

DISSERTATIONS IN  
**SOCIAL SCIENCES  
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**JAANA LAPPALAINEN**

*Association Between  
Corporate Governance  
Structures and Agency  
Problems in Small Firms –  
Evidence on Finnish SMEs*

**PUBLICATIONS OF THE UNIVERSITY OF EASTERN FINLAND**  
*Dissertations in Social Sciences and Business Studies*



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Dissertation

## **ABSTRACT**

The overall purpose of this dissertation is to investigate the association between corporate governance structures and agency problems in small firms. The aim is to address the question whether ownership structure and board composition are associated with growth and profitability, and whether attitudes towards and the use of different funding sources and the investment behaviors differ between family and non-family firms.

This dissertation provides evidence that both ownership structure and board composition are significant determinants of firm performance in the sample of private small and medium-sized Finnish firms. The results imply that the ownership structure may be a more important determinant of the growth and profitability of small firms than board composition. The findings reveal that pecking order theory is a relevant theory in explaining the funding behavior of family firms. The results obtained support the prior evidence that family firms are more interested in maintaining control within the family. The results on the funding behavior could also imply that family firms may be more financially constrained than their non-family counterparts and they face more severe agency problems between the firm and potential lenders due to information asymmetry.

The results on the investment behavior suggest that family firms are more likely to reject an investment than are non-family firms. However, the findings on the amount of investment indicate that no statistically significant difference exists between family firms and non-family firms. The result could imply that both family and non-family firms may be concerned with their firm's future performance and ability to survive in competition, thus, affecting their investment behavior in a similar way.

Keywords: corporate governance, agency problems, growth, profitability, funding, investment, small firms

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Väitöskirja

## **ABSTRAKTI**

Tämän väitöskirjan tavoitteena on tutkia corporate governancen ja agenttiongelmien välistä yhteyttä pk-yrityksissä. Väitöskirjassa tutkitaan vaikuttavatko omistusrakenne ja hallituksen kokoonpano pk-yritysten kasvuun ja kannattavuuteen ja eroavatko perheyrietykset ja ei-perheyrietykset rahoitus- ja investointikäyttäytymisessä.

Tutkimustulosten mukaan yrityksen omistusrakenne ja hallituksen kokoonpano vaikuttavat pk-yrityksen kasvuun ja kannattavuuteen. Kuitenkin omistusrakenteella on enemmän vaikutusta kasvuun ja kannattavuuteen kuin hallituksen kokoonpanolla. Rahoituskäyttäytymisen osalta perheyrietykset näyttävät käyttävän ostovelkoja, rahoitusyhtiöitä ja nykyisiä omistajia rahoituslähteenään useammin kuin ei-perheyrietykset. Kuitenkin perheyrietysten omistaja-johtajien asenteet ovat negatiivisemmat pankkilainoja ja ostovelkoja kohtaan ja positiivisemmat omistajien lisäsijoituksia kohtaan kuin ei-perheyrietyksissä. Yrietykset näyttävät noudattavan pääosin pecking order- teoriaa rahoituskäyttäytymisessään. Tulokset viittaavat siihen, että perheyrietyksillä on enemmän agenttiongelmia yrityksen ja rahoittajien välillä kuin ei-perheyrietyksillä.

Tutkimustulokset paljastavat, että perheyrietykset joutuvat hylkäämään investointeja useammin kuin ei-perheyrietykset mm. rahoituksen saannin vaikeuden vuoksi. Tämä viittaa agenttiongelmiiin yrityksen ja ulkopuolisten rahoittajien välillä. Investointien määrän osalta perhe- ja ei-perheyrietyksillä ei näytä olevan tilastollisesti merkittäviä eroja.

Avainsanat: corporate governance, agenttiongelmia, kasvu, kannattavuus, rahoitus, investoinnit, pk-yritykset



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Korholanmäki, April 2014

*Jaana Lappalainen*



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# 1 Introduction

## 1.1 BACKGROUND AND RESEARCH ENVIRONMENT

This study addresses topics that have attracted increasing levels of attention in the corporate finance and governance literature in recent decades. Research on small businesses and especially family businesses has increased and developed remarkably during the past decade, coming to include more-established management disciplines (Gedaljovic, Carney, Chrisman, & Kellermans, 2012). Worldwide, small- and medium-sized private firms are regarded as important to economic growth and employment and they constitute a vast majority of private firms. Their financial performance and success are of key importance to economic growth, both nationally and internationally. Furthermore, a remarkable share of closely held private firms consists of firms with concentrated ownership structures or family firms.

This dissertation focuses on investigating the association between corporate governance structures and the financial performance, funding, and investment behavior of private small- and medium-sized firms in an agency theory context. Agency theory suggests that agency problems arise due to the separation of ownership and control (Jensen & Meckling, 1976). Furthermore, when ownership and management are separated, there is a potential information asymmetry between the managers and owners, because managers may possess better information about the likelihood of success and future returns of a project (Harris & Raviv, 1991). Divergence of interests between the parties may lead to agency problems if interests are misaligned (Jensen & Meckling, 1976).

As agency theory suggests, when managers' interests are aligned with those of shareholders through ownership, agency problems should not exist, at least not between the owners and managers when ownership and management overlap entirely (Jensen & Meckling, 1976). This applies to small and medium enterprises (SMEs), which are typically characterized as having concentrated ownership structures and overlapping roles of owners and management. But, in closely held firms, such as family firms, agency conflicts may arise from altruism or divergence of interest between the majority and minority owners (Schulze, Lubatkin, & Dino, 2003). Furthermore, an agency theory context is relevant in investigating private small- and medium-sized firms because agency problems due to information asymmetry between the owner-managers and outside suppliers of funds are more likely to be present in smaller firms than in their larger counterparts (Myers, 1984; Myers & Majluf, 1984). Furthermore, small closely held firms such as family firms are more susceptible to financial constraints due to information asymmetry (Myers, 1984; Myers & Majluf, 1984).

Although overlapping owner-manager roles reduce agency problems, ownership concentration may lead to risk avoidance. This is supported by Storey (1994) who argues that owners of small businesses find growth too risky and Naldi, Nordqvist, Sjöberg, and Wiklund (2007) who suggest that owner-managed firms such as family firms are generally regarded as more risk averse because their business represents a significant proportion of their wealth. Also, Shleifer and Vishny (1986) propose that large and undiversified investors will exercise risk-reduction strategies. This may also apply to firms with other kinds of corporate governance structures, such as firms with boards that consist of major owners. Lower risk taking may affect a firm's financial performance and the value of the firm. As Bammens, Voordeckers, and van Gils (2008) imply, corporate governance structures matter and failure of firms could be avoided by implementing good corporate governance mechanisms. If firms with certain corporate governance and ownership structures outperform the other structures, it may enhance the overall performance of firms. Furthermore, if firms are financially less constrained, they are able to access to several funding sources and are more capable of investing efficiently, which may increase growth and improve their ability to survive in the competition.

In comparison with many other countries, the operating and institutional environment in Finland is advanced. The Finnish legal environment belongs to the Scandinavian civil law system and it differs from the common law system. Legislation concerning corporate and trade laws and protection of investors is well-developed. The protection of investors in terms of debts is strong, whereas the protection of equity holders is weaker (La Porta, Lopez-de-Silanes, & Shleifer, 1999). Although the Finnish capital markets are well-developed, they are bank-based and highly concentrated with only a small number of banks operating in the country (Niskanen & Niskanen, 2006). Furthermore, bank loans are important sources of funding for small- and medium-sized firms.

In Finland, as in other countries, most firms are micro-, small-, or middle-sized businesses. According to Statistics Finland, in 2012, there were over 320,000 firms in Finland, including primary production, which represents 17.2% of the firms. Large firms constitute only about 620 firms, out of which around 30% are family-controlled businesses. Micro-, small-, and medium-sized firms represent over 99% of all firms in the country. Moreover, the smallest ones, micro-sized firms, constitute over 94% of the firms. SMEs employ over 1.0 million persons. Family businesses represent a significant proportion of all firms; approximately over 80% of all firms are family firms, depending on the definition. New business formation activity has been declining since 2011. In 2005, the number of new formations was 29,859 firms, but at the same time, 21,197 firms ceased their operations while the corresponding figures in 2011 were 32,476 and 24,448 and in 2012 those figures were 31,209 and 25,545. As far as the legal form of the firms is concerned, over 40% of the firms are limited liability entities. During recent years, the number of limited companies among newly founded firms has increased.

## 1.2 PURPOSE OF THE DISSERTATION

The overall purpose of this dissertation is to investigate the financial patterns of private small businesses in Finland in an agency theory context. The aim is to explore the impact that corporate governance and ownership structures may have on financial performance, funding behavior, and investment behavior. More precisely, this dissertation focuses on growth and profitability and the attitudes toward and the use of different funding sources as well as on the amount of investment and rejection of investments in micro-, small-, and medium-sized private businesses.

In the corporate finance literature, an increasing interest during recent decades in exploring SMEs in a family business context has also yielded a growing number of studies, but there is still room for contribution, especially in a private family and non-family business context. Through a comprehensive inspection of the literature, it was possible to identify research gaps for this dissertation.

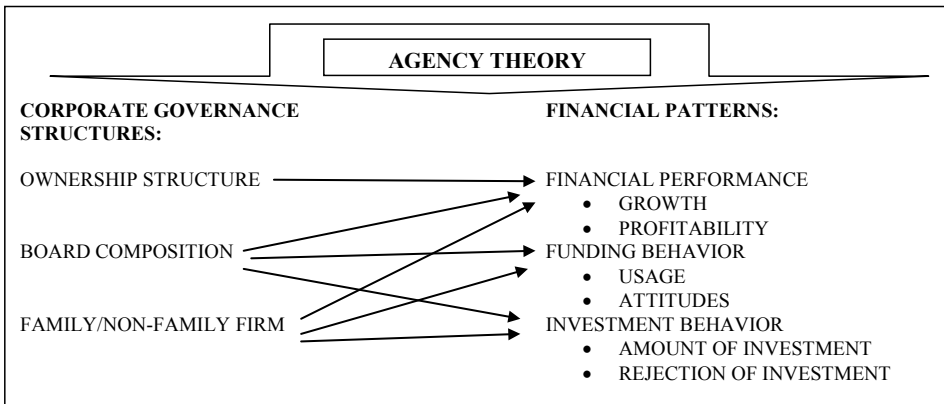
The main parts of the dissertation are presented in the form of three articles. The focus in the first article is on how corporate governance and ownership structures affect the performance of private small- and medium-sized firms. Most prior studies on the relationship between corporate governance structures and financial performance have used data on firms in Anglo-Saxon environments and on large, listed firms, e.g., Morck, Shleifer, and Vishny (1988), McConnell and Servaes (1990), Hermalin and Weissbach (1991), Pearce and Zahra (1992), Agrawal and Knoeber (1996), Dehaene, De Vyust, and Ooghe (2001), Andersson and Reeb (2003), Ben-Amar and André (2006), and Lasfer (2006). Because the legal framework differs by country, and it may have an impact on the corporate governance structures of firms, including those of SMEs, it has been suggested that research on ownership structures should be country-specific. Furthermore, a surprisingly small number of studies have focused on investigating non-listed private small- and medium-sized firms in this context, even though SMEs are recognized worldwide as important engines of economic growth. One reason for that may be that the availability of reliable data on non-listed private firms such as SMEs is, in general, difficult to obtain. This study uses data on SMEs collected through a private survey, which was conducted to extract the detailed data on ownership structure and board composition. This study is one of the few that shed light on how corporate governance and ownership structures affect the financial performance of private small- and medium-sized firms.

The second article approaches the funding behavior in a family and non-family firm context from two different perspectives, those of usage of and attitudes toward different funding sources. An increasing interest in the funding behavior of SMEs has yielded a growing number of studies, but for the most part these rely on data from Anglo-Saxon countries and on large and listed family firms. Although there are empirical studies in a European context, their focus, data, or/and measures differ from those of this study (e.g., Michaelas, Chittenden, & Poutziouris, 1998; Poutziouris, 2001; Vos, Jia-Yuh Yeh, Carter, & Tagg, 2007; Lòpez-Gracia &

Sánchez-Andújar, 2007). Furthermore, the structure of the capital markets constitutes the framework for alternative forms of financing. This structure differs by country, and, therefore, the country context should also be taken into account when investigating funding behavior. Also, this study uses more detailed measures of actual funding behavior than in most prior studies, which use traditional variables calculated from the financial statements. To be able to explore funding behavior more closely not only from the supply side but also from the demand side, attitudes toward different funding sources are also investigated using owner-managers' views and attitudes toward a set of alternative funding sources, which are based on the pecking order theory.

The third article concentrates on investigating the investment behavior of family and non-family-owned firms. Many previous empirical studies have investigated the impact of liquidity on investment, e.g., Kadapakkam, Kumar, and Riddick (1998), Georgen and Renneboog (2001), and Audretsch and Elston (2002), without considering whether family ownership may affect investment behavior. The number of studies exploring the differences in investment behavior between the small private family and non-family firm context is small. Most prior studies use data on large listed firms, e.g., Gugler (2003) and Andres (2011). This study uses data on micro-, small-, and medium-sized private family and non-family firms. The country context should also be taken into account because the legal protection of investors, corporate governance structures, and financial markets differs by country. In bank-based systems, banks monitor the performance of customers more closely than in other kinds of systems, and small firms may be more financially constrained than their larger counterparts. This funding gap may be even more severe for family firms; as a number of studies (e.g., Niskanen, Niskanen, & Laukkanen, 2010) suggest, banks are averse to lending to small- and medium-sized firms that can be characterized as family firms. Therefore, family firms may lack funds to invest unless internal funds are sufficient. The aim of the third article is to explore whether family firms and non-family firms differ in the amount of investment, in the rejection of investment, and also in the reasons why firms have rejected investments. Finally, the data for this study are collected through a private survey, which consists of detailed information on the size of investment and on the rejection of investment. Prior studies, e.g., Gugler (2003) and Andres (2011), use accounting-based measures for investments while this study uses proxies based on the firms' answers on how much they have invested. Furthermore, information on the rejection of investment and the reasons why firms have rejected investments provide new insights into the investment behavior of family and non-family firms.





*Figure 1: The conceptual framework of the dissertation*

The main objective of this dissertation is to try to fulfill those abovementioned gaps in the literature. Figure 1 depicts the general concepts covered in this study, with an agency theory context being the theoretical frame in each of the research papers. The concepts in the rectangles are covered in the papers. The arrows in the figure depict the proposed association between the corporate governance structures and financial patterns and they are empirically tested in the research papers. The first objective is to examine the relationship between the ownership and board structure and financial performance. The second objective is to investigate whether the funding behaviors of family and non-family firms differ. The third objective is to explore the differences in investment behaviors of family and nonfamily firms.

# 2 Literature Review

The theoretical framework of this dissertation is based on the agency theory. Within this theory, a firm can be regarded as a set of contracts and as teams whose members act from self-interest but who realize that their destinies depend on the extent of the survival of the team in its competition with other teams (Jensen & Meckling, 1976). Fama (1980) argues that this insight is not wide enough because classical models of the firm focus on the manager who operates in the firm to maximize profits. In these theories an entrepreneur is both the manager and residual risk bearer (Fama, 1980). The risk bearers seem to suffer the most direct consequences of the failings of the team. However, such classical theories have subsequently been rejected. Thus, we can no longer assume managers automatically act in the shareholders' interests and to maximize firm value (Jensen, 1993).

## 2.1 AGENCY THEORY IN A SMALL BUSINESS CONTEXT

Agency theory suggests that agency problems exist due to informational opacity and when the interests of the parties are misaligned. An agency theory context is relevant in exploring financial issues in private small- and medium-sized firms because they are more prone to agency problems than are larger firms due to information asymmetry between the owner-managers and outside suppliers of funds (Myers, 1984; Myers & Majluf, 1984). However, the applicability of agency theory has been criticized for its assumptions. Agency theory is based on the assumption that decision makers are rational and motivated by individual goals (Jensen & Meckling, 1976). But, in closely held firms, owner-manager roles often overlap and owner-managers are motivated by the objectives of the organization, i.e., the firm and its performance and reputation, and their behavior is more collective than individualistic (Davis, Schoorman, & Donaldson, 1997).

### 2.1.1 Agency problems

Agency theory suggests that the agency problem is an essential element of the contractual view of the firm due to the separation of ownership and control. The divergence of interests can result in agency problems between the parties, i.e., between suppliers of funds both in terms of equity and debt and managers (Jensen & Meckling, 1976). The key concern among shareholders is whether firm managers with no ownership stakes have an incentive problem in decision making. The divergence of interest may lead to a situation where managers act for their own interest at the expense of shareholders or other stakeholders (Jensen & Meckling, 1976) when the interests of the parties are misaligned. When managers' interests

are not aligned with those of shareholders and in the absence of an agreement on deviations from the contract, the manager may have an incentive to consume more perquisites or other benefits than agreed (Fama, 1980; Jensen & Meckling, 1976). As a consequence, this may lead to lower firm value and redistribution of wealth. Furthermore, outside suppliers of finance may also be concerned how they can control managers. This is the case especially in larger firms where ownership and management are separated.

Free cash flow theory suggests that managers may have incentives to invest free cash flows in unprofitable projects (Jensen, 1986). This is an agency conflict between owners and management (Jensen, 1986). Jensen (1986) further argues that firms increase investment in response to the availability of cash flows but decrease with leverage because current debt and interest payments force cash out of the firm. Therefore, debt can be an effective mechanism to reduce the agency cost of free cash flow (Jensen, 1986). Investment-cash flow sensitivity and the likelihood that a manager will waste internally generated funds can also be mitigated by other governance mechanisms, such as dividends (Degryse & Jong, 2006) or by managerial ownership (Hadlock, 1998).

As far as firm size is concerned, small firm size is more likely to lead to agency problems between owner-managers and lenders (Myers & Majluf, 1984; Hall, Hutchinson, & Michaelas, 2000). Agency problems arise due to higher information asymmetry between the parties because, in small firms, insiders are assumed to possess private information on the firm's return streams or investment opportunities (Myers, 1984; Myers & Majluf, 1984; Harris & Raviv, 1991). Agency conflicts have several possible consequences. First, the credit availability may be weakened (Myers, 1984; Myers & Majluf, 1984). Second, outside suppliers of funds may demand an increased premium be paid for external financing, which drives a gap between the costs of internal and external funding (Myers, 1984; Myers & Majluf, 1984). Third, agency problems may lead to financial constraints and firms will have to forgo investment opportunities (Myers & Majluf, 1984; Hyytinen & Väänänen, 2006) unless the firms can rely on internally generated funds (Myers & Majluf, 1984; Degryse & Jong, 2006). Due to information asymmetry and agency problems, small firms may be more financially constrained than their larger counterparts and, consequently, they tend to follow a pecking order to cover their funding needs: first using retained earnings, followed by debt, and, outside equity, only as a last resort (Myers, 1984; Myers & Majluf, 1984).

### **2.1.2 Agency costs**

Agency costs are the monitoring expenditures by a principal and the bonding expenditures that are associated with both equity and debt (Jensen & Meckling, 1976). Agency costs arise from the consequences of agents' behaviors that are not in the principals' interests. Agency costs represent the costs of all activities and operating systems designed to align the interests of managers with the interests of suppliers of funds (Jensen & Meckling, 1976; Chrisman, Chua, & Litz, 2004). Agency costs can be reduced by monitoring and other controlling activities that

align the manager's interests with those of other stakeholders (Jensen & Meckling, 1976; Agrawal & Knoeber, 1996). Finally, the magnitude of agency costs is limited by how well the owners and delegated third parties monitor the managers (Ang, Cole, & Lin, 2000).

Agency problems between the firm and its lenders can be reduced by a contract whereby the financier and the owner-manager sign a contract that specifies the use of funds and how the returns are divided between the parties (Shleifer & Vishny, 1997). In a small firm, decisions and actions are made by a small number of owners and managers and the effect of opportunistic behavior of those decision makers will be higher than in other kinds of firms (Chrisman et al., 2004). Most banks require a strategic business plan and insist upon covenants to be able to analyze and monitor a small firm's activities better, but those are difficult to monitor and enforce (Anderson, Mansi, & Reeb, 2003; Chrisman et al., 2004). Therefore, debt holders require an increased premium on debt, leading to higher agency costs. However, Anderson et al. (2003) find that family firms enjoy a lower cost of debt funding. The main cost of debt is caused by creditors when a firm is prevented from undertaking good projects because of debt covenants.

One mechanism to reduce agency problems between the firm and its creditors is for firms to have closer ties and a long-term relationship with a bank, which will enable the bank to generate information about the firm more efficiently (Berger & Udell, 1995; Degryse & Cayseele, 2000). Consequently, such relationship lending may reduce information asymmetry and agency costs (Berger & Udell, 1995; Degryse & Cayseele, 2000). However, empirical studies have found conflicting results on the effect of relationship lending on loan terms and reducing agency costs. Niskanen and Niskanen (2010) find that SMEs that borrow from fewer banks have better access to bank lending and are also less likely to be required to put up collateral. Degryse and Cayseele (2000) suggest that loan interest rate increases with the duration of a bank-firm relationship and the scope of the relationship decreases loan rates and collateral requirements. However, Berger and Udell (1995) suggest that a longer relationship decreases both loan rates and collateral requirements. Similarly, a prior study on Finnish data suggests that relationship length improves loan terms for smaller firms (Niskanen & Niskanen, 2000).

## **2.2 INVESTMENT AND FINANCING PATTERNS**

The previous literature suggests that owner-managers' beliefs, attitudes, and early-life experiences are determinants of financing behavior and a firm's capital structure (Michaelas et al., 1998; Michaelas, Chittenden, & Poutziouris, 1999; Gallo, Tàpiens, & Cappuyens, 2004; Malmendier, Tate, & Yan, 2011). Decisions on the type of finance are made on the basis of a combination of social, behavioral, and financial factors (Romano, Tanewski, & Smyrniotis, 2001). Furthermore, firm age, size, industry, age of CEO, extent of family control, business planning, owners' business objectives, and plans to achieve growth influence family business

owners' financing decisions (Coleman & Carsky, 1999; Romano et al. 2001; Blanco-Mazagatos, Quevedo-Puente, & Castrillo, 2007).

Moreover, due to information asymmetry between the firm and outside suppliers of funds, small firms tend to finance their needs as pecking order theory implies, in a hierarchical fashion: first, using internally generated funds, followed by short- and long-term debt and external equity, as a last resort (Myers, 1984; Myers & Majluf, 1984). A pecking order approach is particularly relevant to small firms because most small firms are closely held and/or family-owned and they are more prone to financial constraints due to informational opacity than are larger firms. Family businesses are even more likely to follow a pecking order than are non-family businesses due to personal preferences concerning growth, risk, and ownership-control (Neubauer & Lank, 1998; Poutziouris, 2001; Gallo et al., 2004). Family firm decision making is also affected by family commitment (Koropp, Grichnik, & Kellermans, 2013).

