technical testing and analysis, Scientific research and development, Advertising and market research, Other professional, scientific and technical activities, Veterinary activities (section M)
- 78 Employment activities
- 80 Security and investigation activities
- 80 to 93 Public administration and defense, compulsory social security (section O), Education (section P), Human health and social work activities (section Q), Arts, entertainment and recreation (section R)

Less knowledge-intensive services include:

- 45 to 47 Wholesale and retail trade, repair of motor vehicles and motorcycles (section G)
- 49 Land transportation and transport via pipelines
- 52 to 53 Warehousing and support activities for transportation, postal and courier activities
- 55 to 56 Accommodation and food service activities (section I)
- 68 Real estate activities (section L)
- 77 Rental and leasing activities
- 79 Travel agency, tour operator reservation service and related activities
- 81 Services to buildings and landscape activities
- 82 Office administrative, office support and other business support activities
- 94 to 96 Activities of membership organizations, repair of computers and personal and household goods, other personal service activities (section S)
- 97 to 99 Activities of households as employers of domestic personnel, undifferentiated goods- and services-producing activities of private households for own use (section T), activities of extraterritorial organizations and bodies (section U)