A minority of small business owner-managers are growth oriented (Poutziouris, 2001). Risk avoidance and a "keep-it-in-the-family" tradition lead family firms to adopt conservative financing behavior and to follow pecking order theory (Poutziouris, 2001; Romano et al., 2001). To put it otherwise, family firms prefer to use retained earnings as their primary funding source and are reluctant to use long-term external capital (Gallo & Vilaseca, 1996; Romano et al., 2001; Poutziouris, 2001) because doing so dilutes family control and reduces financial independence (Neubauer & Lank, 1998). If internally generated funds are insufficient, then family firms rely on short- and long-term debts. In case of debt, small firms prefer short-term debts because owner-managers adhere strongly to control and dislike pursuing business growth plans (Poutziouris, 2001). For example, trade credits are preferred because they are a more informal source of funding and do not require security arrangements or sharing of information, such as annual accounts with the creditors (Michaelas et al., 1998). Because family firms tend to take risks to a lesser extent than non-family firms (Naldi et al., 2007), they are more likely to avoid using long-term external capital in terms of debt (Romano et al., 2001; Poutziouris, 2001).

Small firm owner-managers have a profound aversion to external equity because owner-managers dislike diluting ownership and control and sharing the seats on the board with outsiders, as doing so reduces management's freedom of action (Poutziouris, 2001; Romano et al., 2001). Firms might also have more pressure to complete targets based on external equity requirements, such as profit, growth, or dividend targets. Furthermore, retained earnings are preferred in order to minimize the probability of bankruptcy and avoid losing control (Mishra & McConaughy, 1999; McConaughy, Matthews, & Fialko, 2001; Anderson et al., 2003).

The preference for certain funding sources affects firms' capital structure, growth opportunities, and long-term survival. Myers and Majluf (1984) and Carpenter and Petersen (2002) argue that the growth of small firms is constrained by the availability of finance. Family firms may be even more likely to suffer financial constraints because banks tend to be averse to lending to small- and

medium-sized firms that can be characterized as family firms because of agency problems (Niskanen et al., 2010). Furthermore, banks place a heavy reliance on substantial business assets that might be pledged as collateral (Berger & Udell, 1998). Due to agency problems and financial constraints, firms' investments and growth may be restricted or even hampered (Myers & Majluf, 1984; Degryse & Jong, 2006). Moreover, financial constraints may lead to inefficient investment decisions, which are based primarily on the availability of internally generated funds (Georgen & Renneboog, 2001) or that firms have to forgo investment opportunities (Hyytinen & Väänänen, 2006) unless the firms can rely on internally generated funds (Myers & Majluf, 1984; Degryse & Jong, 2006).

### **2.3 CORPORATE GOVERNANCE IN SMALL FIRMS**

Corporate governance mechanisms are economic and legal institutions that can be established through legal protection, such as the Corporate Act (Shleifer & Vishny, 1997). The Corporate Act and other forms of regulation shape the prevailing system of corporate governance. The primary reason for corporate governance is the separation of ownership and control, which potentially causes agency problems (Jensen & Meckling, 1976). The fundamental question is how to assure suppliers of funds, i.e., shareholders and creditors, that they will get a return on their investment (Shleifer & Vishny, 1997) and how to ensure that their interests are protected (John & Senbet, 1998). In firms with fragmented ownership, investors are often small and too poorly informed to exercise even the control rights they possess (Shleifer & Vishny, 1997). Or they may lack the interest or resources to monitor.

Corporate governance aims at the protection of stakeholders and it can be seen as one solution to reduce agency conflicts because it deals with the mechanisms by which the stakeholders of a firm exercise control over management (Shleifer & Vishny, 1997). Large investors both in terms of equity and debt are important to well-functioning governance because they are active investors who expect the returns on their investment to materialize and, therefore, they have a strong interest in controlling the major decisions of the firm (Jensen, 1993; Shleifer & Vishny, 1997). These control mechanisms provide incentives to managers and, therefore, mitigate agency problems (Agrawal & Knoeber, 1996).

Effective corporate governance systems are of enormous practical importance (Shleifer & Vishny, 1997), not only in large firms but also in SMEs. When the interests of contracting parties deviate from that of other stakeholders, control mechanisms are necessary. Monitoring and controlling mechanisms rely on parties outside the firm to monitor managers and include activities such as auditing, formal control systems, budget restrictions, and the establishment of incentive compensation systems (Jensen & Meckling, 1976). Other mechanisms to mitigate agency problems between managers and shareholders are debt financing, board structure, the use of independent outside members on the board, and monitoring by the firm's own large shareholders (Agrawal & Knoeber, 1996).

The legislation and recommendations on corporate governance are ways to promote better corporate governance cultures both in larger and smaller firms. Although organizations do not like control systems, they are, nevertheless, important. As Jensen (1993) argues, ineffective governance is a major part of the problem with internal control mechanisms that seldom respond in the absence of a crisis. Furthermore, internal control systems react too late and they take too long to effect major change. Corporate governance also deals with shareholders' rights, because Articles of Association may include specific provisions on shareholders' rights, such as restricting their rights, e.g., in the case of proxy fights or hostile takeovers (Gompers, Ishii, & Metrick, 2003). Shareholders accept such restrictions in hopes of maximizing their wealth. Moreover, Gompers et al. (2003) find that firms with stronger stakeholder rights outperform firms with weaker stakeholder rights.

The development of corporate governance stems from the need for better stakeholder protection. In Finland, corporate governance reform began after the macroeconomic crises, both after the financial crisis and currency crisis, in the late 1980s and early 1990s (Hyytinen, Kuosa, & Takalo, 2002). This reform was enhanced by the changes in ownership structures, such as a decrease in bank holdings, decrease in government holdings, and increase in foreign holdings. Furthermore, the full opening of capital markets for foreign investors through financial liberalization has reshaped corporate governance (Hyytinen et al., 2002; Liljeblom & Löflund, 2006). Also, changes in accounting, auditing, and disclosure rules have changed corporate governance in Finland (Hyytinen et al., 2002). Moreover, Finnish corporate governance practices have been influenced by Anglo-Saxon corporate governance practices (Liljeblom & Löflund, 2006).

In many countries, legislation protects investors strongly but the level of protection differs by country. In Finland, the protection of investors in terms of debts has been strong, whereas the protection of equity holders has been weaker (La Porta et al., 1999). However, a later study by Hyytinen et al. (2002) implies that the Finnish legislation has become more favorable toward shareholders at the expense of creditors because the protection of shareholders' rights has been strengthened, while the protection of creditors has been weakened.

The Corporate Act applies to all limited companies independently of whether those are listed or not. The amendments of the Corporate Act excluded corporate governance provisions that were left for self-regulation, although minority shareholder and debtor protection was maintained (Liljeblom & Löflund, 2006). Investor protection has also been regulated by the Securities Market Act and the functions of the Financial Supervision Authority (Liljeblom & Löflund, 2006).

The corporate governance system of listed companies is based on the legislation and it complements the statutory provisions (Finnish Corporate Governance Code, 2010). The aim of the Code is to harmonize the practices of listed companies and the information given to shareholders and other investors (Finnish Corporate Governance Code, 2010). Corporate governance describes how firms ought to be run, directed, and controlled, i.e., it sets the rules and procedures and defines the roles of owners and members of boards as managers as well as auditors. The key

features of the corporate governance recommendations include requirements for an independent board, CEO non-duality, establishing of board committees, reporting requirements on the internal control, internal audit, and risk management functions as well as certain disclosure requirements (Liljeblom & Löflund, 2006). A listed firm shall comply with all recommendations of the Code but may depart from an individual recommendation. However, a departure must be disclosed and explained. This is the so-called *Comply or Explain* principle.

The Central Chamber of Commerce has also issued a corporate governance recommendation to unlisted companies (*Improving Corporate Governance of Unlisted Companies*, 2006). Implementation of this agenda is voluntary, but it aims to improve the management methods and governance in unlisted companies. However, the Central Chamber of Commerce has urged unlisted companies to follow the recommendations of the listed companies as far as possible.

Because the legal protection may not give enough control rights to small investors, they can achieve more effective control rights by being large (Shleifer & Vishny, 1997). However, large insider ownership stakes may lead to risk avoidance and unwillingness to engage in strategic changes (Shleifer & Vishny, 1986). Both large shareholdings and board structure play a significant role in effective corporate governance. The firm's board serves as a control mechanism by monitoring management and firm performance, because the main role of the board is corporate control (Jensen, 1993). Furthermore, insider ownership and board composition are regarded as substitute mechanisms for controlling agency problems (Prevost, Rao, & Hossain, 2002).

In privately held firms, ownership structure and board composition are important elements of corporate governance. In general, in small firms ownership dispersion is low and the overlapping roles of owner-managers are common—in small family firms, even more common. Furthermore, the role of the board as a corporate governance mechanism may differ from that of larger firms. Small firms have smaller boards but they are less formal, on average, than in their larger counterparts. Despite the small size, boards may be active. The presence of external stakeholders and outside board members represents good corporate governance mechanisms (Hansson, Liljeblom, & Martikainen, 2011). However, the true independence of outside board members can be questioned, because the owner-CEO is likely to be involved in choosing the board members (Hansson et al., 2011). In family firms, family councils might also be in place that monitor or assist owners and managers on behalf of the family (Neubauer & Lank, 1998). Also, informal social controls play an important role as an informal corporate governance mechanism in small firms, especially in family firms.

### **2.3.1 Ownership structure and agency problems**

Ownership structure refers to ownership by different groups of shareholders, while ownership concentration refers to the number of owners. The most common ownership form is insider ownership, which consists of ownership by the CEO, management, or/and family. Outsider ownership refers to the ownership of



other stakeholders, e.g., venture capitalists or other individuals or firms, who offer funding in terms of equity.

Large shareholders are generally regarded as a good corporate mechanism because of their interest in controlling and monitoring. Large shareholdings, i.e., concentrated ownership structures, are characteristic for small firms. In SMEs, one typical form of large shareholdings is the ownership of a family. However, Dyer (2006) argues that owner-management is not unique to the family firms because in non-family firms, managers may also be owners. As agency theory implies, large insider ownership may lead to risk avoidance and unwillingness to engage in strategic changes. Although concentrated large ownership may reduce some agency problems, it may lead to unique agency problems, especially in family firms.

### **Managerial ownership**

One important form of insider ownership is managerial ownership, which serves as an important means of controlling agency problems. Jensen and Meckling (1976) suggest that when managers' interests are aligned through ownership in their firm, they are less likely to deviate from shareholders' wealth maximization by consuming perquisites, shirking, or undertaking projects that will maximize only their own benefits. Prior studies have found that managers' and shareholders' interests become more closely aligned as managerial ownership increases (Jensen & Meckling, 1976; Morck et al., 1988; McConnell and Servaes, 1990) because managerial ownership can increase the management's motivation to work toward raising the value of the firm's stock (Hermalin & Weissbach, 1991) and the incentive to consume perquisites declines as a manager's ownership share increases because his/her share of the profits will increase with ownership (Jensen & Meckling, 1976). Therefore, stock ownership by management will lead to a situation in which there exists less demand for alternative mechanisms to reduce agency problems. But, when the interests of management are misaligned with those of shareholders, the resources of a firm are not entirely used in a way that will guarantee the maximization of shareholders' wealth. However, in SMEs the ownership of management is common. Consequently, the interests of owners and managers are more aligned, which reduces agency problems between the owners and managers.

Although managerial ownership reduces agency problems between owners and managers, it may increase agency problems between the firm and its lenders due to the firm's closely held nature, which is generally regarded as more informationally opaque among lenders. Prior studies, e.g., that of Niskanen and Niskanen (2010), report that in small firms, an increase in managerial ownership decreases loan availability and increases interest rates and the requirements for collateral.

### **Family ownership**

Another important type of insider ownership is family ownership. Businesses are regarded as family firms when certain levels of family influence are exceeded. Family firms are generally defined as businesses either owned or managed

and operated by the family or its units. However, to date, no clear consensus has emerged concerning the definition of family businesses although prior studies have presented several different definitions of family firms. The most commonly used definitions are based on the family ownership, family's presence on the board, family members' control over the company (distribution of capital and voting rights), or how family members hold top management positions. Anderson and Reeb (2003) suggest that a family business can be characterized as a firm controlled and also usually managed by multiple family members, or from multiple generations, while Dyer (2006) presents four general types of family firms based on the following dimensions: family assets, family liabilities, agency benefits, and agency costs. Klein, Astrachan, and Smyrnios (2005) argue that a family business definition should be transparent and unambiguous. They propose that the use of a continuous variable should be preferred instead of using a binary variable. Klein et al. (2005) suggest a more appropriately measured variable, which consists of three important dimensions of a family business: power, experience, and culture. First, power refers to the family ownership ratio, the percentage of top management positions, and the proportion of board seats held by the family. Second, experience refers to generations in business and the number of family members contributing to the business. Third, culture refers to values, commitment, attitudes, and opinions. However, a unique definition of family businesses may be misleading due to the fact that it cannot take into account differences in legal and institutional frameworks in different countries (Dyer, 2006).

As far as the characteristics of family firms are concerned, one of the prime objectives of family firms is to transfer the business ownership to the next generation (Anderson et al., 2003; Naldi et al., 2007). Large concentrated shareholdings, such as family holdings, may derive greater benefits from the pursuit of objectives in their own interests, such as growth, rather than from enhancing shareholder value (Andersson & Reeb, 2003). But, family firms have not only economic but also non-economic goals (Chrisman et al., 2004). Family firms often overlook growth opportunities (Poutziouris, 2001) and tend to take lower risks than do non-family firms (Naldi et al., 2007). They make decisions on longer time horizons than do non-family firms (Bartholomeusz & Tanewski, 2006). Moreover, family firms may make better investment decisions, since families have more specific knowledge of the firm (James, 1999; Sirmon & Hitt, 2003). Families' interest is likely to focus on the firm's long-term survival and concern for both the firm's and family's reputation (Anderson et al., 2003). Owner-managed firms and family firms may pursue low-risk investment strategies to moderate the level of business risk (Hutchinson, 1995). Also, Shleifer and Vishny (1986) propose that large and undiversified investors will exercise risk-reduction strategies. In family firms, risk aversion may stem from the fact that their business represents a significant proportion of their wealth and they may wish to pass it on to the next generation (Naldi et al., 2007).

The previous empirical literature is not unanimous on whether agency problems are more or less severe in family firms. Some studies suggest that family firms should be exempt from agency problems due to the intra-familial altruistic

element as well as the fact that management and ownership overlap (Jensen & Meckling, 1976; Ang et al., 2000; Dyer, 2006). Anderson et al. (2003) argue that agency problems are less severe in firms with founding family ownership, because the family's interest and concern is not only in the firm's long-term survival but also in the family's and firm's reputation. Similarly, some studies suggest that agency problems exist but they may be less severe because family firms also have non-economic goals (Poutziouris, 2001; Chrisman et al., 2004), such as providing jobs for less-talented family members (Chrisman et al., 2004). Schulze, Lubatkin, Dino, and Buchholz (2001) and Schulze et al. (2003) argue that altruism may create agency problems unique to family firms, because family relationships may make it more difficult to solve conflicts or to curb unproductive behavior. However, altruism may increase loyalty and commitment to the firm and encourage members within the family to take care of one another. Furthermore, it may lead to increased communication and cooperation. Family ownership may also bring common goals, higher trust, and shared values, which reduce monitoring costs, i.e., agency costs (Dyer, 2006). At the same time, altruism may motivate the taking of such actions as free riding and shirking (Schulze et al., 2001; Schulze et al., 2003; Chrisman et al., 2004) or becoming more dependent on each other, which may threaten the welfare of both the family and the business because it is difficult to punish poor performance (Schulze et al., 2001).

Because a family firm cannot be regarded as a homogeneous group of people with joint interests (Sharma, Chrisman, and Chua, 1997), agency conflicts may arise between majority and minority shareholders (Morck et al., 1988; La Porta et al., 1999; Chrisman et al., 2004) because the majority owners may inefficiently redistribute wealth from other investors to themselves (Shleifer & Vishny, 1997). It has been argued that family-controlled firms employ higher dividend payout ratios because families use dividends, or debt, as a substitute for independent directors (Setia-Atmaja, Tanewski, & Skully, 2009). Family firm owners may be more dependent on steady dividend payments because their firms often constitute a primary or a significant source of income for them.

Not only the small firm size but also family ownership may increase the likelihood that agency problems arise between a firm and its outside suppliers of funds. Family firms may be even more likely to face agency problems between the firm and its potential lenders due to the closely held nature and higher information asymmetry (Myers & Majluf, 1984).

### **Outside ownership**

One fundamental decision of finance is whether or not to allow external finance to be provided by outsiders in return for part ownership of the firm (Storey, 1994). Outside owners can provide finance in terms of equity and, therefore, offer the capital needed. As a firm grows it may become more difficult for the initial owners to provide additional equity. Consequently, one alternative is to invite outside shareholders who can provide finance in terms of equity, which will also improve the firm's capital structure. However, most small firms are owner-managed, and

small business owners are not motivated to share their ownership either with other individuals, firms, or financial institutions, because doing so dilutes ownership-control and diminishes management's freedom of action (Storey, 1994; Neubauer & Lank, 1998; Poutziouris, 2001). In other words, family firms tend to follow a keep-it-in-the-family tradition (Poutziouris, 2001).

One form of outside ownership is ownership by venture capitalists. Venture capitalists are institutional or individual investors who invest large sums in a single business and support the firm and provide entrepreneurship with business skills. In general, venture capitalists invest in firms with high growth potential (Berger & Udell, 1998) at the founding stage. They retain their holdings and expect to obtain capital gains rather than dividends. Venture capitalists also contribute to the firm's decision making by acting as an advisor or board member. But, they represent a relatively small proportion of small business finance because they invest very selectively and target their investments on firms with high growth potential (Berger & Udell, 1998).

To sum up, outside owners can provide needed capital, strengthen the capital structure, and enhance better corporate governance. Moreover, depending on the size of the stakes, outside owners may have a role of good monitoring and controlling, and, therefore, the presence of outside owners may mitigate agency problems. However, small firms may be too small for the investment scope of outside investors, such as venture capitalists. Also, small business owners' reluctance to employ outside equity and share ownership is, in general, high, for purposes of retaining ownership control (Poutziouris, 2001), which reduces the attractiveness of this form of funding.

### **Number of owners and ownership dispersion**

The number of owners refers to the level of ownership dispersion. Fragmented ownership is beneficial in terms of optimal allocation of risk bearing (Fama, 1980). Businesses founded by a team are more likely to grow than businesses owned by a single person because the management of a business requires a wide range of skills (Storey, 1994). However, many small business owners are strongly opposed to sharing their ownership because doing so dilutes ownership and control (Storey, 1994). Ownership concentration may reduce agency problems, but it may also increase risk aversion. This is based on the argument that an individual shareholder's large stake in one firm implies lower portfolio diversification for that shareholder (Himmelberg, Hubbard, & Palia, 1999), thereby reducing incentives for risk taking.

Agency theory suggests that shareholders are homogenous and their influence on firm performance is directly proportional to their ownership ratio. But, ownership dispersion may also lead to a lower level of monitoring and more severe agency problems because the free rider problem increases as the number of owners increases (Jensen & Meckling, 1976). Fragmented ownership may cause shareholders to be too diversified to have the incentive or ability to monitor a particular firm (Fama & Jensen, 1983). Berle and Means (1932) suggest that dispersed ownership

may also render shareholders powerless to constrain professional management. On the contrary, large controlling shareholders who are not managers are more capable of monitoring and controlling managers and have greater resources and incentives to acquire information (Shleifer & Vishny, 1997). An extensive number of SMEs are closely held, i.e., owned by the founders, management, or family. Thus, the number of owners in SMEs is, on average, relatively low. Consequently, the small number of owners and an overlapping owner-management role reduces agency problems between owners and managers. Thus, room is still left for the other kinds of agency problems such as between owners and lenders or between majority and minority owners.

### **Implications**

The prior empirical literature suggests that managerial ownership affects firm performance positively at lower levels of ownership and negatively at higher levels of ownership (Morck et al., 1988; Hermalin & Weissbach, 1991; McConnell & Servaes, 1990), because at higher levels of ownership, managers are rewarded for good performance or prefer to retain their ownership in a well-performing firm (McConnell & Servaes, 1990). But, at lower levels of ownership, managers may have lower executive pay or side payments and interests are not aligned (Morck et al., 1988). Furthermore, Agrawal and Knoeber (1996) find a positive relationship between insider ownership and firm profitability but they point out that better performance may also lead to higher insider ownership. As far as funding and managerial ownership are concerned, small business owner-managers' attitudes and beliefs shape a firm's financing behavior (Michaelas et al., 1998), and firms tend first to use retained earnings to cover the funding needs to retain ownership-control (Myers & Majluf, 1984; Poutziouris, 2001). This is supported by Hadlock (1998) who finds that investment-cash flow sensitivity increases with managerial ownership.

Morck et al. (1988) suggest that firms with high insider ownership perform better. However, prior studies suggest conflicting results. Large family holdings can have a negative impact on firm value and it may be even more negative if family members hold executive positions such as CEO in the firm because large shareholders may undertake less risk to protect their wealth (Ben-Amar & André, 2006). However, Allouche, Amann, Jaussad, and Kurashina (2008) and Andres (2008) find that family ownership is associated with better firm performance, at least under certain conditions, such as when the founding family is still active, e.g., serve as board members, because families have a deeper relationship with their firms and they feel responsible for other shareholders (Andres, 2008). Similarly, Villalonga and Amit (2006) show that family firms with the founder as board chair have the higher performance, but performance is lower when descendants serve as board chair or CEO because the agency conflict between family and non-family shareholders is more costly. Hansson et al. (2011) and López-Gracia and Sánchez-Andújar (2007) suggest that there is no significant difference in terms of profitability between small- and medium-sized family and non-family firms. However,

differences exist in their funding behaviour (López-Gracia & Sánchez-Andújar, 2007). Naldi et al. (2007) argue that small- and medium-sized family firms take risks to a lesser extent than their non-family counterparts and that risk taking is negatively related to performance. Family firms tend to be more conservative and risk averse in decision making to avoid losing family wealth.

Those mixed results may be a consequence of, as Gedaljovic, Carney, Chrisman, and Kellermans (2012) argue, the national economy's state of institutional development, adoption of different theoretical perspectives, different types of family firms, the use of convenience samples, and selection bias. The differences may also result from differences in the definition of family influence (Miller, Le Breton-Miller, Lester, and Cannella, 2007; Gedaljovic et al., 2012).

Carney (2006) and Gedaljovic et al. (2012) suggest that the positive effect of family ownership on firm performance is related to fewer agency problems, parsimonious use of financial resources, adaptation of long-term investment horizons, increased fostering of entrepreneurial risk taking, greater intensity in scrutinizing business opportunities, avoidance of inefficient unrelated diversification, and the fact that name and personal identity are related to the family firm's reputation. Agency conflicts between owners and managers are mitigated because owner-managers regard growth opportunities and risk bearing as one and the same (Carney, 2005). Furthermore, when family firms utilize social capital, entrepreneurial cognitions, and tacit knowledge and combine parsimony, personalism, and particularism, it will lead to competitive advantages (Carney, 2005; Gedaljovic et al., 2012). Similarly, family firms may benefit from human capital, because the transmission of knowledge about the business among family members is easier (Bertrand & Schoar, 2006).

The negative effect of family ownership on firm performance is related to selfish behavior, incentive to consume perks, managerial entrenchment, and divergence of interests between the majority and minority owners (Gedaljovic et al., 2012). Furthermore, negative effects may also stem from non-family managers and employees. More precisely, employees with no ownership stakes may undertake inefficient investments because only owners benefit from good investments. Furthermore, executives are not rewarded with performance incentives such as stock options because it dilutes ownership and control. Also, owners may favor family members, which can generate inequities. Therefore, family firms may lack the "best talents" because they may have difficulties in recruiting, rewarding, and retaining high-quality managers (Schulze et al., 2001). Family firms may also be less likely to achieve their goals when they rely on non-family managers because family firms are unwilling or unable to offer high-powered incentives (Gedaljovic et al., 2012).

Moreover, nepotism, insular management, familial control concerns, and poor governance may also have negative effects. Family firm founders are more likely to hire relatives in the business than to hire more-talented professionals because founders may derive utility from seeing relatives involved in the business (Bertrand & Schoar, 2006). Gedaljovic et al. (2012) argue that family firm managers

have diverse and mixed personal economic and non-economic motives. Mixed motives of managers may not necessarily lead to inefficient resource allocation, such as inefficient investments. However, family firms face capital and managerial capacity constraints that will limit the resources (Carney, 2005). Furthermore, opportunistic investments may occur because family firm owners have the power and ability to allocate resources without being required to analyze their investment decisions carefully (Carney, 2005). Finally, family values and cultural issues such as family ties or family norms may play an important role in family businesses, leading to lower efficiency and lower willingness to make changes to their overall strategy (Bertrand & Schoar, 2006).

Some studies have found that family firms use less debt to minimize the probability of bankruptcy and the risk of losing control (Mishra & McConaughy, 1999; McConaughy et al., 2001; Anderson et al., 2003). They suggest that the other reason to avoid using debt could be based on the fact that family business owners avoid damaging both the firm's and the family's reputation and losing their own wealth. But, Coleman and Carsky (1999) argue that family firms use debt as much as non-family firms because loans are available due to the firms' ability to fulfill the requirements of the lender, such as sufficient collateral, a reliable business plan, and financial statements. However, Blanco-Mazagatos et al. (2007) argue that small- and medium-sized family firms use more debt because they are averse to expanding the firm's ownership structure due to fear of losing control.

Small firm size may increase the likelihood that firms have to reject investment opportunities because small firms may be more financially constrained than are their larger counterparts due to information asymmetry (Myers & Majluf, 1984; Hyytinen & Väänänen, 2006). Therefore, family firms may face even more financial constraints. This is supported by Niskanen et al. (2010) who suggest that family firms may lack financial resources because banks are averse to lending to small- and medium-sized firms that can be characterized as family firms. Moreover, family firms avoid using debt in order to protect the longevity of the family business as well as to keep control within the family and, therefore, family firms may forgo growth and other opportunities (Mishra & McConaughy, 1999), and they are more likely to postpone an investment rather than give up control over their company (Gugler, 2003). However, one funding form is mezzanine capital, which combines the characteristics both of equity and debt financing (Amon & Dorfleitner, 2013; Pratt & Crowe, 1995). It can be regarded as an alternative to financing capital expenditure or expansion with a lower average cost of capital and without losing ownership and management control (Amon & Dorfleitner, 2013; Pratt & Crowe, 1995).

As noted before, an increase in managerial ownership increases the value of the firm because managerial ownership aligns the interests of managers and shareholders (Jensen & Meckling, 1976; Morck et al., 1988; McConnell & Servaes, 1990). Jensen and Meckling (1976) and Cho (1998) suggest that managerial ownership affects investments and, therefore, firm value, because the interests of the contracting parties are more aligned. Cho (1998) finds that a non-monotonic relationship

exists between insider ownership and capital expenditures and between insider ownership and R&D expenditures, but in the way that investments affect firm value, which in turn affects the ownership structure. However, Croci, Doukas, and Gonenc (2009) and Block (2012) propose that family firms seem to invest more in low-risk, fixed-asset capital expenditure than in high-risk, R&D expenditure, which confirms their non-risk-seeking behavior. In general, economic goal orientation may lead to higher risk taking. But, family firms also have non-economic goals (Chrisman et al., 2004). As a result, small- and medium-sized family firms are more likely to adopt more conservative and less risk-oriented investment strategies (Naldi et al., 2007), and they avoid using external funding sources both in terms of debt and equity (Poutziouris, 2001). Consequently, if internally generated funds are insufficient, this may lead to financial constraints and reduce the firm's resources to invest (Gallo et al., 2004).

Gugler (2003) finds a positive relationship between investment and cash flow in family firms because family firm owners seem to be unwilling to issue new equity and give up control over the firm. However, it has been argued that family firms are more likely to withdraw funds for own use, which reduces the funds for undertaking investment projects (Jensen, 1986; Dyer, 2006). Finally, if owners with different levels of ownership stakes have different goals and/or risk-tolerance levels, they may prefer to divert resources away from the firm, leading to the problem of underinvestment. As Block (2012) argues, second-generation family firm owners' main ambition is to secure the firm's survival and its dividend payments.

Small firm owners, especially family firm owner-managers, avoid using external capital in terms of equity because owner-managers dislike diluting ownership, control, and financial independence and sharing the seats on the board with outsiders because it reduces management's freedom of action (Neubauer & Lank, 1998; Poutziouris, 2001). A minority of family business owner-managers are growth oriented (Poutziouris, 2001), which reduces the interest of outsiders such as venture capitalists in investing in a family firm. Furthermore, they target their investments on firms with high growth potential (Berger & Udell, 1998; Poutziouris, 2001) and the smallest firms may be too small for their investment scope. The avoidance of using outside equity funding may also stem from the fact that firms might also have more pressure to complete profit and dividend targets that external equity requires (Poutziouris, 2001).

Prior studies are not unanimous whether the number of owners affects performance. As agency theory implies, larger insider ownership, i.e., ownership concentration, may lead to risk avoidance and unwillingness to engage in strategic changes. Demsetz and Lehn (1985) and Demsetz and Villalonga (2001) find no statistically significant relationship between ownership concentration and firm performance, while some other studies find a positive association between ownership concentration and profitability because ownership concentration reduces agency problems (Morck et al., 1988; Agrawal & Knoeber, 1996; Andersson & Reeb, 2003). Furthermore, when ownership is concentrated among family, those firms perform better because family members understand the business and act as stewards of their firms (Andersson & Reeb, 2003).



### 2.3.2 Board composition and agency problems

The role of the board is of key importance in corporate governance. Boards set overall policy for firms, but daily decision making rests with management. The board is responsible for the firm's leadership and management without actually interfering in day-to-day operations, which is the duty of the CEO. The board recruits the CEO and represents the interests of the firm's shareholders, providing the CEO with advice and counsel. The main role of the board is corporate control and the board serves as a control mechanism by monitoring management and firm performance (Jensen, 1993). Performing these activities, boards can enhance the performance of the firm and maximize shareholder value. The board can ensure that decision management and decision control are kept separate (Ezzamel & Watson, 1993), which promotes better corporate governance.

In a firm with separate ownership and management, the board's role in monitoring and controlling is important in the safeguarding of shareholders' investments (Brunninge, Nordqvist, & Wiklund, 2007). In closely held firms, the role of the board is different than in widely held firms, because the risk of management's opportunistic behavior is lower due to the overlapping of ownership and management. Johannisson and Huse (2000) and Forbes and Milliken (1999) argue that the role of the board may be of more importance in private SMEs than in large listed firms. This argument is partly based on the idea that the information gap between owner-managers and other major stakeholders of the firm is especially wide in the case of small- and medium-sized private firms. Prior studies also suggest that a well-functioning board of directors may add value through several alternative roles, such as strategy development (Gabrielsson & Winlund, 2000) and controlling the management (Johannisson & Huse, 2000). Johannisson and Huse (2000) imply that because entrepreneurs value independence highly, they dislike any control mechanisms such as the board. They further indicate that providers of external finance may require a seat on the board to reduce the information gap. In smaller firms, the adoption of outside board members is more likely when outside ownership increases, because external owners demand it and to gain the service resource advantages outsiders can provide (Fiegenger, Brown, Dreux, & Dennis, 2000).

Why does board composition matter? Prior research suggests that the board can be an alternative mechanism to solve agency problems. Furthermore, the empirical literature, e.g., Pearce and Zahra (1992), suggests that a board's ability to perform their service, strategy, and control depends largely on board composition. Board composition impacts also board members' ability and power to provide strategic direction and performance (Baysinger & Hoskinsson, 1990). Therefore, board composition may affect the firm's financial performance, risk taking, and value. Moreover, Bammens et al. (2008) suggest that failure of firms could be avoided by implementing such good corporate governance mechanisms as a board.

As noted before, ownership structure and board composition can be seen as alternative corporate governance mechanisms. It has been argued that board size and composition are functions of the board members' and the firm's character-

istics (Rajeha, 2005) and that owners choose a board that is unlikely to monitor (Lasfer, 2006). As far as small firms are concerned, in family firms, family-related variables are more important than CEO-related variables in explaining board composition (Voordeckers, Van Gils, & Van den Heuvel, 2007), which is a reflection of the family characteristics and objectives. Furthermore, in SMEs, owners choose a board composition that matches their own preferences, because owners have most of their wealth invested in their firm and they prefer to have a board that makes decisions carefully (Eisenberg, Sundgren, & Wells, 1998).

### **Board size**

Agency theory suggests that when a board gets too big, agency problems arise. Larger boards with beyond seven or eight members are less effective and easier to control by the CEO (Jensen, 1993). Also, Yermack (1996) suggests that smaller boards are better boards because they are more effective and firms with smaller boards exhibit better performance. Boards will be smaller when insiders' incentives are aligned with those of shareholders'. In addition, smaller boards save on the outsider coordination costs while these still motivate inside board members to reveal their private information (Rajeha, 2005). Small firms with high managerial ownership or controlled by founding families tend to have smaller and less-independent boards because board size is sensitive to the benefits and costs of monitoring managers (Yermack, 1996; Boone, Field, Karpoff, & Rajeha, 2007). In small family firms, small board size may reflect the family owners' concern to retain control in the hands of the family, which may also result in having a low number of outsiders on the board (Blanco-Mazagatos et al., 2007). Furthermore, board size is positively related to firm size, i.e., larger firms have larger boards (Dehaene et al., 2001; Bozec, 2005). However, optimal board size varies because it reflects the nature of the firm, or businesses adjust the board size in response to their past performance (Eisenberg et al., 1998). Board size and independence increase as firms grow and diversify because most firms' boards are tailored to suit the business's competitive environment (Boone et al., 2007). In small firms, boards are, in general, small, because in small firms agency problems may be less severe due to firms' closely held nature.

### **Board independence**

Agency theory further suggests a need for board independence. Also, the corporate governance recommendations propose that firms should prefer independent boards. The degree of board independence is closely associated with its composition. Outsider presentation is used as a measure of board independence. Hence, the board is presumed to be more independent as the number of outside members increases proportionally. Outside board members are believed to be independent from the management and they can provide superior performance benefits to the firm (Fama, 1980; Dalton, Daily, Ellstrand, & Johsson, 1998) and take care of the controlling role on behalf of stakeholders. However, Fama and Jensen (1983) imply that outside board members are more independent of the CEO but they are less informed about the firm and its projects.

The level of board independence depends also on the affiliation of outside board members with the management, which may harm board independence. The true independence of outside board members can be questioned, because an owner-CEO is likely to be involved in choosing the board members (Hansson et al., 2011). In practice, small firm and family firm owners or owner-CEOs tend to appoint outside board members who are their close friends or have a good relationship with him/her or the firm. Consequently, those affiliated board members have close ties to the CEO, and, consequently, personal loyalty to him/her, which may threaten board independence. Furthermore, the board's effectiveness will decrease with the proportion of outside board members influenced by the CEO because they may be unable to disagree with him/her (Rajeha, 2005). However, the adoption of an outside board member could reduce agency costs, because the presence of outsiders on the board will increase board independence (Voordeckers et al., 2007).

Outsiders are often thought to play a monitoring role inside the board, but, insiders possess superior information that could lead to better evaluation of managers (Bozec, 2005). Based on the prior studies, outside directors are adopted on the board because of advice and control needs (Hermalin & Weissbach, 1988; Johannisson & Huse, 2000; Bammens et al., 2008). But, outsiders may reduce the influence of the board on several activities and functions due to the lack of firm-specific knowledge and its environment, or lack of availability to the firm. Coles, Daniel, and Naveen (2008) suggest that firms in which firm-specific knowledge of insiders is relatively important, such as R&D-intensive firms, are likely to benefit from greater presentation of insiders on the board because insiders may have a stronger commitment to the firm than have outsiders. However, diversified, large firms, or firms with higher leverage may have greater advising needs and they will benefit from the presence of outside board members (Coles et al., 2008).

Independent board members are regarded as a good governance mechanism because independent members represent the shareholders' interests and bring added value to the firm (Ben-Amar & André, 2006). Because in small firms managers often own large stakes in their firms, it could be argued there will be less demand for controlling devices such as outside board members. Furthermore, small firms have been criticized for being slow to adopt outsiders on the board because owners may be more reluctant to have someone directing their actions and reducing their freedom of action. This is supported by Fama and Jensen (1983) and Jensen (1993) who suggest that managers are unlikely to prefer outside board members because their function is to exercise control.

As far as diversity of the board is concerned, both small and large firms could benefit from board diversity. Outside board members could bring their expertise, experience, and contacts and their role is more critical to improved performance than to the control function (Daily & Dalton, 1993; Gabrielsson & Winlund, 2000) because they offer advice (Bammens et al., 2008). Furthermore, outsiders from different backgrounds may enhance the understanding of the firm's internal and external environment and provide broader views in strategic decision making

(Gabrielsson & Winlund, 2000). Board diversity has been discussed also by politicians and the enforcement of a quota for female board members by a law has been suggested (Liljebloom & Löflund, 2006). However, although such a quota has not been stipulated, the number of female board members has increased in Finnish listed firms (Liljebloom & Löflund, 2006). Furthermore, boards have become more international because of the nomination of foreign board members (Liljebloom & Löflund, 2006).

Prior studies have found that firms facing greater information asymmetry, i.e., smaller firms, have smaller and less-independent boards because of higher costs of monitoring (Bozec, 2005). Furthermore, the proportion of outside board members is likely to be positively associated with board size (Yermack, 1996; Dehaene et al., 2001), while Mak and Li (2001) indicate opposite results. Hermalin and Weissbach (1988), Mak and Li (2001), Lafer (2006) and Boone et al. (2007) suggest that the number of outsiders on the board is negatively related to managerial ownership. In line with them, Coles et al. (2008) report that the percentage of insiders on the board is positively associated with CEO ownership. Fiegenger et al. (2000) find that outside ownership increases the likelihood that firms have boards with outside board members.

Family firms are more likely to have CEO duality and a lower proportion of independent members on the board than are non-family firms (Bartholomeusz & Tanewski, 2006). Voordeckers et al. (2007) argue that small- and medium-sized family firms that focus more on business objectives than family-related objectives are more likely to have at least one outside board member. They further imply that having a keep-it-in-the-family character induces firms to avoid outside board members. However, family firms are more likely to employ outside board members near generational change or to facilitate access to resources critical to the firm's success. Furthermore, in case of conflicts between family members, outside board members can serve as arbitrators because of their objectivity and expertise (Voordeckers et al., 2007). In addition, outside suppliers of funds, e.g., banks, may have the power to require an outsider on the board to exercise control and participate in strategic direction to control the firm and its management (Shleifer & Vishny, 1997; Johannisson & Huse, 2000). Consequently, this practice reduces information asymmetry and agency problems. The other mechanism that protects lenders' rights and diminishes agency conflicts is covenants, which restrict the managers' actions in the firm (Jensen & Meckling, 1976; Anderson et al., 2003). Based on the agency theory, outside boards should be preferred because the board's ability to exercise control increases with board independence. Voordeckers et al. (2007) argue that, in small firms, the adoption of outsiders on the board may diminish agency costs resulting from altruistic behavior.

### **CEO duality**

CEO duality refers to a joint board leadership structure in which the same person undertakes both the roles of CEO and board chair (Bozec, 2005). The preference for a separate leadership structure is based on the agency theory, which states

that CEO duality undermines board independence because the CEO will acquire a wider locus of control. Also, corporate governance recommendations suggest that the roles of board chair and CEO should be separated (Finnish Corporate Governance Code, 2010). CEO duality results in managers having more power to influence board decisions (Lasfer, 2006). As Jensen (1993) argues, a CEO cannot perform the role of the board chair without of his/her personal interest. Therefore, an independent board chair is necessary to perform the board's critical functions and its most important role, namely that of controlling and monitoring.

In small firms, the CEO is often the dominant person because he/she is one of the owners. A powerful CEO may be able to take the position of board chair and also be involved in the selection of board members, or may structure their boards in self-serving ways. The CEO will be able to use his/her bargaining position such as his/her voting stake to ensure a relatively weak board (Hermalin & Weissbach, 1988). Prior studies suggest CEO duality increases as management ownership increases (Lasfer, 2006) and as blockholder ownership, e.g., family ownership, increases (Mak and Li, 2001). CEO duality may increase agency problems, at least between the firm and outside suppliers of funds.

### **Implications**

The previous literature suggests that a well-functioning board may add value through several alternative roles, such as strategy development (Gabrielsson & Winlund, 2000) and controlling the management (Johannisson & Huse, 2000). Therefore, a corporate governance mechanism such as board independence may enhance performance, enable better access to financing, lower the cost of capital, and moderate the other terms of financing because board independence may reduce agency problems between the firm and its outside suppliers of funds, as it increases accountability and reduces information asymmetry.

Prior studies have found that boards composed primarily of outsiders should be generally superior to boards of insiders (Wagner, Stimpert, & Fubara, 1998), because outside board members are believed to be independent from management and they can provide superior performance benefits for the firm (Fama, 1980; Dalton et al., 1998). Outsiders are expected to represent the shareholders' interests and bring added value to the firm (Ben-Amar & André, 2006) and they are often thought to play a monitoring role inside the board (Bozec, 2005). However, Bozec (2005) argues that it may be difficult for outsiders to understand the complexities of the firm since outside board members are usually part-time and they may sit on a number of other boards.

As far as the relationship between financial performance and board structures is concerned, the previous empirical literature finds conflicting results suggesting a positive relationship between outsiders on the board and firm profitability (Pearce & Zahra, 1992; Dehaene et al., 2001) and a negative association between outsiders on the board and firm profitability (Agrawal & Knoeber, 1996). Furthermore, Kesner (1987) suggests that the presence of insiders on the board is positively associated with firm profitability, while Wagner et al. (1998) argue that

the presence of a mixture of both insiders and outsiders is positively associated with profitability because insiders have better knowledge about the firm and its managers and outsiders bring their objectivity, expertise, and connections. Studies on the relationship between board leadership structure and performance have also yielded mixed results. Some studies find no relationship between performance and CEO duality (Dalton et al., 1998), while other studies suggest a negative association between profitability and CEO duality (Ezzamel & Watson, 1993; Bozec, 2005). Others, such as Dehaene et al. (2001), find a positive relationship between CEO duality and profitability, because an active CEO seeks for growth or extends his/her personal status. However, Hermalin and Weissbach (1988) argue that after a poor result, inside board members are replaced by outside members. In line with that, Agrawal and Knoeber (1996) propose that better firm performance may lead to fewer outsiders on the board, because outsiders are added only to the boards of poorly performing firms. Hansson et al. (2011) imply that in small- and medium-sized family firms, a positive relationship exists between profitability and family CEO. They also find that in family firms, a negative association exists between board size and performance, which suggests that very small boards are better boards in simple firms.

Board structure may have an impact on the availability of external funds in small firms because the board may have a role in reducing agency problems between the firm and its potential outside suppliers of finance. As Johannisson and Huse (2000) argue, the providers of external finance may require a seat on the board to reduce the information gap. When a board is entirely composed of owners, it may lead to risk avoidance, for example, in the form of avoiding using debts. Consequently, it may lead to financial constraints and, therefore, reduce or even hamper investments unless internally generated funds are sufficient.

## **2.4 SUMMARY OF THE RESEARCH QUESTIONS, HYPOTHESES, AND RESULTS**

The overall purpose of this dissertation is to investigate the financial patterns of small- and medium-sized firms in an agency theory and corporate governance context through three related articles. Those articles focus on the impact that ownership and board structures may have on financial performance, funding behavior, and investment behavior.

The purpose of the first article is to investigate the relationship between performance and ownership and corporate governance structures in small- and medium-sized firms. Hypotheses on the relationship between ownership structure and board composition and performance are based on the prior theoretical and empirical literature. The aim of the second article is to explore the relationship between family ownership and the owner-manager's attitudes toward using different funding sources and the actual financing behavior in private family and non-family firms. Hypotheses are constructed both on the attitudes and usage of

different funding sources. The third article focuses on the investment behavior of private small- and medium-sized family and non-family firms. The purpose is to explore whether there are differences in the amount of investment and in the rejection of investment. The hypotheses are based on the previous theoretical and empirical literature on investment and financing patterns. Table 1 summarizes the research questions, hypotheses, and results.

*Table 1: Research questions, hypotheses, and results in the articles*

<b>Article 1: Financial Performance of SMEs – Impact of Ownership Structure and Board Composition</b>		
<b>Research question</b>	<b>Hypotheses</b>	<b>Results</b>
Do the ownership structure and board composition affect growth and profitability?	Management ownership is negatively related to growth and positively related to profitability.	growth - profitability +
	Venture capital ownership is positively related to growth and profitability.	growth + profitability -
	Expectations on the role that outside and inside board members have on growth and profitability are open.	outsiders and growth - outsiders and profitability -
<b>Article 2: Behavior and Attitudes of Small Family Firms toward Different Funding Sources</b>		
<b>Research question</b>	<b>Hypotheses</b>	<b>Results</b>
Do the attitudes toward and the use of different funding sources differ between family and non-family firms?	Family firms are more likely to use trade credits and funding from finance companies as their funding source than are non-family firms.	supported
	Family firms are more likely to use additional equity from current owners than are non-family firms.	supported
	Family firms have more positive attitudes toward trade credits and funding from finance companies than do non-family firms.	more negative attitudes/ opposite to hypothesis
	Family firms have more negative attitudes toward bank loans than do non-family firms.	supported
	Family firms have more positive attitudes toward additional equity from current owners than do non-family firms.	supported
<b>Article 3: Do the Investment Behaviors of Family Firms and Non-family Firms Differ?</b>		
<b>Research question</b>	<b>Hypotheses</b>	<b>Results</b>
Do the investment behaviors of family and non-family firms differ?	Family firms are more likely to reject an investment than are non-family firms.	supported
	Family firms invest lesser amounts than do non-family firms.	insignificant results

## 2.5 DATA DESCRIPTION

The data for this study were collected through a private survey in autumn 2006. The survey was targeted on the limited liability companies that are located in four regions in Finland: Kainuu, Pohjois-Savo, Etelä-Savo, and Pohjois-Karjala. The financial statement data have been collected from Voitto+ register and compiled by Asiakastieto Ltd., a Finnish financial and credit information company. Voitto+ register is a commercial and comprehensive database with financial statement information. The sample firms are firms with at least two employees and whose legal form is a limited liability. The questionnaires were sent to the CEOs. Of the 3262 questionnaires sent, a total of 621 responses were usable, which resulted in an effective response rate of 19%. The final sample consists of 600 small- and medium-sized firms operating in Finland, because some firms that are outside the European Union (EU) definition of small- and medium-sized firms were dropped.

The sample firms represent all industries, excluding primary production. Primary production is excluded because of its different nature of business compared to other businesses. Other legal forms than limited liabilities are excluded because official financial statement data on them are not available.

The firms were asked to provide information on their ownership structure, board composition, preferences toward different funding sources, the information on their use of different funding sources, the amount of investments, and whether they have rejected investments and if so, why. Observations include the years from 2000 to 2005. The total number of available observations per firm per year varies because, in some cases, information is available for less than six years.



# 3 Summary of the Articles

## **3.1 ARTICLE 1: FINANCIAL PERFORMANCE OF SMES – IMPACT OF OWNERSHIP STRUCTURE AND BOARD COMPOSITION**

The purpose of the first article was to investigate the association between performance and ownership and corporate governance structures in small- and medium-sized firms. The research question addressed the topic whether ownership structure and board composition are associated with a firm's growth and profitability.

The relationship between corporate governance structures, i.e., ownership structure and board composition, and financial performance has long been the subject of an important debate in the corporate finance literature. As agency theory suggests, the separation of ownership and control may lead to agency problems when the interests of owners and managers are misaligned (Jensen & Meckling, 1976). One way to mitigate agency problems is ownership structure, such as managerial ownership (Jensen & Meckling, 1976). An alternative mechanism for reducing agency problems is board composition. Furthermore, the prior literature suggests that ownership structure and board composition can be seen as a potentially important predictor of financial performance.

Panel data estimation methods were employed in the analyses. More specifically, all models were run with both random effects and fixed effects models. The 2SLS model was used to address the endogenous nature of growth and profitability. The findings of the study suggest that both ownership structure and board composition are significant determinants of firm performance in our sample of private small- and medium-sized Finnish firms. However, the results imply that the ownership structure may be a more important determinant of the growth and profitability of small firms than is board structure. The results further suggest that the ownership structure affects both the growth and the profitability of small private firms. More precisely, firms with high managerial ownership levels exhibit higher profitability ratios but have lower growth rates. Furthermore, firms with high venture capital firm ownership ratios grow faster but are less profitable. Finally, the results on board structure suggest that board structure has only a slight impact on the performance of small firms. The only significant result in this context is that firms with outside board members have lower growth rates and they are less profitable.

The results of this study can be interpreted to indicate that owner-managers are risk averse and that venture capital firms seek investments with high growth potential. The results could also imply that outsiders are taken on as board members in badly performing firms on financiers' requests, which could suggest that

creditors aim at reducing agency problems. An alternative explanation for outsiders' presence on the board may be that they are nominated as board members because it is thought that they can enhance financial performance.

### **3.2 ARTICLE 2: BEHAVIOR AND ATTITUDES OF SMALL FAMILY FIRMS TOWARD DIFFERENT FUNDING SOURCES**

The aim of the second article was to explore the relationship between family ownership and the owner-manager's attitudes toward using different funding sources and the actual financing behavior in private family and non-family firms. The research question was: Do the attitudes toward and the use of different funding sources differ between family and non-family firms?

The theoretical framework of this article is based on the pecking order theory (Myers, 1984; Myers & Majluf, 1984). In small businesses, information asymmetry may induce agency problems between the owner-managers and outside suppliers of funds, which may lead to financial constraints and lead firms to follow a pecking order (Myers, 1984; Myers & Majluf, 1984; Hall, Hutchinson, & Michaelas, 2000). Pecking order theory can be considered a relevant approach in explaining especially the funding behavior of family firms because they avoid using external capital to retain ownership-control and financial independence (Poutziouris, 2001; Romano et al., 2001).

Because of the quantitative nature of the data, logit regressions were used to investigate the usage of funding sources and ordinary least squares regression (OLS) analysis to investigate attitudes toward different funding sources. The results of this study suggest that family firms are more likely to use trade credits, finance company, and owners as their sources of finance than are non-family firms. The results also suggest that family firms have more negative attitudes toward bank loans and trade credits but more positive attitudes toward additional equity from current owners than have non-family firms.

The fact that the results on the usage of and attitudes toward trade credit differ suggests that the family firms in the sample may be forced to use short-term debts because more-preferred sources are not available. This could imply that family firms may be more financially constrained than their non-family counterparts and they face more severe agency problems between the firm and potential lenders due to information asymmetry stemming from the firm's closely held nature. Although in family firms attitudes toward short- and long-term debts are more negative than in non-family firms, the attitudes toward additional equity from current owners are more positive. This contradicts pecking order theory to some extent, and supports the idea suggesting that family firms are more interested in maintaining control within the family. The finding that family firms have more negative attitudes toward retained earnings may result from the fact that family firms prefer to distribute dividends instead of using the profits to develop the firm. In Finland, dividends may be of more importance to small firm owners because dividends have been tax-free to a certain extent.

### **3.3 ARTICLE 3: DO THE INVESTMENT BEHAVIORS OF FAMILY FIRMS AND NON-FAMILY FIRMS DIFFER?**

The third article investigated the investment behavior of private small- and medium-sized family and non-family firms. The purpose was to explore whether there are differences in the amount of investment and in the rejection of investment. Furthermore, this paper also explored the reasons why family and non-family firms have rejected investments. The research question was: Do the investment behaviors of family and non-family firms differ?

The theoretical framework of this article is based on the literature on agency theory and investment and financing patterns in family and non-family firms. The theory of finance implies that every positive net present value project should be taken, regardless of whether internal or external funds are used to cover it (Myers & Majluf, 1984). However, previous studies suggest that investment decisions are associated with both financial factors (Myers & Majluf, 1984; Poutziouris, 2001; Gugler, 2003) and ownership structure (Gallo et al., 2004; Naldi et al., 2007).

The panel data estimation method and logit regression method were employed in the analyses. In addition, the OLS method was used. The findings of this study suggest that family firms are more likely to reject an investment. Furthermore, the reasons why firms have rejected investments could imply that family firms may be more financially constrained than non-family counterparts, suggesting that family firms may face more difficulties in obtaining financing. However, family firms may be reluctant to take more loans because lower debt levels are preferred to minimize the probability of bankruptcy and due to the fear of losing control. Avoidance of loans could also be based on the fact that increasing debt ratios dilutes family control. But, it may lead to the rejection of investments when sufficient internal funds are not available. The results on the amount of investment when using OLS regression suggest that family firms invest larger amounts than do non-family firms. However, the findings on the amount of investment when using a random effects model imply—although the sign is positive—that no statistically significant difference in the amount of investment exists between family firms and non-family firms. The results are qualitatively similar when using a continuous variable family ownership rate and other family influence variables.

The findings could be interpreted to mean that although family firms are more likely to reject an investment, they still invest the amount necessary to maintain their ability to generate future earnings when they have finally decided to invest. The result could also indicate that both family and non-family firms may be concerned with their firm's future performance and ability to survive in competition, thus affecting their investment behavior in a similar way. Furthermore, taking into account the data used and the average size of firms, firms may be forced to undertake investments due to lower flexibility in the timing of investments. However, the reasons for rejecting investments support the notion that family firms may be more financially constrained and more susceptible to agency problems.

# *4 Conclusions and Contribution of the Dissertation*

## **4.1 CONTRIBUTION OF THE DISSERTATION**

The overall purpose of this dissertation was to investigate the financial issues of SMEs in agency theory and corporate governance contexts. The main focus was on the financial performance, funding, and investment behavior of small- and medium-sized private firms and how ownership and board structures are associated with these phenomena. This dissertation contributes to the literature by examining three related articles.

The overall contribution of this dissertation is that it narrows the gap between the association of corporate governance structures and agency problems in private small business and in family business contexts. This dissertation focuses also on the smallest firms, micro-sized firms, which are the least-investigated firms in the corporate finance literature. This study supports the prior empirical evidence that smaller firms are more likely to face agency problems between the firm and its outside suppliers of funds due to information asymmetry. Consequently, this affects firms' funding and investment behavior. Family firms seem to be more likely to face agency problems and financial constraints than are non-family firms. To summarize the results of this dissertation, firms with certain corporate governance structures are more susceptible to agency problems. More precisely, in small firms, agency conflicts between the firm and its outside suppliers of funds seem to increase with managerial and family ownership.

More specifically, this dissertation contributes to the empirical literature in the following ways. The first contribution is that this dissertation sheds more light on the association between corporate governance structures and the financial performance of SMEs and including also the smallest businesses, micro-sized firms, which are the least-investigated context in the empirical literature. Prior studies focus most often on large listed firms and their governance structures. Data used in this study are unique at least to some extent because the data consist of micro-, small-, and medium-sized firms and include more detailed variables than prior studies. The availability of reliable data on non-listed private firms such as SMEs is, in general, scarce and difficult to obtain.

The second contribution is that this study investigates more closely the supply side of the funding sources because detailed variables of funding sources were

available. The variables used in this differ from those used in previous studies, e.g., Gallo and Vilaseca (1996) and Lòpez-Gracia and Sánchez-Andújar (2007), who use variables constructed from financial statements.

The third contribution is that this study also explores attitudes toward different funding sources. This study offers a new contribution to the empirical literature by combining both attitudes toward and the usage of different funding sources. Traditional variables, especially those constructed from financial statements, do not allow for investigating the demand side of funding sources.

The fourth contribution of this dissertation is that this study adds to the empirical literature on investment behaviors of private family and non-family firms and by investigating not only the size of investment but also whether firms have rejected investments. Furthermore, the reasons for the rejection of investments were also made available. Most studies investigate the relationship between liquidity and investment without considering whether family ownership may affect investment behavior. Moreover, the number of studies exploring the differences in investment behaviors of small private family and non-family firms is small.

The fifth contribution of this dissertation is this study contributes to the understanding of funding and investment behavior of firms in the countries that have a similar legal and operating environment and bank-centered capital markets as in Finland. The legal framework and the protection of stakeholders differ by country, which may have an impact on firms and their corporate governance structures. Furthermore, the structure of the capital markets constitutes the framework for alternative forms of funding and this structure differs by country.

## **4.2 MANAGERIAL, THEORETICAL, PRACTICAL, AND POLICY IMPLICATIONS**

The findings of this dissertation may have some implications for scholars, outside suppliers of funds, and policy makers.

This study has implications for scholars as this thesis is suggesting and confirming that smaller firm size, managerial ownership, and family ownership make firms more susceptible to agency problems and financial constraints. The results of this dissertation also imply that the ideas on the role of the board mostly developed for large and/or listed firms with dispersed ownership structures do not necessarily apply to SMEs because owner-managers select boards that are less likely to monitor, reducing thereby the influence that the board has on financial performance. This dissertation also suggests that agency theory and pecking order theory seem to be relevant contexts explaining the funding behavior and investment behavior of small firms.

The results also have implications for investors and suppliers of funds because this dissertation shows that firms with smaller size and higher managerial or family ownership are more likely to suffer agency problems and, therefore, they are more financially constrained. Outside suppliers of funds should be more aware of the nature of family businesses and reconsider their attitudes toward small,

closely owned businesses' funding, because firms with high insider or managerial ownership are more risk averse. In addition, although firms with high managerial or family ownership seem to have lower growth rate, their performance is fairly stable and profitable. Furthermore, potential lenders should take into account the influence of family business characteristics and family commitment on a family firm's decision making and strategic choices.

The results also have implications for policy makers. The empirical evidence of this dissertation on financial constraints suggests that policy makers should consider creating some tax incentives or other (financial) incentives that might enhance investment activity among small- and medium-sized firms and diminish obstacles to financing their investments.

### **4.3 LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH**

This study has several limitations. The first limitation of this study is that data on the real independence and affiliation of the CEO, managers, and board members are not available. However, board members are divided into different categories based on their affiliations, such as family, employment, and finance. The second limitation is that the information on managers' relationships with family is not available. Also, more detailed information on the affiliations of managers and board members could have shed more light on the real independence of the firm's management and boards. Third, information on why firms have recruited outside board members or why firms are reluctant to recruit outsiders on the board could have revealed more about the association between ownership and board structure.

The fourth limitation of this study is that information on the family's presence on the management, i.e., family managers and the generation in power, would have been useful; unfortunately, this information was, again, not available. These could all affect the use of and attitudes toward different funding sources of firms. Fifth, this study could not use F-PEC (family power, experience, and culture) as an explanatory variable, as was suggested by Klein et al. (2005). Sixth, although detailed information on sources of funding was collected, two sources of funding are not present. It would have been useful and important to investigate loans from current owners and loans from family members in more detail in this context, but, unfortunately, this data was not available.

The seventh limitation is that more detailed information on investments and their classification into extension, replacement, and compulsory investment was not available, nor was the amount of R&D expenditure. These could all have provided more detailed information on investment behavior and the quality of assets firms invest in. Finally, because the data for this study were collected through a private survey, respondents did not answer all questions. Consequently, observations on some variables are missing, which led to a situation in which the investigated topics on the same firms are not involved in all analyses.

The eighth limitation is related to the data used in this study. The firms in the sample represent four different regions within Finland but those regions may have their own specific business environments, which may affect the results.

#### **4.4 AUTHOR´S CONTRIBUTION TO THE JOINT ARTICLES**

The contribution of the present author in joint articles (1) and (2) is the following. She collected the data and defined the variables used in the articles. She was responsible for the statistical analyses in both articles. As agreed at the beginning of the project, the present author always wrote the first draft of the article submitted to the journal. After receiving the reviewers´ comments, the authors frequently revised the articles together. The third article is written solely by the present author.

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# Articles

## **ARTICLE I**

### **FINANCIAL PERFORMANCE OF SMES: IMPACT OF OWNERSHIP STRUCTURE AND BOARD COMPOSITION**

Lappalainen, Jaana & Niskanen, Mervi (2012): Financial Performance of SMEs – Impact of Ownership Structure and Board Composition. *Management Research Review*, Vol. 35, No. 11, 1088-1108.

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## **ARTICLE II**

### **BEHAVIOR AND ATTITUDES OF SMALL FAMILY FIRMS TOWARDS DIFFERENT FUNDING SOURCES**

Lappalainen, Jaana & Niskanen, Mervi, (2013): Behavior and Attitudes of Small Family Firms towards Different Funding Sources. Working Paper, University of Eastern Finland.

## **ARTICLE III**

### **DO THE INVESTMENT BEHAVIORS OF FAMILY FIRMS AND NON-FAMILY FIRMS DIFFER?**

Lappalainen, Jaana (2013): Do the Investment Behaviors of Family Firms and Non-family Firms Differ? Working Paper, University of Eastern Finland.





# *Article I*

## **Financial Performance of SMEs: Impact of Ownership Structure and Board Composition**

Lappalainen, Jaana & Niskanen, Mervi (2012): Financial Performance of SMEs – Impact of Ownership Structure and Board Composition. *Management Research Review*, Vol. 35, No. 11, 1088-1108.

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# Financial Performance of SMEs – Impact of Ownership Structure and Board Composition

## Abstract

**Purpose** This study investigates the impact that ownership structure and board composition have on financial performance in a sample of Finnish SMEs.

**Methodology** The data for this study was collected through a private survey. The financial data were collected from the Voitto+ register. Observations were made from 2000 to 2005. We employ panel data estimation and 2SLS methods in our analyses.

**Findings** Our results suggest that the ownership structure affects both the growth and the profitability of small private firms. Firms with high managerial ownership levels exhibit higher profitability ratios, but have lower growth rates. We also find that firms with high venture capital firm ownership ratios grow faster and are less profitable. Our results on board structure suggest that board structure has little impact on the performance of small firms. The only significant result in this context is that firms with outside board members have lower growth rates and are less profitable.

**Originality/value** Our study is one of the few that shed light on how corporate governance and ownership structures affect the performance of small private firms.

**Practical implications** The results of this study can be interpreted to indicate that owner-managers are risk averse and that venture capital firms seek investments with high growth potential. The results could also imply that outsiders are taken on as board members in badly-performing firms on financiers' requests, or because it is thought that they can enhance performance.

**Keywords** Ownership, Board Composition, SMEs, Performance

**Paper type** Research paper

## 1. Introduction

Agency theory suggests that the separation of ownership from control may lead to agency problems when the interests of managers and owners are misaligned. For example, Jensen and Meckling (1976) suggest that managers who own a stake in their firm are less likely to deviate from shareholder wealth maximisation by consuming perks, shirking, or undertaking sub-optimal projects to maximize their own benefits. In small firms, where managerial ownership is common, agency problems are more likely to arise between owner-managers and outside suppliers of finance due to information asymmetry. It can also be argued that ownership concentration among the top management can lead to risk aversion and a lack of willingness to engage in strategic changes. Consequently, ownership structure may be associated with firm performance.

An alternative mechanism to solving agency problems is board composition. In this context, the board can be seen as a key link between management and shareholders (Brunninge et al., 2007). While agency theory suggests that independent boards should be preferred, the connection between board composition and firm performance is not necessarily as simple as is sometimes assumed. Previous results on the association between board composition and firm performance are mixed. Other studies suggest that managers choose boards that are unlikely to monitor, or tend to reduce the monitoring role of, the board by implementing CEO duality.

Most previous studies on the relationship between board composition, ownership structure and firm performance use US or UK data and data on large, listed firms. The legal framework differs by country, and this can have an impact on corporate governance structures of firms, including those of SMEs. Therefore, it has been suggested that research on ownership structures should be country-specific. Furthermore, a surprisingly small number of researchers have concentrated on exploring non-listed private small and medium-sized firms in this context, even if SMEs are recognized worldwide as important engines of economic growth. This study investigates the determinants of performance in small and medium-sized firms in Finland, and our study is one of the few that shed light on how corporate governance and ownership structures affect the performance of private small- and medium-sized firms. Because the availability of reliable data on non-listed private firms such as SMEs is, in general, difficult to obtain, a private survey was needed to extract the data on ownership structure and board composition.

We find that both ownership structure and board composition are significant determinants of firm performance in our sample of small and medium sized Finnish firms. More specifically, the overall results suggest that an increase in managerial ownership has a negative impact on growth and a positive impact on profitability, whereas venture capital firm ownership is positively associated with growth but negatively with profitability. We also find that firms with lower growth rates or weaker profitability are more likely to have outsiders on the board.

The remainder of this paper is structured as follows. Section 2 discusses the theories and empirical literature relevant to this study. Section 3 describes the sample, data and variables. Section 4 presents the empirical findings, and Section 5 concludes the paper.

## 2. Literature review

The relationship between ownership structure and financial performance has long been the subject of an important debate in the corporate finance literature. This debate is based on Berle and Means (1932), who suggested that ownership concentration should have a positive effect on firm value and performance. Demsetz (1983) offers an alternative view: that ownership structure should be thought of as an endogenous outcome of decisions reflecting the influence of shareholders. Furthermore, Demsetz and Lehn (1985) and Demsetz and Villalonga (2001) suggest that there should be no systematic association between ownership structure and performance because ownership structures should be endogenously determined.

Jensen and Meckling (1976), suggest that the separation of ownership from control can result in potential agency conflicts stemming from the divergence of managerial and shareholder interests. Agency problems arise whenever managers have incentives to pursue their own interests at the shareholders' expense (Agrawal and Knoeber, 1996) or due to the various forms of information asymmetry (Ezzamel and Watson, 1993) because managers possess private information about the firm's future earnings, cash flows, or investment opportunities that the investors (i.e., shareholders or lenders) do not have (Harris and Raviv, 1991).

Agency problems can be reduced by managerial shareholdings, debt financing, the use of outsiders on the board, and monitoring by the firm's own large shareholders (Agrawal and Knoeber, 1996). It has also been suggested in previous literature that board composition and insider ownership are substitute mechanisms in controlling agency problems (Prevost et al., 2002).

### 2.1 Ownership structure

The ownership structure of a firm can be investigated from a number of alternative dimensions. Most commonly, ownership structure refers to the ownership by different groups of shareholders. Another dimension of ownership structure is ownership concentration. When it comes to ownership concentration, previous empirical studies have yielded conflicting results on the relationship between ownership concentration and performance. Demsetz and Lehn (1985) and Demsetz and Villalonga (2001) find no statistically significant relationship between ownership concentration and firm performance, while several studies find a positive association between ownership concentration and profitability, (e.g., Agrawal and Knoeber (1996), Andersson and Reeb (2003), and Morck et al. (1988)). Ownership concentration may reduce agency problems, but it may also increase risk aversion. This is based on an argument that an individual shareholder's large stake in one firm implies less portfolio diversification for that shareholder (Himmelberg et al., 1999), thereby reducing incentives for risk taking. Therefore, we expect that ownership concentration is negatively related to growth and positively related to profitability.

Agency theory suggests that increased insider ownership, or the presence of a large shareholder, can lead to better performance because it reduces agency problems between owners and managers (Jensen and Meckling, 1976). One important form of insider ownership in small firms is managerial ownership. Prior empirical literature suggests that managerial ownership affects firm performance positively at lower levels of ownership and negatively at higher levels of ownership (e.g., Morck et al. (1988), Hermalin and Weissbach (1991), and McConnell and Servaes (1990)). Similarly, managements' risk-taking incentives are reduced

as their stake in the company increases. Furthermore, Agrawal and Knoeber (1996) find a positive relationship between insider ownership and firm profitability. Based on these arguments, we expect that management ownership is negatively related to growth and a positively related to profitability.

The family firm is important type of firm with concentrated ownership structures. Firms owned by large shareholders, such as families, have longer investment horizons and may make better investment decisions, since families have more specific knowledge of the firm (James, 1999; Sirmon and Hitt, 2003). Anderson and Reeb (2003) and Barontini and Caprio (2006) find family firms performing significantly better than non-family firms. Family firms are also generally regarded as more risk averse because their business represents a significant proportion of their wealth and they may wish to pass it on to the next generation (e.g., Naldi et al., 2007). Based on previous literature, we expect to find that family ownership is negatively related to growth and positively related to profitability.

A further type of block holder ownership is that by Venture Capital Firms. Ben-Amar and André (2006) and Lasfer (2006) report that outside ownership has a positive influence on firm profitability. In addition, Kang and Sorensen (1999) suggest that this form of concentrated holdings may lead to increased performance. According to Berger and Udell (1998), business angels and venture capitalists represent a relatively small proportion of small business finance because they invest very selectively and target their investments on firms with high growth potential. Therefore, we expect that venture capital ownership is positively related to growth and profitability.

## **2.2 Board composition**

Board composition refers to the number and the type of board members, and board structure can be seen as a potentially important predictor of firm financial performance (Zahra and Pearce, 1989). In firms with separate ownership and management, the board's monitoring and controlling role is important in the safeguarding of shareholders' investments (Brunnerge et al., 2007). Pearce and Zahra (1992) find that the board's ability to implement its service, strategy, and control role depends largely on its composition. However, the connection between board composition and firm performance may not be as simple as is sometimes assumed. For example, Hermalin and Weissbach (1991) find no association between board composition and firm performance, while Lasfer (2006) suggests that managers choose boards that are unlikely to monitor them. Managers are also likely to reduce the monitoring role of the board by CEO duality.

Voordeckers et al. (2007) point out that the majority of studies on the role of boards focus on board practices in large listed firms, where the role of the board is to make sure that the managers' interest are in line with the shareholders' interests. Johannisson and Huse (2000), as well as Forbes and Milliken (1999), argue that the role of the board may be of more importance in SMEs than in large listed firms. This argument is partly based on the idea that the information gap between owner-managers and other major stakeholders of the firm is especially wide in the case of small and medium-sized private firms. It can also be argued that, in small and medium-sized firms, the role of the board is different because the risk of management's opportunistic behavior is lower due to the firm's closely held nature (i.e., because management and ownership overlap). Other studies suggest that a well-functioning board of directors may add value through several alternative roles, such as strategy

development (Gabrielsson and Winlund, 2000) and controlling the management (Johannisson and Huse, 2000).

Board structure can be investigated through several different dimensions. Some of the typical dimensions are CEO duality and whether there are inside or outside members in the board. CEO duality refers to a board leadership structure in which the chief executive officer is also the chairman of the board (Bozec 2005). Previous empirical studies on the relationship between board leadership structure and performance, using for the most part data on large listed firms, have yielded mixed results. Some studies find no relationship (e.g., Dalton et al. (1998)), while other studies suggest a negative association between CEO duality and profitability (e.g., Ezzamel and Watson (1993) and Bozec (2005)). Others, such as Dehaene et al. (2001), find a positive relationship between CEO duality and profitability. Because of these conflicting findings, our expectations on the impact that CEO duality has on growth and profitability are open.

Agency theory suggests a need for board independence. Boards composed primarily of outsiders should be generally superior to boards of insiders (Wagner et al., 1998), because outside board members are believed to be independent from management and they can provide superior performance benefits for the firm (Fama, 1980; Dalton et al., 1998). Outsiders are expected to represent the shareholders' interests and bring added value to the firm (Ben-Amar and André, 2006), and they are often thought to play a monitoring role inside the board (Bozec, 2005). Few studies investigate the role of outsiders on the boards of SMEs. Voordeckers et al. (2007) argue that, in small firms, the adoption of outsiders on the board may diminish agency costs resulting from altruistic behavior. Johannisson and Huse (2000) imply that because entrepreneurs value independence highly, they defy any control mechanisms, such as the board. They further indicate that providers of external finance may require that firms have an outsider on the board. Fiegenger et al. (2000) suggest that adoption of outside board members is more common as external ownership increases. This is in line with Linck et al. (2007), who find that small firms with high managerial ownership tend to have less independent boards. Previous empirical literature, using again mostly data on large and/or listed firms, (e.g., Pearce and Zahra (1992) and Dehaene et al. (2001)) reports a positive relationship between outsiders on the board and firm profitability, while Agrawal and Knoeber (1996) find an opposite result. However, Kesner (1987) suggests that the presence of insiders on the board is positively associated with firm profitability. Also, Wagner et al. (1998) argue that presence mixture of both insiders and outsiders are positively associated with profitability. Based on the previous discussion and conflicting results, our expectations on the role that outside and inside board members have on growth and profitability are open.

### **3. Data and Variables**

#### **3.1 Data**

The data for this study were collected through a private survey. Of the 3262 questionnaires sent, a total of 621 responses were usable, which resulted in an effective response rate of 19 %. The final sample consists of 600 SMEs operating in Finland, because we drop firms which are outside the EU definition of SMEs. Based on the definition, a micro-size firm is a firm that employs fewer than 10 people and whose maximum annual turnover or total assets are

<€2m. A small firm is a firm which employs fewer than 50 people and has maximum annual turnover or total assets of <€10m. A medium-sized firm is a firm that employs fewer than 250 people and whose maximum annual turnover is <€50m or maximum total assets are <€43m. The firms represent all industries, excluding primary production. The sample firms are firms with at least two employees and whose legal form is a limited liability.

The firms were asked to provide information on their ownership structure during the years 2000-2005, for each year separately. The firms were also asked to provide information on their board composition during the years 2000-2005. The financial data were collected from the Voitto+ register. This register includes data on firm age, employment, line of business, and the complete financial statements. Observations include the years from 2000 to 2005. The total number of firm-year observations available is 3519, because information is available for fewer than 6 years in some cases. In individual regression models, the number of observations varies because of missing observations on some variables.

We employ panel data estimation methods in our analyses. More specifically, we run all models with both random effects and fixed effects models. Assuming fixed effects, we impose time independent effects for each entity, which are possibly correlated with the regressors. There are two common assumptions made about the individual specific effect: the random effects assumption and the fixed effects assumption. The random effects assumption is that the individual specific effects are uncorrelated with the independent variables. The fixed effects assumption is that the individual specific effect is correlated with the independent variables. If the random effects assumption holds, the random effects model is more efficient than the fixed effects model, and vice versa. We also use the 2SLS model to address the endogenous nature of growth and profitability.

## 3.2 Variables

### Dependent Variables

Our measures of firm performance are the annual logarithmic growth rate of sales and the return on assets. We chose sales growth rate as our measure of growth, because firms rarely select employment growth as their goal per se. It could also be argued that our sample of Finnish firms further justifies this choice due to the excessively high labor cost imposed on local employers.<sup>1</sup> These costs are often stated to be a major barrier for small firms to increase the number of their employees. In addition to our reported measure of firm profitability, we also run our models with the profit margin. The results of these alternative models are qualitatively similar to the ones reported here.

### Independent variables

*Ownership.* We include four ownership variables in our model. Our measures in this context include the number of owners, share of family ownership, share of managerial ownership, and the share of venture capitalist ownership. *Number of owners* is the number of the owners in the firm. *Family ownership* means the percentage of shares controlled by the family. *Managerial ownership* refers to the percentage of shares controlled by the firm's management. *Ownership of VC* indicates the percentage of shares controlled by venture capital funds.

*Board Structure.* We include three measures of board structure into our models. *CEO duality* is a variable with a value of 1 if the roles of board chair and CEO are held by the same

person, otherwise the value is 0. *Top Management* refers to the number (ratio) of board members who represent the firm's top management. *Outside members* indicates the number (ratio) of board members who are not insiders of the firm.

### **Control variables**

*Firm age.* Firm age and size are the two most commonly investigated independent variables suggested to affect firm growth and performance. The general pattern between firm age and growth seems to be that young firms are more likely to grow faster. Glancey (1998), Almus and Nerlinger (1999) and Davidsson et al. (2002) report an inverse relationship between firm age and growth, suggesting that older firms grow less rapidly than younger firms. Roper (1999) finds that firm age and profitability are negatively related. Our measure of firm age is the natural log of (1+age), because it can be argued that the impact of one extra year diminishes as the firm gets older. Therefore, we expect to find a negative association between firm age and growth and between firm age and profitability.

*Firm size.* Gibrat's law, also called the "law of proportionate effect", implies that the expected growth rate is the same across all size classes of firms (Sutton 1997). In most studies on small firms (e.g., Harhoff et al. (1998) and Almus and Nerlinger (2000)), Gibrat's law is rejected. Other studies (e.g., Evans (1987) and Hall (1987)) suggest that deviations from this law diminish when data on larger firms are used, while Roper (1999) asserts that firm size and profitability are positively related. Our measure of firm size is the natural log of the firms' total assets. Based on the discussion, we expect to find a negative relationship between firm size and growth and a positive relationship between firm size and profitability.

*Profitability and liquidity.* Myers (1984) claims that capital structure is driven by a firm's desire to finance investments first internally, then with low-risk debt, and finally, and only as a last resort, with outside equity. Carpenter and Petersen (2002) find that the growth of small firms is constrained by internal finance. Our proxies for the firms' internal funding resources are the return on assets and the current ratio. Based on previous studies, we expect to find that profitability and growth are positively related, that liquidity and growth are negatively related, and that liquidity and profitability are positively related.

*Financial structure.* Financial constraints have been suggested to be one of the most important barriers to growth (Storey, 1994). It has also been suggested that small firms in particular face difficulties in obtaining external funding. Becchetti and Trovato (2002) report that firms that have been credit rationed by their financial institutions are likely to have lower growth rates. Our measure for the financial structure is the firms' debt-to-assets ratio. Therefore, we expect to find a positive relationship between growth and leverage and a negative relationship between profitability and leverage.

*Industry.* It is usually accepted that firms in different industries exhibit different growth rates. We add 15 different industry dummies to our models to control for industry-specific differences in growth rates.



## 4. Empirical results

### 4.1 Descriptive statistics

Table 1 lists descriptive statistics for the key variables. The numbers represent average rates across the entire period of the survey. The results show that the average firm age is 14.80 years. The average total assets are €1,793,810 and sales €1,865,740. The average number of employees is 16.30 and the median is 7.00. The average ratios regarding leverage, liquidity, and profitability are 62.03 %, 2.35 (current ratio), and 16.55 % (return on assets), respectively. The average growth rate in terms of sales (i.e., change in sales) is 29.29 %. The firms have 5.57 owners, on average. The average family ownership is 52.34 %, and managerial ownership 48.71 %. The average ownership ratios of outsiders are the following: bank ownership 0.75 %, venture capital ownership 0.92 %, and other outside owners 11.92 %. CEOs are also board chair in 49 % of the firms. The average board size is 2.61 and the median is 2. The average number of family members on the board is 1.10, while the corresponding number of top management on the board is 1.10, of employees is 0.28, and of venture capital funds 0.05. The average number of outside members on the board is 0.52.

#### (TABLE 1)

Table 2 presents board size and board composition. Panel A shows that 14.3 % of the firms only fulfill the minimum requirements of the Corporate Act that so that the board is comprised of one member and one deputy member. The most common board size is 2 members; in 39.1 % of the firms. In 46.6 % of the firms there are at least 3 or more board members. Panel B presents statistics on the presence of outsiders on the board. Most firms, 76.2 %, do not have any outsiders on the board. On the other hand, 23.8 % of the firms have outside board members, of which 45.5 % have one outside board member, 27.7 % have two outside board members, and 27.7 % have three or more outside board members.

#### (TABLE 2)

Table 3 presents Pearson (Spearman) correlations above (below) the diagonal. The correlations between performance and ownership and board variables do not exceed +/- 0.009, and variables between ROA, ownership and board do not exceed +/-0.281. Among ownership and board variables we observe correlations between +/- 0.001 and +/-0.465. We do not observe any serious correlations between the variables.

#### (TABLE 3)

We investigate the ownership and board structure variables in more detail in Table 4, where we have divided the data into firms with fewer than 16 employees and those with 16 or more employees. This division is based on the mean number of employees. We use a T-test for independent samples to compare the means to investigate whether our ownership and board structure variables may differ by firm size. On average, the larger firms have more owners. Smaller firms have a higher level of CEO, bank, and venture capital ownership. The rate of other owner ownership in larger firms exceeds that of smaller firms. As far as board structure is concerned, the results in Table 4 show that CEO duality is more common in smaller firms. The number of board members varies by firm size, and the average number of board members is 3.48 in the firms with 16 or more employees, as opposed to 2.50 in the smaller firms. The number of top management, family members, as well as venture capital funds on

the board is higher in larger firms, but the number of employees is higher in smaller firms. Furthermore, the number of outside board members is higher in larger firms.

**(TABLE 4)**

Table 5 presents the differences in means for the performance measures. We use a T-test for independent samples to investigate whether our performance variables may differ based on high and low insider ownership ratios. Panel A presents the results for family ownership levels above and below 50 %. Our results show that growth is higher in firms with low family ownership levels than in firms with high family ownership levels. The results also demonstrate that profitability is higher in firms with high family ownership levels than in firms with low family ownership levels. When we investigate ownership levels of above 75 % and below 25 % separately, our results remain the same.

Panel B presents the results for CEO ownership levels above and below 50 %. The results indicate that profitability is higher in firms with high CEO ownership than in firms with low CEO ownership levels. When we investigate ownership levels of above 75 % and below 25 % separately, our results remain the same.

Panel C presents the results for above and below 50 % managerial ownership levels. Our results show that growth is higher in firms with low managerial ownership levels and that profitability is higher in firms with high managerial ownership levels. When we investigate managerial ownership levels of above 75 % and below 25 % separately, our results remain the same. To sum up, in firms with high insider ownership, ratios growth seems to be lower, but profitability is higher than in firms with low insider ownership ratios.

**(TABLE 5)**

Table 6 presents descriptive statistics for the variables on performance when the data has been divided into two sub-samples by board composition. Panel A presents the results by board size. The results suggest that firms with smaller boards have higher growth and profitability. Panel B presents the results for the presence of outsiders on the board. Our results suggest that firms with no outsiders on the board are more profitable than firms with outsiders on the board.

**(TABLE 6)**

## **4.2 Determinants of Firm Growth**

Our first measure of firm performance is growth. Our measure of firm growth is the annual natural logarithmic growth rate of sales. We employ panel data estimation methods in our analyses. More specifically, we run all models using both random effects and fixed effects models. We investigate the impact that ownership and board structure have on firm growth with three different models in Table 7. Column I presents a model that includes the ownership variables, column II a model which includes the board structure variables, and column III a model which includes all the ownership and board structure variables. The results in column I suggest that an increase in the level of managerial ownership has a negative impact on growth. This result is well in line with the notion that managerial risk

aversion increases when its stake holdings increase and is in line with the results observed in, for example, Morck et al. (1988), McConnell and Servaes (1990), and Hermalin and Weissbach (1991). The results also suggest that the presence of Venture Capital Firm ownership is associated with higher growth rates. This finding supports our prediction and is in line with Kang and Sorensen (1999). When the managerial dispersion variable is dropped in the fixed effect model (due to the little time variance in the variable), we also obtain a statistically significant coefficient for our measure of family ownership. This suggests that firms with high levels of family ownership have lower growth rates than firms with low levels of family ownership. This result is in line with our expectation and with McConnell and Servaes (1990) and Morck et al. (1998). Again, it can be argued that when the stake of the stock holding family increases, the owners become more risk averse.

### (TABLE 7)

When we investigate the impact of board structure in column II in Table 7, we observe that firms with low growth rates are more likely to have outside members on their boards, as expected. Our finding could imply that more outsiders are taken on as board members in badly-performing firms. Outsiders are believed to provide expertise, and they are independent from management and, therefore, may provide superior performance benefits. An alternative explanation could be that financiers may require a seat on the board in the firms they finance. Finally, we include all our ownership and board structure variables into one model in column III. As far as ownership structure is concerned, the results are similar to the ones in column II. The fact that our ownership variables maintain their significance, while none of the board structure variables are significant in column III, suggests that ownership structure is a more important determinant of growth than board composition. This is to some extent in line with Lasfer (2006), who suggests that board composition and insider (managerial) ownership are substitute mechanisms in controlling agency problems.

As far as our firm-specific control variables are concerned, the results indicate that an increase in profitability increases growth rates, as expected. This is in line with the arguments that firms tend to finance their growth internally and, for example, Myers (1984). The results also show that firms with higher debt to assets ratios grow faster. This result is predicted and suggests that firms with easy access to outside funding grow faster.

Although the correlation results indicated no significant correlation between the variables, we investigate a model with a VIF-test. We do not find any serious multicollinearity because the highest VIF value is 1.534, and in industry dummies the highest value is 4.644.

### 4.3 Determinants of Firm Profitability

Our second measure of firm performance is profitability. The dependent variable in the regression models in Table 8 is the return on assets ratio. This approach has previously been used in, for example, Andersson and Reeb (2003), Kesner (1987), and Pearce and Zahra (1992). We run three different models with both random effects and fixed effects specifications. Our first measure of firm ownership is ownership dispersion, which is measured by the number of owners in the firm. The results in Table 8 indicate that an increase in the number of owners reduces firm profitability. This finding is consistent with Berle and Means (1932) and Miller et al. (2007). Furthermore, our findings also support the idea that firms with concentrated ownership would be expected to reflect the interests of their

owners. In firms with a small number of owners, the importance of dividends is higher and, therefore, the firm has to be more profitable to be able to distribute dividends. Our second measure of firm ownership is the share of managerial stockholdings in the firm. This variable is significant and positive only in the absence of the ownership dispersion variable. This finding is in line with our expectations and with previous studies, such as Andersson and Reeb (2003) and Barontini and Caprio (2006).

We also include a measure for venture capital firm ownership. These results suggest that firms with high venture capital firm ownership are less profitable. This finding is not expected, and contradicts Ben-Amar and André (2006), Lasfer (2006), and Kang and Sorensen (1999). One potential explanation could be that firms with venture capital ownership grow fast, which may reduce profitability, and that venture capital firms are more likely to invest in firms with a high growth potential. When we include our board structure variables in the model in column II of Table 8, the results of this variable are reversed. These results can be interpreted to mean that venture capital ownership, as such, improves profitability, but that the presence of outside board members (mostly placed at the request of investors) is a sign of weaker profitability. One potential explanation could be that more outsiders are taken on as board members in badly-performing firms.

The results on our control variables suggest that the larger firms in our sample are, on average, more profitable, and that firms with high leverage ratios are less profitable. These findings are expected and in line with Barontini and Caprio (2006). Our finding regarding leverage is consistent with Agrawal and Knoeber (1996). As suggested above in connection with the growth models, we run a model with a VIF-test, but find no indication of any significant multicollinearity.

### (TABLE 8)

#### 4.4 Additional tests

It is possible that the panel estimation models, random effect, and fixed effect, reported in Tables 7 and 8, are not collectively valid, since there might be a simultaneity problem between growth and profitability. We correct for this possibility of an endogeneity problem by re-estimating all our equations by using 2SLS. In order to satisfy the necessary identification requirements, the firm characteristic variable with the lowest level of significance in the OLS equations (not reported), treating the industry dummies as a group, is dropped. This entails omitting the current ratio from growth equations and the age variable from profitability equations.

When we compare the results of the 2SLS model with our panel estimation results, we find that fewer explanatory variables are significant even if the variables have the same signs as in the panel estimation models. In the growth equations, managerial ownership and outside board members are negatively and significantly related to growth, while in the profitability equations, only ownership by venture capitalists is significant and negatively associated with profitability. As far as our firm characteristic variables are concerned, smaller firms are more profitable and younger firms grow more. Firms with higher liquidity exhibit higher profitability ratios. Furthermore, similar to the results in the panel estimation models, we find

that firms with lower leverage are more profitable and firms with a higher debt to assets ratio experience more growth.

**(TABLE 8)**

## 5. Conclusions

The aim of this paper is to investigate the impact of board structure and ownership structure on the performance of SMEs. Most previous studies on the association of board composition, ownership structure, and performance use data on large, listed firms. Our study is one of few that shed light on how corporate governance and ownership structures affect the performance of small firms.

We find that both ownership structure and board composition are significant determinants of firm performance in our sample of small- and medium-sized Finnish firms. However, our results suggest that the ownership structure may be a more important determinant of the growth and profitability of small firms than board structure. Firms with high managerial ownership levels and a small number of owners exhibit higher profitability ratios, but have lower growth rates. These results can be interpreted to imply that controlling owners are more interested in retaining profits than they are in high growth ratios. This further suggests that owner-managers are risk averse. We also find that firms with high venture capital firm ownership ratios grow faster and are less profitable. This result may reflect the notion that venture capital firms are more interested in firms with high growth potential.

Our results on board structure suggest that board structure has little impact on the performance of small firms. The only significant result in this context is that firms with outside board members have lower growth rates and are less profitable. One potential explanation could be that outsiders are appointed as board members in badly-performing firms. An alternative explanation could be that financiers may require control of a seat on the board in firms that they finance. The results on our control variables indicate that an increase in profitability increases growth rates. This is consistent with the arguments that firms are willing to finance their growth internally. However, the results also show that firms with a higher debt to assets ratios grow faster, suggesting that firms with easy access to outside funding also grow faster. Our results of the 2SLS are fairly consistent with the results of our panel estimations. Again, we find that firms with higher managerial ownership and outsiders on the board experience less growth. Furthermore, the presence of top management on the board decreases growth rates. As far as profitability is concerned, firms with venture capital fund ownership are less profitable.

Our findings add to the understanding of the importance of ownership structure and board composition in private small- and medium-sized firms. The results suggest that ownership structure and board composition overlap to some extent and that complex board structures in SMEs are not reflected in terms of enhanced performance. Our results could also suggest that firms with high insider (managerial) ownership are more risk averse. Overall, our results imply that the ideas on the role of the board mostly developed for large and/or listed firms with dispersed ownership structures do not necessarily apply for SMEs. One potential explanation could be that owner-managers choose boards that are unlikely to monitor, demising thereby the impact that the board has on financial performance. Whether this is the

case or whether there are alternative explanations, leaves room for future research. Our results on the effect of ownership structure and board composition on firm growth and profitability may be of interest to providers of finance, such as banks and venture capitalists.

This study has several limitations. For example, data on the CEOs', managers' or board members' affiliations or real independence is not available. However, we attempted to obtain information on a number of different types of affiliations such as family, employment, and finance. Unfortunately, information on affiliations outside this list is not available. Furthermore, we do not know whether managers may be family related or not. The fact that our results on family ownership and managerial ownership are, for the most part, different, suggests that these two types of ownership do not completely overlap on the database. More detailed information on these aspects could have shed more light on the real independence of the firms' management and boards.

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**Table 1**  
**Descriptive Statistics**

This table presents descriptive statistics on the sample firms. Column I presents the number of observations. Column II presents the average values of the variables, column III the medians, and column IV the standard deviations.

Variables	Number of Observations	Mean	Median	Standard Deviation
Firm age	2434	14.80	12	13.87
Total Assets	2434	1 793.81	262.40	9 977
Sales	2388	1 865.74	567.70	5 784
Number of Employees	2345	16.30	7	42.13
Leverage	2369	62.03	57.1	53.19
Current Ratio	2366	2.35	1.5	3.70
Return on Assets	2369	16.55	14.00	24.27
Change in Sales	2434	29.29	5.9	322.66
Number of Owners	3427	5.57	2	31.474
Family Ownership (%)	3224	52.34	60	47.262
CEO Ownership (%)	3219	48.44	50	35.148
Managerial Ownership (%)	3226	48.71	50	42.272
Bank Ownership (%)	3217	0.75	0	8.606
Venture Capital Ownership (%)	3218	0.92	0	7.192
Other Owners Ownership (%)	3211	11.92	0	24.001
CEO Duality	3349	0.49	0	0.503
Number of Board Members	3345	2.61	2	1.366
Family Members on the Board	3315	0.86	1	1.116
Top Management on the Board	3315	1.10	0	0.966
Employees on the Board	3309	0.28	0	0.671
Venture Capitalists on the Board	2699	0.05	0	0.306
Outside Board Members	3225	0.52	0	1.331

**Table 2**  
**Board composition by board size and by the number of outsiders on the board**

This table presents the board composition of the sample firms. Panel A presents board size and panel B the number of outsiders on the board.

<b>Panel A: Board size</b>					
<b>Board size</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5 or more</b>
	<b>(+deputy)</b>				
Percentage of firms	14.3 %	39.1 %	30.4 %	9.8 %	6.4 %
<b>Panel B: The number of outsiders on the board</b>					
<b>Number of outsiders on the board</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3 or more</b>	
Percentage of firms	76.2 %	10.8 %	6.6 %	6.4 %	

**Table 3 Correlation Matrix**

	LnChSales	Profitability	Number of owners	Family Ownership	CEO Ownership	Managerial Own	Bank Ownership	VC Ownership	Other Owners	CEO Duality	Board size	Manag Board	Empl Board	Family Board	VC on the Board	Outsiders
LnChSales		0.100	<b>-0.023</b>	<b>-0.092</b>	-0.043	<b>-0.104</b>	-0.023	0.040	0.031	0.051	-0.021	0.005	0.027	-0.018	0.004	-0.033
Profitability	0.027		<b>-0.138</b>	0.063	<b>0.162</b>	0.025	0.048	<b>-0.157</b>	<b>-0.185</b>	<b>0.079</b>	<b>-0.161</b>	0.028	<b>-0.077</b>	0.040	<b>-0.151</b>	<b>-0.153</b>
Number of owners	-0.031	<b>-0.095</b>		<b>-0.053</b>	<b>-0.475</b>	0.014	<b>-0.104</b>	<b>0.155</b>	<b>0.300</b>	<b>-0.313</b>	<b>0.440</b>	<b>0.172</b>	<b>0.120</b>	0.040	0.028	<b>0.061</b>
Family Ownership	<b>-0.087</b>	<b>0.116</b>	<b>-0.099</b>		<b>0.114</b>	<b>0.204</b>	<b>-0.094</b>	<b>-0.089</b>	<b>-0.246</b>	<b>0.190</b>	<b>-0.220</b>	<b>-0.230</b>	<b>-0.194</b>	<b>0.499</b>	-0.048	<b>-0.306</b>
CEO Ownership	-0.043	<b>0.170</b>	<b>-0.322</b>	<b>0.104</b>		<b>0.216</b>	<b>-0.121</b>	<b>-0.074</b>	<b>-0.187</b>	<b>0.414</b>	<b>-0.349</b>	<b>-0.074</b>	-0.030	<b>0.057</b>	-0.013	<b>-0.211</b>
Managerial Own	<b>-0.122</b>	0.070	<b>-0.052</b>	<b>0.205</b>	<b>0.219</b>		<b>-0.100</b>	<b>-0.107</b>	<b>-0.251</b>	-0.005	<b>-0.081</b>	<b>0.213</b>	-0.041	-0.011	-0.022	<b>-0.210</b>
Bank Ownership	-0.024	0.041	<b>-0.056</b>	<b>-0.096</b>	<b>-0.119</b>	<b>-0.100</b>		-0.013	<b>-0.054</b>	<b>-0.088</b>	<b>0.084</b>	0.023	0.010	<b>-0.079</b>	<b>0.128</b>	<b>0.091</b>
VC Ownership	0.049	<b>-0.281</b>	<b>0.100</b>	<b>-0.090</b>	<b>-0.113</b>	<b>-0.121</b>	-0.011		<b>0.085</b>	<b>-0.048</b>	<b>0.127</b>	-0.045	0.022	-0.029	<b>0.383</b>	<b>0.221</b>
Other Owners	0.049	<b>-0.134</b>	<b>0.177</b>	<b>-0.278</b>	<b>-0.274</b>	<b>-0.285</b>	-0.043	0.002		<b>-0.159</b>	<b>0.222</b>	-0.024	<b>0.174</b>	<b>-0.157</b>	<b>0.071</b>	<b>0.294</b>
CEO Duality	0.048	<b>0.090</b>	<b>-0.194</b>	<b>0.178</b>	<b>0.422</b>	-0.009	<b>-0.088</b>	<b>-0.061</b>	<b>-0.197</b>		<b>-0.396</b>	<b>-0.209</b>	0.019	<b>0.094</b>	<b>-0.093</b>	<b>-0.280</b>
Board size	-0.031	<b>-0.197</b>	<b>0.289</b>	<b>-0.213</b>	<b>-0.355</b>	<b>-0.113</b>	<b>0.068</b>	<b>0.157</b>	<b>0.347</b>	<b>-0.380</b>		<b>0.162</b>	<b>0.218</b>	<b>0.063</b>	<b>0.112</b>	<b>0.405</b>
Manag Board	-0.019	0.012	<b>0.082</b>	<b>-0.222</b>	<b>-0.098</b>	<b>0.213</b>	<b>0.015</b>	<b>-0.059</b>	<b>-0.066</b>	<b>-0.226</b>	<b>0.110</b>		<b>0.058</b>	<b>-0.453</b>	0.032	<b>-0.152</b>
Empl Board	0.021	-0.060	<b>0.048</b>	<b>-0.186</b>	<b>-0.059</b>	<b>-0.056</b>	-0.001	<b>0.047</b>	<b>0.163</b>	0.023	<b>0.176</b>	0.004		<b>-0.242</b>	-0.022	-0.031
Family Board	-0.026	0.053	<b>0.066</b>	<b>0.465</b>	-0.005	-0.004	<b>-0.071</b>	-0.033	<b>-0.163</b>	<b>0.064</b>	<b>0.157</b>	<b>-0.375</b>	<b>-0.201</b>		-0.003	<b>-0.233</b>
VC on the Board	0.009	<b>-0.273</b>	0.023	<b>-0.052</b>	-0.034	<b>-0.048</b>	<b>0.295</b>	<b>0.274</b>	-0.006	<b>-0.095</b>	<b>0.144</b>	0.019	-0.043	-0.031		<b>0.054</b>
Outsiders	-0.055	<b>-0.131</b>	<b>0.078</b>	<b>-0.249</b>	<b>-0.245</b>	<b>-0.220</b>	<b>0.060</b>	<b>0.160</b>	<b>0.449</b>	<b>-0.258</b>	<b>0.617</b>	<b>-0.213</b>	-0.038	<b>-0.159</b>	0.003	

This table presents Pearson (Spearman) correlations above (below) the diagonal. **LnChSales** is the natural logarithm of change in sales percentage. **Profitability** is the return on assets. **Number of owners** is the number of owners of the firm. **Family Ownership** is the percentage of shares controlled by the family. **CEO Ownership** refers to the percentage of shares controlled by the firm's CEO. **Managerial Own** means the percentage of shares controlled by the firm's management. **Bank Ownership** is the percentage of shares controlled by the bank. **VC Ownership** refers to the percentage of shares controlled by Venture capital funds. **Other Owners** means the percentage of share controlled by other stakeholders. **CEO Duality** is a variable with a value of 1 if the roles of board chair and CEO are held by the same person, otherwise, the value is 0. **Board Size** refers to the number of board members. **Manag Board** refers to the number (ratio) of board members who represent a firm's top management. **Empl Board** is the number of board members who represent employees. **Family Board** is the number (ratio) of family members on the board. **VC on the Board** refers to the number (ratio) of venture capital fund representatives on the board. **Outsiders** refers to the number (ratio) of board members who are not insiders of the firm. Data covers the years from 2000 to 2005. Correlations significant at the 1 percent confidence level are reported with bold characters.

**Table 4**  
**Ownership and Board Structure by Firm Size**

This table presents descriptive statistics for the variables on ownership and board structure when the data has been divided into two sub samples by firm size. Column I presents the results for the firms with 16 or more employees and column II for firms with fewer than 16 employees. Column III presents the p-values on t-test for the equality of means between the two sub samples.

	<b>Employees</b> <b>≥ 16</b> <i>n</i> = 752	<b>Employees</b> <b>&lt; 16</b> <i>n</i> = 1246	<b>Probability of</b> <b>difference</b>
Number of Owners	11.30	3.81	0.000
Family Ownership	53.45 %	51.89 %	0.548
CEO Ownership	30.45 %	51.71 %	0.000
Managerial Ownership	45.51 %	47.15 %	0.478
Bank Ownership	0.00 %	1.10 %	0.029
Venture Capital Ownership	0.38 %	1.33 %	0.026
Other Owner's Ownership	17.10 %	12.20 %	0.000
CEO Duality	0.31	0.52	0.000
Number of Board Members	3.48	2.50	0.000
Top Management on the Board	1.34	1.04	0.000
Employees on the Board	0.21	0.29	0.022
Family Members on the Board	1.08	0.83	0.000
VC on the Board	0.14	0.04	0.000
Outside Board Members	0.63	0.38	0.001

**Table 5**  
**Performance by insider ownership**

This table presents descriptive statistics for the variables on performance when the data has been divided into two sub samples by insider ownership. Panel A presents the results for family ownership, panel B for CEO ownership, and panel C for management ownership. Column III presents the p-values on *t*-test for the equality of means between the two sub samples.

Panel A: Performance by family ownership			
	<b>Family Ownership &gt;50 %</b>	<b>Family Ownership ≤ 50 %</b>	Significance of difference
Growth	2.4748	<b>2.6824</b>	0.009
Profitability	<b>18.351</b>	15.050	0.001
	<b>Family Ownership ≥ 75 %</b>	<b>Family Ownership ≤ 25 %</b>	Significance of difference
Growth	2.4601	<b>2.7155</b>	0.002
Profitability	<b>18.665</b>	14.136	0.000
Panel B: Performance by CEO ownership			
	<b>CEO Ownership &gt;50 %</b>	<b>CEO Ownership ≤ 50 %</b>	Significance of difference
Growth	2.5871	2.5647	0.785
Profitability	<b>20.275</b>	14.478	0.000
	<b>CEO Ownership ≥ 75 %</b>	<b>CEO Ownership ≤ 25 %</b>	Significance of difference
Growth	2.605	2.7339	0.251
Profitability	<b>20.655</b>	12.070	0.000

## Panel C: Performance by managerial ownership

	<b>Managerial Ownership &gt;50 %</b>	<b>Managerial Ownership ≤ 50 %</b>	Significance of difference
Growth	2.3730	<b>2.7247</b>	0.000
Profitability	<b>18.375</b>	15.501	0.006
	<b>Managerial Ownership ≥ 75 %</b>	<b>Managerial Ownership ≤ 25 %</b>	Significance of difference
Growth	2.3812	<b>2.7555</b>	0.000
Profitability	<b>18.077</b>	15.367	0.029



**Table 6**  
**Performance by board size and the presence of outside board members**

This table presents descriptive statistics for the variables on performance when the data has been divided into two sub samples by board composition. Panel A presents the results for board size and panel B for the presence of outsiders on the board. Column III presents the p-values on *t*-test for the equality of means between the two sub samples.

<b>Panel A: Performance by board size</b>			
	<b>Board size <math>\geq 3</math></b>	<b>Board size <math>&lt; 3</math></b>	<b>Significance of difference</b>
Growth	2.4704	<b>2.6149</b>	0.061
Profitability	13.051	<b>19.821</b>	0.000

<b>Panel B: Presence of outsiders on the board</b>			
	<b>Outsiders on the board</b>	<b>No outsiders on the board</b>	<b>Significance of difference</b>
Growth	2.4366	2.5316	0.377
Profitability	7.345	<b>18.673</b>	0.000

**Table 7**  
**The determinants of firm growth**

The dependent variable is the annual logarithmic sales growth rate. We employ panel data estimation methods and run all models both with random effects and fixed effects models. Each column presents the results from both models. Column I presents the model that includes the ownership variables, column II the model with board structure variables, and column III includes both ownership and board structure variables. Some variables are dropped from the models because of little time variation. The asterisks denote the significance level. \*\*\* denotes significance at the 0.01 (99%) level. \*\* denotes significance at the 0.05 (95 %) level. \* denotes significance at the 0.10 (90 %) level. The *p*-value is shown in parenthesis.

	Column I		Column II		Column III	
	Random Effects	Fixed Effects	Random Effects	Fixed Effects	Random Effects	Fixed Effects
	Coeff. ( <i>p</i> )	Coeff. ( <i>p</i> )	Coeff. ( <i>p</i> )	Coeff. ( <i>p</i> )	Coeff. ( <i>p</i> )	Coeff. ( <i>p</i> )
Constant	.815 (.369)	2.095 (.063)	1.118 (.229)	-1.69 (.400)	.594 (.551)	1.241 (.567)
<i>Firm characteristics</i>						
Ln (Total assets)	.016 (.738)	.156 (.279)	-.012 (.812)	.282* (.089)	.026 (.660)	.221 (.210)
Ln (1+ firm age)	-.061 (.413)	.001 (.989)	.008 (.925)	.089 (.475)	-.003 (.974)	.112 (.439)
Return on Assets	.733*** (.001)	.976*** (.001)	.482* (.057)	1.259*** (.001)	.607** (.022)	1.276*** (.001)
Current Ratio	.044 (.102)	.005 (.898)	.018 (.042)	-.005 (.852)	.050 (.135)	.003 (.952)
Debt to total assets	1.011*** (.000)	1.425*** (.000)	.636*** (.005)	1.069*** (.009)	.834*** (.001)	1.290*** (.003)
<i>Ownership</i>						
Number of Owners	-.015 (.932)		.150 (.497)		.059 (.809)	
Managerial Ownership	-.003** (.016)	-.018** (.014)			-.004** (.020)	-.020** (.012)
Family Ownership	-.103 (.367)	-1.267* (.064)			-.106 (.456)	-2.50*** (.007)
Ownership by VC	.019** (.014)	.034*** (.003)			.026*** (.004)	.035** (.025)
<i>Board Structure</i>						

CEO duality	-0.041		.013	
	(.775)		(.930)	
Top Management	-0.064	.282	-0.009	.320
	(.349)	(.830)	(.914)	(.810)
Outside Members	-0.111*	2.162	-0.080	1.364
	(.080)	(.116)	(.340)	(.360)

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<i>Industries</i>	YES	YES	YES	YES	YES	YES
R <sup>2</sup>	.0794	.044	.046	.027	.0640	.052
Number of observations	1198	1198	988	988	894	894
Chi <sup>2</sup> statistics	75.85		30.58		46.60	
	(.000)		(.0810)		(.004)	
F-statistics		4.35		2.52		3.06
		(.0009)		(.015)		(.0009)
Breusch-Pagan	59.83		43.87		33.59	
LM-test	(.000)		(.000)		(.000)	

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**Table 8**  
**The Determinants of firm profitability**

The dependent variable is the return on assets (ROA). We employ panel data estimation methods and run all models both with random effects and fixed effects models. Each column presents the results from both models. Column I presents the model that includes the ownership variables, column II ownership and board structure variables, and column III board structure variables. Some variables are dropped from the models because of little time variation. The asterisks denote the significance level. \*\*\* denotes significance at the 0.01 (99%) level. \*\* denotes significance at the 0.05 (95 %) level. \* denotes significance at the 0.10 (90 %) level. The *p*-value is shown in parenthesis.

	Column I		Column II		Column III	
	Random Effects	Fixed Effects	Random Effects	Fixed Effects	Random Effects	Fixed Effects
	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
	( <i>p</i> )	( <i>p</i> )	( <i>p</i> )	( <i>p</i> )	( <i>p</i> )	( <i>p</i> )
Constant	.387 (.008)	.071 (.483)	.228 (.178)	.530 (.023)	.231 (.154)	.657 (.003)
<i>Firm characteristics</i>						
Ln (Total assets)	-.003 (.684)	.016 (.215)	.014* (.093)	.041*** (.005)	.012 (.103)	.046*** (.001)
Ln (1+ firm age)	-.002 (.829)	-.001 (.968)	-.007 (.501)	-.003 (.816)	-.006 (.547)	.001 (.989)
Current Ratio	.002 (.151)	-.001 (.640)	-.001 (.329)	-.001 (.527)	-.001 (.366)	-.001 (.729)
Debt to total assets	-.290*** (.000)	-.307*** (.000)	-.285*** (.000)	-.296*** (.000)	-.286*** (.000)	-.300*** (.000)
<i>Ownership</i>						
Number of Owners	-.060** (.025)		-.047 (.222)		-.075** (.034)	
Managerial Ownership	.001 (.878)	.003*** (.001)	.001 (.466)	.003*** (.000)		
Family Ownership	.016 (.342)	.091 (.207)	-.012 (.616)	.061 (.482)		
Ownership by VC	-.005*** (.000)	-.004*** (.006)	-.002* (.053)	.006*** (.002)		
<i>Board Structure</i>						

CEO duality			.029 (.240)		.036 (.127)	
Top Management			-.001 (.914)	-.010 (.952)	.008 (.506)	-.006 (.097)
Outside Members			-.030** (.037)	-1.532*** (.000)	-.018* (.095)	-1.35*** (.000)
<hr/>						
<i>Industries</i>	YES	YES	YES	YES	YES	YES
R <sup>2</sup>	.255	.174	.2379	.268	.225	.251
Number of observations	2080	2080	1566	1566	1706	1706
Chi <sup>2</sup> statistics	529.06 (.000)		445.22 (.000)		477.64 (.000)	
F-statistics		47.12 (.000)		47.70 (.000)		72.10 (.000)
Breusch-Pagan	434.69		436.34		558.98	
LM-test	(.000)		(.000)		(.000)	

**Table 9**  
**Determinants of growth and profitability using 2SLS**

This table reports the results on LnChSales and the return on assets (ROA) using 2SLS. Columns I and II present the results on models which include the ownership and board structure variables, columns III and IV the models with ownership variables, and columns V and VI include board structure variables. The asterisks denote the significance level. \*\*\* denotes significance at the 0.01 (99%) level. \*\* denotes significance at the 0.05 (95 %) level. \* denotes significance at the 0.10 (90 %) level. The *p*-values are shown in parenthesis.

	Column I	Column II	Column III	Column IV	Column V	Column VI
	LnChSales	ROA	LnChSales	ROA	LnChSales	ROA
	Coeff. ( <i>p</i> )	Coeff. ( <i>p</i> )	Coeff. ( <i>p</i> )	Coeff. ( <i>p</i> )	Coeff. ( <i>p</i> )	Coeff. ( <i>p</i> )
Constant	1.422 (0.134)	91.320 (0.117)	2.410 (0.001)	69.930 (0.026)	0.956 (0.484)	110.058 (0.314)
<i>Firm characteristics</i>						
Ln (Total assets)	0.077 (0.189)	-0.639 (0.729)	0.054 (0.261)	-1.699* (0.052)	0.071 (0.405)	-2.545* (0.084)
Ln (1+ firm age)	-0.110 (0.119)		-0.097* (0.062)		-0.085 (0.232)	
Return on Assets	0.024 (0.303)		0.009 (0.585)		0.035 (0.258)	
Current Ratio		1.946 (0.108)		1.505*** (0.003)		1.539 (0.304)
Debt to total assets	0.009* (0.063)	-0.062 (0.653)	0.003 (0.137)	-0.079** (0.032)	0.012* (0.085)	-0.054 (0.818)
LnChSales		-26.344 (0.344)		-13.471 (0.276)		-31.458 (0.525)
<i>Ownership</i>						
Number of Owners	0.000 (0.895)	-0.018 (0.805)	-0.001 (0.654)	-0.026 (0.599)		
Managerial Ownership	-0.005*** (0.000)	-0.087 (0.463)	-0.003*** (0.001)	-0.042 (0.374)		
Family Ownership	-0.001 (0.438)	0.025 (0.512)	-0.002 (0.100)	0.014 (0.605)		
Ownership by VC	0.028 (0.183)	-0.683** (0.015)	0.013 (0.412)	-0.840*** (0.000)		
<i>Board Structure</i>						
CEO duality	-0.036 (0.749)	1.926 (0.567)			-0.173 (0.270)	2.639 (0.516)

Top Management	-0.001 (0.515)	-0.010 (0.833)			-0.003** (0.041)	-0.041 (0.726)
Outside Members	-0.005* (0.074)	-0.102 (0.492)			-0.005* (0.058)	-0.185 (0.490)
<i>Industry dummies</i>	YES	YES	YES	YES	YES	YES
R <sup>2</sup>	0.036	0.059	0.044	0.102	0.018	0.027
Number of observations	865	865	1172	1172	940	940
F-statistics	2.769 (0.000)	3.989 (0.000)	4.611 (0.000)	9.911 (0.000)	2.238 (0.006)	2.890 (0.000)

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<sup>i</sup> A social insurance premium of at least 25 percent is added to the wages; Source: Statistics Finland





# *Article II*

## **Behavior and Attitudes of Small Family Firms towards Different Funding Sources**

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# *Behavior and Attitudes of Small Family Firms towards Different Funding Sources*

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**ABSTRACT.** This study investigates how family ownership affects the usage of and the attitudes towards different funding sources in micro-sized, small, and medium-sized private family and non-family firms. Our findings suggest that family firms are more likely to use trade credits, finance companies and owners as their sources of finance than are non-family firms. We also find that family firms have more negative attitudes towards bank loans and trade credits but more positive attitudes towards additional equity from current owners than non-family firms have. The fact that our results on the usage of and attitudes towards trade credit differ, suggests that the family firms in our sample may be forced to use short-term debt because more preferred sources are not available. Our results also suggest that attitudes towards different funding sources seem to follow pecking order theory.

**Keywords:** Family firms, Funding sources, Attitudes, Small firms

# 1 Introduction

Family firms are often credited for their long-term strategic commitment (Poutziouris, 2001) and financial prudence, but they are criticised for their conservative financing philosophy (Gallo and Vilaseca, 1996; Romano, Tanewski and Smyrniotis, 2001). However, prior empirical literature on the financing behaviour of family firms and non-family firms has yielded mixed results. Family businesses follow a “peculiar financial logic” due to personal preferences concerning growth, risk and ownership-control (Neubauer and Lank, 1998; Poutziouris, 2001; Gallo, Tàpiens and Cappuyens, 2004). Consequently, they are likely to rely on internally generated funds (Poutziouris, 2001). Gallo and Vilaseca (1996) also indicate that family businesses have low debt to equity levels and they avoid obtaining loans from financial institutions to minimize the probability of bankruptcy and to maintain family control (Mishra and McConaughy, 1999; McConaughy, Matthews and Fialko, 2001). Blanco-Mazagatos, de Quevedo-Puente and Castrillo (2007) suggest contradictory that family firms have higher levels of debt than non-family firms which implies that family businesses prefer debt to equity for covering external funding. Finally, López-Grazia and Sánchez-Andújar (2007) find that there are no large differences between the funding behaviour of family firms and non-family firms.

The aim of this study is to explore the relationship between family ownership and owner-managers’ attitudes towards using different funding sources and the actual financing behaviour. We focus on small family and non-family firms. We use the pecking order theory approach in this study. Pecking order theory implies that small firms, both family and non-family firms, tend to finance their investment needs in a hierarchical fashion: first using internally generated funds, then short- and long-term debts, and finally outside equity—only as a last resort (Myers and Majluf, 1984). Pecking order can be considered a relevant approach especially in explaining the funding behaviour of family firms because family firms are characterized by avoiding the use of external capital (Gallo and Vilaseca, 1996; Romano et al., 2001) and preferring to safeguard ownership, control and financial independence (Poutziouris, 2001). Furthermore, it has been suggested that information asymmetry induces agency problems between the firm and its potential creditors and they are more severe for smaller firms (Myers, 1984; Myers and Majluf, 1984; Hall, Hutchinson and Michalae, 2000). Data for this study consists of micro-sized, small and medium-sized private firms in Finland.

An increasing interest in the funding of SMEs and in family businesses has yielded a growing number of studies in this area using data mostly on Anglo-Saxon countries and usually data on large and listed family firms. Although there are empirical studies investigating sources of funding also in a European context,

their focus, data or/and measures are different from this study. Gallo and Vilaseca (1996) use debt-to-equity level and investigate the capital structure of small and medium-sized family, but not non-family firms. Michaelas, Chittenden and Poutziouris (1998) and Vos, Jia-Yuh Yeh, Carter and Taggar (2004) explore different funding sources in small firms but not in the family context, whereas Poutziouris (2001) focuses on different sources of finance in small and medium-sized family and non-family firms but is not investigating attitudes. Finally, López-Gracia and Sánchez-Andújar (2007) investigate the differences in medium-sized family and non-family firms but use debt ratio and operating cash flow as their measures.

The structure of the capital markets constitutes the framework for alternative forms of financing. This structure differs by country, and therefore, it has been suggested that the country context should also be taken into account. The Finnish capital markets are bank-based and highly concentrated with only a small number of banks operating in the country (Niskanen and Niskanen, 2006) and bank loans are important sources of funding for small and medium-sized firms. In contrast to many other bank-based financial markets, the Finnish market is characterized by a very low number of banks operating in the country, making the markets very concentrated. In bank-based systems banks monitor the performance of customers more closely than in other kind of systems, for example in the U.S. Schmidt and Tyrell (1997) provide an in-depth review on the nature of bank-based capital markets. This implies that bank funding is quite easily available. It also implies that since the market for equity is less well developed, the access to outside equity is scarce.

Our findings suggest that when it comes to the funding patterns of family vs. non-family firms, there are three significant differences. First of all, family firms are more likely to use trade credits and finance companies than non-family firms are even if their attitudes towards trade credits are more negative than those of non-family firms. This may indicate that family firms are more often forced to use trade credits because more preferred funding sources are not available to them, such as bank loans. Family firms are also more likely to resort to increased funding from the current owners, as our finding suggests. Our results also suggest that this may be at least partly due to the positive attitudes that family firms have towards additional equity from current owners. Our results further imply that attitudes towards different funding sources tend partially to follow pecking order theory.

Our study contributes to the existing empirical literature in three different ways. We investigate funding behavior in the family context with a data of private micro-sized, small, and medium-sized firms. Our definition of family firms is similar to López-Gracia and Sánchez-Andújar (2007) and Niskanen, Karjalainen and Niskanen (2010a), who suggest that a private firm is regarded as family firm when family ownership exceeds 50 %. Furthermore, we are able to use more detailed measures of actual funding behavior than most previous studies. We investigate also the attitudes towards different funding sources to be able to investigate more closely the demand of funding sources because traditional vari-

ables, especially those constructed from the financial statement, do not allow for this. For example, although firms might prefer to use a long-term debt, they may be forced to take short-term debts to cover the funding needs when long-term debts are not available. This funding gap may be more severe for family firms because a number of studies, for example, Niskanen, Niskanen and Laukkanen (2010b), suggest that banks are averse to lending to small and medium-sized firms that can be characterized as family firms.

The remainder of this paper is as follows. Section 2 reviews theories and empirical literature relevant to this study and presents our hypotheses. Section 3 describes data, methodology and variables. Section 4 presents the results, and section 5 includes the discussion and concludes the paper.

## *2 Literature Review and Hypotheses*

Information asymmetry refers to the fact that firm managers or other insiders are assumed to possess more information about the firm's performance (Storey, 1994), future earnings, cash flows or investment opportunities than financiers or other stakeholders (Harris and Raviv, 1991). Consequently, small firm size is likely to lead to agency problems between owner-managers and lenders (Myers and Majluf, 1984; Hall et al., 2000) which may weaken the credit availability (Myers, 1984) and make external finance costly (Shleifer and Vishny, 1997) and therefore, affect the funding of small firms (Myers and Majluf, 1984). Firms tend to follow pecking order due to information asymmetry and the interests of current shareholders (Myers and Majluf, 1984). Pecking order approach is particularly relevant to small firms because the costs associated with external finance are higher for small firms than their larger counterparts (Chittenden, Hall and Hutchinson, 1996).

However, previous literature is not unanimous on whether agency problems are more or less severe in family firms. Some studies suggest that family firms should be exempt from agency problems due to the intra-familial altruistic element and due to that management and ownership overlap (Jensen and Meckling, 1976; Dyer, 2006). Other studies imply that agency problems may be less severe because family firms have also non-economic goals (Poutziouris, 2001; Chrisman, Chua and Litz, 2004). However, Schulze, Lubatkin, Dino and Buchholz (2001) and Schulze, Lubatkin and Dino (2003) argue that altruism may create agency problems unique to family firms, because family relationships may make it more difficult to solve conflicts or to curb unproductive behaviour. Furthermore, because family firms cannot be regarded as a homogeneous group of people with joint interests (Sharma, Chrisman and Chua, 1997), it may lead to conflicts of interests between majority and minority shareholders (Morck, Shleifer and Vishny, 1988; La Porta, Lopez-de-Silanes and Shleifer, 1999). In small family firms agency problems are more likely to be present between the firm and its potential outside suppliers of funds due to information asymmetry (Myers, 1984) because the quality of financial statements varies. Consequently, family firms, due to firms' closely held nature, may be even more susceptible to financial constraints and disadvantageous loan terms such as lower loan availability, higher costs of debts and increased collateral requirements (Gallo and Vilaseca, 1996; Niskanen et al. 2010b).

Prior empirical studies imply that the characteristics of the owner and the firm as well as owners' beliefs and attitudes are determinants of financing behaviour and firm's capital structure (Michaelas et al., 1998; Michaelas, Chittenden and

Poutziouris, 1999; Gallo et al., 2004; Vos et al., 2007). Moreover, the preference of certain funding sources affects firms' capital structure (Romano et al., 2001). Small firms tend to finance their needs as pecking order theory implies, in a hierarchical fashion: first, using internally generated funds, followed by short- and long-term debt, and external equity, as a last resort (Myers, 1984; Myers and Majluf, 1984).

It has been suggested that there are no large differences in the funding behaviour between the family firms and non-family firms (López-Grazia and Sánchez-Andújar, 2007; Coleman and Carsky, 2007). However, Gallo and Vilaseca (1996) propose that the family nature of business leads family firms to behave differently from the financing choices of non-family firms. First, family firms rely more on retained earnings due to their aversion of sharing ownership and due to keep control (Neubauer and Lank, 1998; Poutziouris, 2001). Second, family firms use more short term funding because owner-managers adhere strongly family control and dislike pursuing business growth plans (Poutziouris, 2001). Third, some studies (for example Wu, Chua and Chrisman, 2007; Blanco-Mazagatos et al., 2007; King and Santor, 2008) suggest that family firms use more loans than non-family firms because family firms may experience lower cost of debt than their non-family counterparts and owner-managers prefer to maintain control, whereas Gallo and Vilaseca (1996), Romano et al. (2001), Poutziouris (2001) and Lopez-Gracia and Sanchez-Andujar (2007) argue that family firms use less debt to retain family control. Fourth, avoidance of external capital in terms of equity is stronger in family firms because of reluctance to share ownership and control (Neubauer and Lank, 1998).

Retained earnings are the most frequently used funding sources for family firms (Mishra and McConaughy, 1999; Vos et al., 2007; López-Gracia and Sánchez-Andújar, 2007). Family firms are more dependent on retained earnings because owner-managers are reluctant to share ownership and motivated to retain financial independence (Neubauer and Lank, 1998; Poutziouris, 2001). The preference to use first retained earnings is also in line with the pecking order theory (Myers and Majluf, 1984). This leads to our first hypothesis:

H1: Family firms have more positive attitudes towards retained earnings than non-family firms have.

Although family owner-managers prefer to use internal finance, debt financing is used if retained earnings are inadequate (Blanco-Mazagatos et al., 2007). Trade credits are preferred because they are a more informal source of funding and do not require security arrangements or sharing of information such as annual accounts with the creditors (Michaelas et al., 1998). Due to that aversion of external long term funding in terms of debt is particularly strong in family firms, they tend to prefer short-term funding when external funding is used (Poutziouris, 2001). Short term debts such as trade credits or funding from finance companies (leasing, factoring or instalment purchase) are used because they require no collateral security (Poutziouris, 2001). These considerations lead to the following hypotheses:



H2a: Family firms are more likely to use trade credits and funding from finance companies as their funding source than non-family firms do.

H2b: Family firms have more positive attitudes towards trade credits and funding from finance companies than non-family firms do.

Some studies suggest that family firms attempt to maintain their control of the firm by adopting a highly levered capital structure (Wu et al., 2007) and that bank loans and bank overdraft are important funding sources for family firms (Mishra and McConaughy, 1999; Vos et al., 2007). Family firms may be more dependent on debt funding because they avoid using external equity funding (Poutziouris, 2001). They are even prepared to accept higher financing costs in order to preserve their financial independence and flexibility, for example, by using bank overdrafts which have higher interest rates than bank loans (Peters and Westerheide, 2011). Blanco-Mazagatos et al. (2007) and King and Santor (2008) argue that family firms have higher levels of debt than non-family firms which implies that family businesses prefer debt to equity for covering external funding. Because owner-managers prefer to safeguard family ownership, control and financial independence (Poutziouris, 2001), family firms are more dependent on debts than are their non-family counterparts (Blanco-Mazagatos et al., 2007). Based on the previous we propose the following:

H3a: Family firms are more likely to use bank loans than non-family firms do.

H3b: Family firms have more positive attitudes towards bank loans than non-family firms do.

Yet, other studies imply that family businesses have low debt to equity levels (Gallo and Vilaseca, 1996; López-Gracia and Sánchez-Andújar, 2007) and that family firms use less debt to minimize the probability of bankruptcy and due to the risk of losing control (Mishra and McConaughy, 1999; McConaughy et al., 2001; Anderson et al., 2003). Furthermore, because family firms tend to take risks to a lesser extent than non-family firms (Naldi, Nordqvist and Sjögren, 2007) they are more likely to avoid using long-term external capital in terms of debt (Romano et al., 2001; Poutziouris, 2001). They avoid obtaining loans from financial institutions (Gallo and Vilaseca, 1996) to stay independent from external capital providers. In case of using debt small family businesses prefer to rely on family loans (Romano et al., 2001). An additional factor behind the low levels of debt could be the fact that family firms face difficulties in obtaining financing from banks (Niskanen et al., 2010b). These considerations lead to the following hypotheses which are opposite to hypotheses H3a and H3b:

H4a: Family firms are less likely to use bank loans than non-family firms do.

H4b: Family firms have more negative attitudes towards bank loans than non-family firms do.

Burkart, Panuzzi and Shleifer (2003) propose that families often try to maintain control as long as they can because the amenity potential is large. Due to the amenity potential an owner-manager has the ability to pursue a range of preferred ends through their firm's activities, also through financing decisions. Berger and Udell (1998) suggest that small and young firm owner-managers rely on funding sources such as funds of the major owner because these firms may lack collaterals. Moreover, family firm owner-managers prefer to safeguard ownership, family control and financial independence (Neubauer and Lank, 1998) and follow 'keep it in the family'-tradition (Poutziouris, 2001) and therefore, avoid using outside external capital (Neubauer and Lank, 1998). Based on the previous we propose the following:

H5a: Family firms are more likely to use additional equity from current owners than non-family firms do.

H5b: Family firms have more positive attitudes towards additional equity from current owners than non-family firms do.

Family firms are averse to using long-term external capital in terms of equity (Gallo and Vilaseca, 1996; Romano et al., 2001; Poutziouris, 2001) because dispersion of ownership dilutes family control (Poutziouris, 2001; Romano et al., 2001). Firms might also have more pressure to complete profit and dividend targets that external equity requires and consequently, this may reduce the attractiveness of using outside equity funding (Poutziouris, 2001). Outside investors such as venture capitalists represent a relatively small proportion of small business finance, including that of family firms, because venture capitalists invest very selectively and target their investments to firms with high growth potential (Berger and Udell, 1998; Poutziouris, 2001). Furthermore, a minority of family business owner-managers are growth oriented (Poutziouris, 2001) and the smallest firms may be too small for the investment scope of venture capitalists (Berger and Udell, 1998; Poutziouris, 2001). Both family firm and non-family firm owner-managers have a profound antithesis to venture capital because owner-managers dislike diluting ownership, control and sharing the seats on the board with outsiders as it reduces management's freedom of action (Poutziouris, 2001). Taken this into account, family firms tend to follow the pecking order principles and use outside equity only as a last resort (Romano et al., 2001; Poutziouris, 2001; Blanco-Mazagatos et al., 2007). These considerations lead to the following hypotheses:

H6a: Family firms are less likely to use outside equity than non-family firms do.

H6b: Family firms have more negative attitudes towards outside equity than non-family firms do.

# *3 Data, Methodology and Variables*

## **DATA AND METHODOLOGY**

The data was collected through a private survey in autumn 2006. The survey was targeted to limited liability companies that are located in four regions in Finland. We used Voitto+ register, compiled by Asiakastieto Ltd., a Finnish financial and credit information company, as our sample frame. Voitto+ register is a commercial and comprehensive database with financial statement information. The questionnaires were sent to the CEOs. Of the 3262 questionnaires sent, a total of 621 responses were usable, which resulted in an effective response rate of 19 %. The final sample consists of 600 small and medium-sized firms operating in Finland, because we drop firms which are outside the European Union (EU) definition of small and medium-sized firms. According to EU commission's classification (96/280/CE), a micro-sized firm is a firm that employs fewer than 10 people and whose maximum annual turnover or total assets are € 2m. A small firm is a firm which employs fewer than 50 people and its maximum annual turnover or total assets are € 10m. A medium-sized firm is a firm which employs fewer than 250 people and whose maximum annual turnover is € 50m or maximum total assets are € 43m.

The sample firms represent all industries, excluding primary production. Primary production is excluded because of its different nature of business compared to other businesses. The sample firms are firms with at least two employees and whose legal form is a limited liability. Other legal forms than limited liabilities are excluded because official financial statement data is not available on them.

The firms were asked to provide information on their ownership structure, their preferences towards different funding sources, and the information on their use of the funding sources in the years 2000-2005. The financial data was collected from the Voitto+ register. Observations include the years from 2000 to 2005. The total number of available observations per firm per year varies because, in some cases, information is available for less than six years. The number of observations varies in the tables because of missing observations on some variables. Also in individual regression models, the number of observations varies because of missing observations on some variables.

The data used in this study covers the years 2000 until 2005, but we believe that the age of the data is not an issue because the aim of this study is to explore the differences of funding behavior between family and non-family firms. Attitudes do not change easily and they remain fairly stable despite of fluctuations in macroeconomic conditions. As far as macroeconomic conditions in Finland

are concerned, the Statistics Finland indicate that during the years 2000-2005 the change in GDP was positive and varied between +1.2% and 6.4 %. Euribor 1 month interest rate varied between 2.131 % and 4.943 % and was declining towards the year 2005. Based on the survey of the Central Bank of Finland, during the years 2000-2005 availability of bank loans was excellent and debt ratios and other funding terms were advantageous and inexpensive in Finland. Based on this we argue that the time period is suitable for investigating attitudes because the supply side has been more or less stable.

We use Logit regressions to investigate the usage of funding sources because the dependent variables of usage are dichotomous. The use of different funding sources is captured in the following regression model:

$$1) \text{Use}_t = \beta_0 + \beta_1 \text{family}_t + \beta_2 \text{size}_t + \beta_3 \text{age}_t + \beta_4 \text{growth}_t + \beta_5 \text{profitability}_t + \beta_6 \text{liquidity}_t + \beta_7 \text{leverage}_t + \beta_8 \text{interest}_t + \beta_9 \text{GDP}_t + \beta_{10} \text{trade}_t + \beta_{11} \text{industry}_t + \varepsilon_t$$

where  $\text{Use}_t$  is a dummy variable denoting whether a particular funding source is used or not.

In addition to the usage of different funding sources we investigate also attitudes. We use OLS regression analysis to investigate attitudes towards different funding sources. We measure the attitudes towards different funding sources by retained earnings, trade credits, bank loans, additional equity from current owners and outside equity.

The attitudes towards different funding sources are captured in the following regression model:

$$2) \text{Attitude}_t = \beta_0 + \beta_1 \text{family}_t + \beta_2 \text{size}_t + \beta_3 \text{age}_t + \beta_4 \text{growth}_t + \beta_5 \text{profitability}_t + \beta_6 \text{liquidity}_t + \beta_7 \text{leverage}_t + \beta_8 \text{industry}_t + \varepsilon_t$$

where  $\text{attitude}_t$  is a source of funding with a value between one and five. The most positive attitudes are given the value of 1 and the most negative attitudes are given the value of 5. In both regression models  $\text{Family}_t$  is a variable measuring family influence.  $\text{Size}_t$ ,  $\text{age}_t$ ,  $\text{growth}_t$ ,  $\text{profitability}_t$ ,  $\text{liquidity}_t$ ,  $\text{leverage}_t$ ,  $\text{interest}_t$ ,  $\text{GDP}_t$ ,  $\text{trade}_t$  and  $\text{industry}_t$  are control variables, and  $\varepsilon_t$  is a term of error.

Non-respondent tests have been performed for the database. Tests suggest that the firms that responded to the survey are statistically significantly similar to the whole sample. We also take into account the possibility of common method bias and apply Harman's single-factor test. We load all variables into a principal component factor analysis, and examine a rotated factor solution. None of the factors account for over 18.1 % of the total variance.

## VARIABLES

### Dependent variables

Pecking order theory states that firms facing information asymmetry finance their investments first by retained earnings, followed by debt, and finally, by outside eq-

uity. Our approach as to whether pecking order applies is different from, for example López-Gracia and Sánchez-Andújar's (2007), who use the debt ratio. The validity of this approach using the debt ratio is undermined by the fact that the firms' debt ratios are simultaneously determined by the firms' demand for credit and the supply of credit from different sources. Thus, regression models using the debt ratio as the dependent variable will suffer from a simultaneous equation bias. To overcome this bias, we use different measures for the availability of different funding sources.

The survey firms were asked to provide information on their three latest funding sources. Our six dependent variables for the usage of the six most preferred funding sources; bank loans, trade credits, finance company, friends and family, owners and other firms, have been structured based on these questions. Trade credits are accounts payable, which will due within a specific time frame with alternative payment terms. According to Intrum Justitia, a credit management service company, the average payment time of trade credits in Finland is 26 days. In some cases payment period can be extended to two or three months. Finance company refers to the funding instruments such as factoring, leasing or instalment purchase, which are typically organized by independent finance companies. Each variable is a binary variable and is given a value of 1 if used, and if not used, then the value is 0.

Even after using actual funding sources as the dependent variable and controlling for a number of underlying factors, it is possible that the results are driven by either demand or supply of each individual funding source. Therefore, we continue by investigating the attitudes towards five different funding sources which are based on the pecking order theory approach. We asked the respondents to give their subjective views on a set of alternative funding sources. The funding sources were: retained earnings, trade credits, bank loans, additional equity from current owners and outside equity. The questions were structured so that a very positive attitude towards a specific funding source gets the value of 1, and a very negative attitude a value of 5. Firms had to rank the funding sources from 1 to 5.

### **Explanatory Variables**

We perform the analysis by using three alternative indicators of family influence. First, we use a binary variable to identify family firms and non-family firms. A firm is regarded as family firm if family ownership exceeds 50 % and the variable gets the value of 1, otherwise 0 (as for example López-Gracia and Sánchez-Andújar, 2007). Second, we use a continuous variable, family ownership rate. Third, we use the presence of family members on the board (a binary variable and also a ratio of family members on the board) as an alternative method to identify family influence.

### **Control Variables**

Previous empirical studies find that factors such as firm age, firm size, growth, profitability, liquidity, leverage, risk, and line of business affect the sources of finance in small firms. Bozkaya and Pottelsberghe De La Potterie (2008) find that young firms use internal funds such as personal savings and those of family and friends as the primary sources of financing and banks as sources of external fi-

nance, while Vos et al. (2007) argue that older businesses use retained earnings. We use  $\ln(1 + \text{firm age})$  as a measure of firm age.

Larger firms use more external funding (Coleman and Carsky, 1999) and they exhibit higher leverage (King and Santor, 2008), whereas small firms tend to use short term debt over long term debt (Titman and Wessels, 1988; Michaelas et al., 1999; Hall et al., 2000). Our measure for firm size is  $\ln(\text{Total assets})$ .

High-growth firms use more loans and external funding sources (Vos et al., 2007) and growth seems to affect short and long term debts (Michaelas et al., 1999). We use the annual logarithmic growth rate of sales  $\ln(\text{Change in Sales})$  as our measure of firm growth.

Profitable firms will have more internal funds available and may need to borrow less (Michaelas et al., 1999; Coleman and Carsky, 1999). The need for borrowing is also dependent on the firm's potential investments and firm's financing strategy. Small firms tend to use retained profits rather than access outside funding sources (Myers and Majluf, 1984). Furthermore, improvements in profitability reduce the use of multiple funding sources (Vos et al., 2007). We use the return on assets as a measure of profitability.

Liquidity is the firm's ability to fulfil its financial obligations when they are due. Liquidity is also viewed as increasing debt capacity. Myers and Rajan (1998) claim that there is a dark side to liquidity. They hypothesize that while liquid assets give creditors greater value in liquidation, they also give borrowers more freedom to act at creditor's expense. We include current ratio as a proxy for firm liquidity in our analyses.

Leverage is included as control variables because high leverage typically makes it difficult for a firm to obtain additional debts. For example, Niskanen and Niskanen (2010) find that that an increase in the existing debt ratio increases the likelihood of a loan application will be turned down. We use debt-to-total assets ratio as our proxy for leverage.

Macroeconomic conditions may have an impact on the availability and use of credits (Michaelas et al., 1999). To take into account this, we add change in the gross domestic product (GPD), terms of trade and the annual average on the interest rate of Central Bank of Europe in our models on the usage of different funding sources.

Harris and Raviv (1991), Michaelas et al. (1999) and Vos et al. (2007) suggest that capital structure of small firms is industry dependent and industry specific effects influence the maturity of debts. Industry dummies are binary variables that capture industry fixed effects.

# 4 Results

## Descriptive statistics

Table 1 describes the descriptive statistics for the variables. Panel A shows that the average ownership rate of the family is 52.7 %. In family firms the average family ownership rate is 95.43 % and in non-family firms 4.18 %. Family ratio on the board is almost 56 % in family firms and 15 % in non-family firms. The most preferred funding source is, on average, retained earnings, followed by bank loans, additional equity from current owners, trade credits, and outside equity as the least preferred funding source. Panel B shows that the most popular funding sources in terms of usage are bank loans 0.79, finance companies 0.27, and current owners 0.15.

Table 1: Descriptives

### Panel A: Continuous variables on family influence and attitudes

Variables	n	min	max	Mean	Std. deviation
Family influence					
Family ownership	3218	0	100	52.7	47.275
Family ownership in family firms	1696	51	100	95.43	11.883
Family ownership in non-family firms	1522	0	50	4.18	13.352
Family ratio on the board in family firms	1663	0	100	55.90	42.495
Family ratio on the board in non-family firms	1446	0	100	15.11	31.103
Attitudes					
Retained earnings	2599	1	5	1.60	0.986
Trade credits	2348	1	5	3.40	1.070
Bank loans	2723	1	5	2.23	1.100
Additional equity from current owners	2399	1	5	3.11	1.125
Outside equity	2318	1	5	4.47	0.947

### Panel B: Dichotomous variables on the use of funding sources

Variables	n	min	max	Mean	
Usage					
Trade credits	1809	0	1	0.07	
Finance company	1905	0	1	0.27	
Bank loans	2366	0	1	0.79	
Friends and family	1761	0	1	0.01	
Other firms	1785	0	1	0.02	
Current owners	1869	0	1	0.15	

Table 1 presents the descriptive statistics on the sample firms. Column I presents the variables. Column II presents the number of observations. Column III presents minimum values, column IV maximum values, column V the average values of the variables and column VI the standard deviations.

We run Pearson and Spearman correlations (not reported) on all variables used in this study but do not observe any serious correlations between the variables. We also investigate a model with a VIF-test (not reported) and do not find any serious multicollinearity.

We further investigate the variables related to firm age, firm size and financial ratios in more detail in Table 2, where we divide the data into family firms and non-family firms. We use a *t*-test for independent samples to compare the equality of means by exploring whether the variables differ between the family firms and non-family firms. Family firms have, on average, higher sales and more employees than non-family firms have. As far as profitability and leverage are concerned, family firms perform better than non-family firms which is consistent with prior studies, for example, Gallo and Vilaseca (1996), Allouche, Amann, Jaussad, and Kurashina (2008), and Andres (2008). This implies that due to higher leverage non-family firms have higher interest expenses which may lead to lower profitability. Column IV presents the average financial performance ratios available on the population.

Table 2 presents the descriptive statistics when data has been divided into family firms and non-family firms. Column I presents results for the family firms and column II for the non-family firms. Column III presents *p*-values for the *t*-test for the equality of means between the two sub samples. Column IV represents the average financial ratios of the population.

*Table 2: Descriptive statistics on sample firms by family ownership*

	<b>Family firms <i>n</i>=1147</b>	<b>Non-family firms <i>n</i>=983</b>	<b>Probability of difference</b>	<b>Average ratios of the population</b>
Firm age	13.02	13.52	0.283	
Sales (T€)	2220.66**	1395.68	0.033	1673.50
Total assets (T€)	1076.25	1208.65	0.682	1287.80
Number of employees	17.76**	12.40	0.042	12.30
Profit margin-%	8.63***	1.69	0.000	4.00
Current ratio	2.12	2.00	0.397	
ROA	18.38***	13.53	0.002	
Debt-to-total assets	58.77***	66.73	0.001	62.50

Significance at: \*\*\*0.01, \*\*0.05, \*0.10.

We further investigate the usage of different funding sources in more detail in Table 3, where we divide the sample into family firms and non-family firms. We used a *t*-test for independent samples to compare the equality of means by investigating whether the usage of funding sources differs between the family firms and non-family firms. Family firms are more likely to use bank loans as well as finance companies' funding, trade credits, other firms and friends and family as



their sources of finance than non-family firms do. The use of different funding sources is a binary variable and if used, it gets the value of 1, otherwise 0, which affects the means. The use of retained earnings is not included which will have an impact on the values of usage of other sources.

Table 3 presents results on the usage of different funding sources in family firms and non-family firms. Our six dependent variables for the usage of the six most preferred funding sources are bank loans, trade credits, finance company, friends and family, owners and other firms. Each variable is a binary variable and is given a value of 1 if used, and if not used, then the value is 0. Column I presents results for the family firms and column II for the non-family firms. Column III presents *p*-values for the *t*-test for the equality of means between the two sub samples.

*Table 3: Usage of different funding sources in family firms and non-family firms*

	Family firms <i>n</i> =1147	Non-family firms <i>n</i> =983	Probability of difference
Bank loan	0.81**	0.77	0.050
Finance company	0.31***	0.23	0.000
Current owners	0.16	0.14	0.279
Trade credits	0.10***	0.03	0.000
Other firms	0.04***	0.01	0.000
Friends and family	0.02**	0.01	0.013

Significance at: \*\*\*0.01, \*\*0.05, \*0.10.

We investigate the variables on attitudes towards different funding sources in more detail in Table 4, where we have divided the data into family firms and non-family firms. We use a *t*-test for independent samples to compare the equality of means by investigating whether our variables differ between the family firms and non-family firms. The results of the attitudes towards different funding sources are similar in family firms and non-family firms, that is, both groups have ranked the sources in the same order. The most preferred funding source in both sub samples is retained earnings, second is bank loans, third additional equity from current owners, fourth trade credits and finally, outside equity. The funding sources that differ statistically significantly between the two sub samples are additional equity from current owners and trade credits. Family firms have more positive attitudes towards using additional equity from current owners than non-family firms have, and non-family firms have more positive attitudes towards using trade credits as a funding source. Regarding the results in Table 4 both family and non-family firms seem to prefer additional equity from current owners to trade credits as their funding source. This contradicts with the pecking order theory, but otherwise the results follow pecking order.

Table 4 presents results on the attitudes toward different funding sources. The questions were structured so that a very positive attitude towards a specific funding source gets the value of 1, and a very negative attitude a value of 5. Column I presents results for the family firms and column II for the non-family firms. Column III presents  $p$ -values for the  $t$ -test for the equality of means between the two sub samples.

*Table 4: Attitudes towards different funding sources in family firms and non-family firms*

	<b>Family firms</b> <i>n</i> =1422	<b>Non-family firms</b> <i>n</i> =1136	<b>Probability of difference</b>
Retained earnings	1.62	1.59	0.468
Bank loans	2.22	2.23	0.747
Additional equity from current owners	3.07**	3.18	0.013
Trade credits	3.46	3.33***	0.004
Outside equity	4.50	4.46	0.288

Significance at: \*\*\*0.01, \*\*0.05, \*0.10.

### **Use of different funding sources**

Table 5 reports the results from logistic regression analyses. The dependent variable gets the value of 1 if firms indicated that one of their latest funding sources was a trade credit, finance company, bank loan, owners, other firms, or family and friends, otherwise 0. The measure for family firm is a dummy variable. The results in column I and II indicate that family firms are more likely to use trade credits and funding from finance companies. These findings support our hypothesis H2a and are in line with Poutziouris (2001).

The results in column IV further show that family firms are more likely to use current owners than non-family firms. This finding supports hypothesis H5a and is in line with Romano et al. (2001) and Poutziouris (2001).

We also run our models of usage separately by dividing the firms into size categories, that is, micro-sized, small and medium-sized firms. The results (not reported) remain qualitatively similar to those with the whole sample in Table 5 except that the micro-sized family firms are more likely to use owners as a funding source and this finding is significant. This finding supports hypothesis H5a and is in line with Romano et al. (2001) and Poutziouris (2001).

As far as the control variables are concerned, firms with higher leverage and growth are more likely to use trade credits. Younger firms and firms with lower liquidity are more likely to use finance companies as a funding source. Larger firms and firms with higher liquidity are more likely to use owners as their funding source.

Table 5 presents results on the logistic regression analyses on the usage of different funding sources. The dependent variable is a binary variable which gets the value of one if the firm's most recent funding source has been a) trade credits in column I, b) finance company in column II, and c) bank loans in column III, d) owners in column IV, e) other firms in column V and f) friends and family in

Table 5: Usage of different funding sources

	<b>Column I</b>	<b>Column II</b>	<b>Column III</b>	<b>Column IV</b>	<b>Column V</b>	<b>Column VI</b>
	<b>Trade credits</b>	<b>Finance company</b>	<b>Bank loans</b>	<b>Owners</b>	<b>Other firms</b>	<b>Friends and family</b>
	<b>Coeff. (p-value)</b>	<b>Coeff. (p-value)</b>	<b>Coeff. (p-value)</b>	<b>Coeff. (p-value)</b>	<b>Coeff. (p-value)</b>	<b>Coeff. (p-value)</b>
Constant	-23.821 (0.996)	0.436 (0.751)	2.676 (0.013)	-4.054 (0.035)	-83.546 (0.982)	-20.588 (0.997)
Family firm/Non-family firm	2.227** (0.015)	0.594** (0.032)	-0.135 (0.533)	0.675* (0.080)	16.073 (0.985)	2.780 (0.202)
<b>Firm characteristics</b>						
Ln (Total assets)	-0.217 (0.442)	-0.122 (0.260)	-0.064 (0.475)	0.376** (0.015)	4.837 (0.266)	-1.230 (0.161)
Ln (1+ firm age)	-0.088 (0.833)	-0.336** (0.032)	-0.009 (0.483)	-0.252 (0.225)	5.242 (0.487)	-0.460 (0.617)
Ln Change in Sales	0.517* (0.063)	0.035 (0.702)	0.029 (0.703)	0.054 (0.676)	-0.596 (0.548)	0.357 (0.839)
Return on Assets	0.026 (0.213)	0.002 (0.731)	0.001 (0.767)	0.017 (0.114)	-0.020 (0.355)	-0.011 (0.839)
Current Ratio	-0.365 (0.314)	-0.572*** (0.002)	-0.166** (0.045)	0.199* (0.086)	-1.266 (0.618)	-2.342 (0.216)
Debt to total assets	0.020** (0.049)	0.003 (0.482)	-0.004 (0.329)	0.010 (0.136)	-0.155 (0.474)	-0.027 (0.684)
Interest rate	-40.403 (0.342)	-1.842 (0.919)	-11.698 (0.390)	-19.971 (0.411)	400.306 (0.191)	-1669.67 (0.988)
Change in GDP	-11.374 (0.686)	-21.839* (0.082)	1.912 (0.844)	1.619 (0.923)	-6.380 (0.942)	-692.633 (0.991)
Terms of trade	-16.454 (0.686)	-4.645 (0.792)	18.361 (0.169)	16.227 (0.493)	-119.924 (0.430)	-491.785 (0.992)
<b>Industry dummies</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>
Nagelkerke R <sup>2</sup>	0.333	0.272	0.070	0.155	0.775	0.575
# of observations	447	447	447	447	447	447

Significance at: \*\*\*0.01, \*\*0.05, \*0.10, p-values are shown in parenthesis.

column VI. The explanatory variable, family firm/ non-family firm, is a dummy variable. Column I represents the results for regressing trade credits on family firm dummy. Column II represents the results for regressing finance company on family firm dummy. Column III represents the results for regressing bank loans on family firm dummy. Column IV represents the results for regressing owners on family firm dummy. Column V represents the results for regressing other firms on family firm dummy. Column VI represents the results for regressing friends and family on family firm dummy. Coefficients are unstandardized.

We also run the models with a continuous family ownership variable and the results (not reported) are similar to the ones obtained in Table 5. We also run our

models using a dummy variable for family members on the board. Again, the results on trade credits support hypothesis H2a. Firms with the presence of family on the board are less likely to use additional equity from current owners. This finding is opposite to hypothesis H5a and with our finding when using a family firm dummy. One possible explanation could be that the firms are larger and have therefore more diverse boards or that they are in different generational stages which information is not available. Overall, the differences indicate that family ownership and board membership are not interchangeable measures of family influence. We also run our model with a continuous variable indicating the ratio of family members on the board. The results are very similar (not reported).

### **Attitudes towards different funding sources**

We turn to investigate the attitudes towards different funding sources and whether attitudes may differ between family firms and non-family firms. Table 6 presents our results from OLS regression analysis. Our dependent variable measures the attitudes towards each individual funding source on a scale from 1 to 5, with 1 representing the most positive attitudes and 5 the most negative attitudes. Our measure of family ownership is a dummy variable. The results in column II suggest that family firms have more negative attitudes towards trade credits than non-family firms have. This finding contradicts with hypothesis H2b and Poutziouris (2001). The results in column III suggest that family firms have more negative attitudes towards bank loans. This finding supports our hypothesis H4b and is in line with Mishra and McConaughy (1999), McConaughy et al. (2001), Romano et al. (2001), Andersson, Mansi and Reeb (2003), Poutziouris (2001) and López-Gracia and Sánchez-Andújar's (2007). The results in column IV indicate that family firms have more positive attitudes towards additional equity from current owners than non-family firms have. This finding supports hypothesis H5b and is in line with Gallo and Vilaseca (1996), Romano et al. (2001) and Poutziouris (2001).

We also run our models of attitudes separately by dividing firms into size categories, that is, micro-sized, small and medium-sized firms. The results (not reported) remain qualitatively similar to those with the whole sample in Table 6 except that among the small family firms attitudes towards outside equity are more positive than in small non-family firms and this finding is significant. This result contradicts our hypothesis H6b and with Gallo and Vilaseca (1996), Romano et al. (2000) and Poutziouris (2001). This result could suggest that small family firms prefer to have moderate debt levels and avoid risks.

As far as the control variables are concerned, firms with lower profitability and lower leverage but better liquidity have more negative attitudes towards bank loans. Firms with larger size, lower age, lower growth rates, higher profitability and higher debt ratios have more positive attitudes towards additional equity from current owners.

Table 6 presents results on the OLS regressions on the attitudes towards different funding sources. We have used White's correction. The dependent variable measures attitudes toward each specific funding source. The most positive attitudes are given the value of 1 and the most negative attitudes are given the value

of 5. Column I presents the results for regressing retained earnings on family firm dummy. Column II presents the results for regressing trade credits on family firm dummy. Column III presents the results for regressing bank loans on family firm dummy. Column IV presents the results for regressing additional equity from current owners on family firm dummy. Column V presents the results for regressing outside equity on family firm dummy. Coefficients are unstandardized.

Table 6: Attitudes towards different funding sources

	<b>Column I</b>	<b>Column II</b>	<b>Column III</b>	<b>Column IV</b>	<b>Column V</b>
	<b>Retained earnings</b>	<b>Trade credits</b>	<b>Bank loans</b>	<b>Additional equity from current owners</b>	<b>Outside equity</b>
	<b>Coeff. (p-value)</b>	<b>Coeff. (p-value)</b>	<b>Coeff. (p-value)</b>	<b>Coeff. (p-value)</b>	<b>Coeff. (p-value)</b>
Constant	2.158 (0.000)	2.937 (0.000)	1.917 (0.000)	2.622 (0.000)	4.699 (0.000)
Family firm/Non-family firm	-0.109 (0.251)	0.618*** (0.000)	0.228** (0.022)	-0.276** (0.024)	-0.103 (0.305)
<b>Firm characteristics</b>					
Ln (Total assets)	-0.097*** (0.004)	-0.004 (0.919)	-0.039 (0.370)	0.137** (0.010)	0.029 (0.483)
Ln (1+ firm age)	0.041 (0.432)	0.081 (0.152)	-0.031 (0.551)	-0.144** (0.024)	0.034 (0.509)
Ln Change in Sales	0.030 (0.407)	0.018 (0.587)	0.060 (0.102)	-0.110** (0.017)	-0.013 (0.724)
Return on Assets	0.001 (0.756)	-0.001 (0.452)	-0.009*** (0.000)	0.005*** (0.008)	0.006*** (0.003)
Current Ratio	-0.013 (0.562)	0.046 (0.161)	0.095** (0.004)	-0.039 (0.311)	-0.101*** (0.006)
Debt to total assets	0.003 (0.116)	-0.002 (0.353)	-0.004** (0.040)	0.007*** (0.000)	-0.003* (0.086)
Industry dummies	YES	YES	YES	YES	YES
R <sup>2</sup>	0.2454	0.2059	0.1599	0.1405	0.1278
# of observations	420	380	453	395	370
F-test statistics	11.75 (0.000)	11.39 (0.000)	6.74 (0.000)	7.69 (0.000)	7.61 (0.000)

Significance at: \*\*\*0.01, \*\*0.05, \*0.10, p-values are shown in parenthesis.

In addition to the results reported here we also run the models with a continuous variable, the family ownership rate. The results (not reported) are similar to the ones reported in Table 6. We also run our models using a dummy variable family on the board. The results suggest that the attitudes towards retained earnings as a funding source are more negative when family is represented on the board. This finding contradicts hypothesis H1 and Mishra and McConaughy (1999), Vos et al. (2007) and López-Gracia and Sánchez-Andújar (2007). One potential explanation

could be that family members on the board may prefer to distribute dividends and not to use retained earnings to fund future investments of the company. This could be the case in Finland because dividends have been tax-free to a certain extent during the study period. For a robustness check we also use a continuous variable in our specifications, but the results are qualitatively similar (not reported).

We also ran all our models without leverage due to potential endogeneity problem resulting from the possibility that our dependent variables and the control variable leverage might be correlated. However, the significance and signs of the results remain similar (not reported).

Figure 1 summarizes our main findings on the usage of and attitudes towards different funding sources.

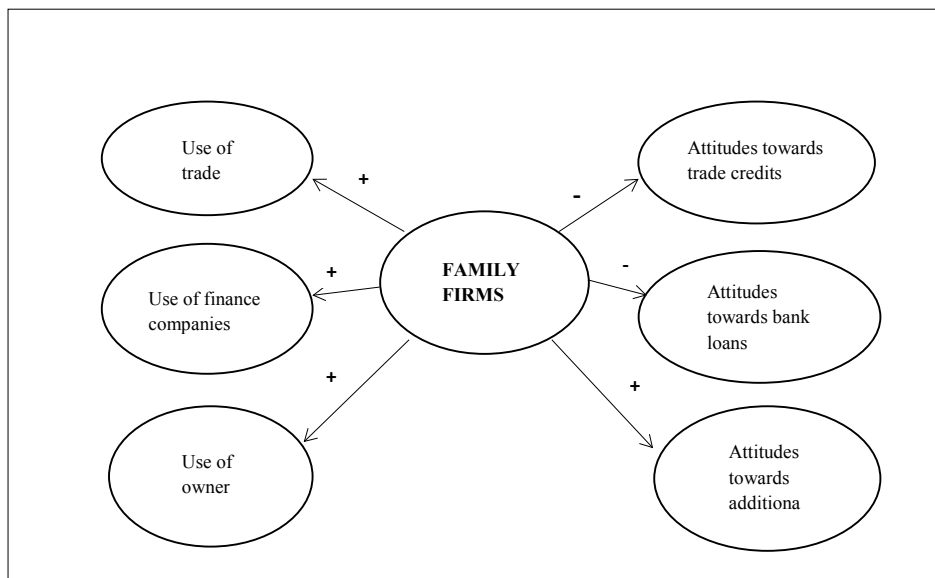


Figure 1: Summary of the findings

The results suggest that family firms are more likely to use trade credits and funding from finance companies. This is in line with Poutziouris (2001). Also, family firms are more likely to resort to current owners and this supports the findings of Romano et al. (2001) and Poutziouris (2001). Concerning the attitudes our findings imply that family firms have more negative attitudes towards trade credits and bank loans. The result on trade credits was unexpected but on bank loans is line with, for example, Romano et al. (2001, Poutziouris (2001) and López-Gracia and Sánchez-Andújar (2007). Finally, family firms have more positive attitudes towards additional equity from owners which is in line with Gallo and Vilaseca (1996), Romano et al., (2001) and Poutziouris (2001).

# 5 Conclusions

The objective of this study was to investigate the association between family ownership and the usage of and attitudes towards different funding sources. We focused on whether family firms and non-family firms differ in their funding behavior. We add to the existing literature by using data on small, non-listed firms. We are also able to use more detailed measures for the firms' actual funding behavior. Finally, we extend the findings of previous studies by exploring both the use of and attitudes towards different funding sources. When we explore not only the usage but also attitudes, we are able to obtain more detailed information on the demand side. The fact that demand and supply of funding sources do not always meet leads to situations in which firms are obliged to use different source(s) than they otherwise would, if all sources were available. Furthermore, our findings present evidence that family firms often rely on short-term funding and additional investments from current owners. We also find that funding behavior differs slightly by different size categories, i.e. when firms are divided into micro-sized, small and medium-sized firms.

Our findings partially support prior findings that family firms are more likely to follow pecking order in their funding behavior. When it comes to the funding patterns of family vs. non-family firms, our results show two significant differences. First of all, the family firms in our sample are more likely to use trade credits and finance companies than non-family firms are. This is the case, even if the family firms show more negative attitudes towards these funding sources. This can be interpreted to indicate that although family firms have more negative attitudes towards trade credits and bank loans, they have to use short-term funding such as trade credits because family firms may be more prone to face difficulties in obtaining loans from banks (Niskanen et al., 2010b), and they may lack collaterals (Berger and Udell, 1998).

Although in family firms attitudes towards short- and long-term debts are more negative than in non-family firms, the attitudes towards additional equity from current owners are more positive. This contradicts pecking order theory to some extent, and supports the idea suggesting that family firms are more interested in maintaining control within the family (Neubauer and Lank, 1998; Burkart et al., 2003). The finding that family firms, when using the measure of family on the board ratio, have more negative attitudes towards retained earnings may result from the fact that family firms prefer to distribute dividends instead of using the profits to develop the firm. This could be the case when family members are more represented on the board and therefore, family influence may be higher. However, Gallo et al. (2004) find that family firms do not pay dividends. But, dividends may be of more importance in Finland because dividends are tax-free to a certain extent and therefore, it may be an additional lower-taxed source of income to

owner-managers. In older small family firms attitudes towards outside equity are more positive than in small non-family firms. Our own anecdotal evidence from Finnish small and medium-sized firms suggests that they prefer to use retained earnings and avoid extending the ownership structure. Furthermore, if outside funding is needed, they turn to traditional funding sources such as bank loans.

We also find that family firms are more likely to resort to increased funding from the current owners. The fact that family firms are more willing to use additional funding from current owners is sometimes seen to imply that family firms are financially constrained and that they do not have any other choice. This is not necessarily the case in our sample, because the results also indicate that this may be at least partly due to the positive attitudes that family firms have towards this funding source. It can, therefore, be argued that the funding behavior observed here may be a result of choice, that is, to retain control (Neubauer and Lank, 1998; Burkart et al., 2003). The results can also imply that family firms are more likely to minimize the risk of default which is caused by higher leverage (Mishra and McConaughy, 1999; McConaughy et al., 2001).

The results of this study support the findings of prior empirical studies in that family and non-family firms tend to follow pecking order theory even if our results reveal slight differences compared to prior studies. The results may differ, for example, because of different country contexts and legal environments (La Porta et al., 1999). It has also been argued that the national economy's state of institutional development, different types of family firms, and the use of convenience samples (Gedaljovic, Carney, Chrisman and Kellermans, 2012) may have an impact. Furthermore, differences may also result from the difference in defining of family influence and family firm (Miller, Le Breton-Miller, Lester and Cannella, 2007).

This study may have implications for entrepreneurs, financiers, policy makers and researchers. First, the firms' ability to survive in the competition will be enhanced when firms do not suffer financial constraints induced by their own attitudes. Secondly, outside suppliers of funds should be more aware of how the nature of family businesses and family commitment affects family firm's decision making and strategic choices. Small business owners often rely on traditional funding sources and this behavior is based on own knowledge and prior experience. Firms with high family ownership tend to be more risk averse and there might be a need for different types of financing products. Third, the welfare of national economy depends on the performance of small firms and their growth. However, growth opportunities may be hindered due to financial constraints. There have been discussions on what types of measures should be taken to enhance firms' growth and mitigate financial constraints. But, not enough attention has been paid to the fact that firms may have negative attitudes towards financial instruments typically referred to as risk financing, that is, equity. Funding instruments should be developed so that also entrepreneurs can accept them and are willing to use them. Finally, regarding the academic importance of this study, the results validate the prior empirical literature findings in different environment, in a bank based environment, such as Finland.



As far as the generalizability and time frame of the results are concerned, attitudes towards different funding sources do not change easily but economic conditions may affect the use of different funding sources (Michaelas et al., 1999). This study used data from the years 2000-2005. This was a time period when economic conditions in Finland were favourable and firms were performing relatively well. The supply of different funding sources to an individual firm is not available but we believe that when including the measures of financial health of firms we are able to capture some of the variability in the supply of different funding sources.

This study investigated the funding behaviour of small and medium-sized private family firms in one country, Finland, and therefore, it invites a further study in other countries. La Porta et al., (1999) suggest that the structure of capital markets may have an impact on the capital structure of firms. The Finnish legal environment belongs to the Scandinavian civil law system and it differs from the common law system. The protection of investors in terms of debts is strong, whereas the protection of equity holders is weaker (La Porta et al., 1999). Based on this we argue that the results are generalizable to countries which have a similar legal environment and bank centred capital markets (Niskanen and Niskanen, 2006) or otherwise similar operating environment.

Although we make a contribution to understanding the differences in funding behavior between family firms and non-family firms in a sample of micro-sized, small and medium-sized firms, this study has several limitations. For example, we do not have the information on family's presence on the management, the generation in control, or values, which all could potentially have an impact on funding behavior in small private family firms, both the use of and attitudes towards different sources of finance. Also, it would have been interesting to investigate loans from current owners and family members in more detail in this context, but unfortunately, this data is not available. It might also be interesting to explore how the attitudes towards different funding sources are developed in family firms and whether there are certain characteristics common to specific types of family firms.

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# *Article III*

## **Do the Investment Behaviors of Family Firms and Non-Family Firms Differ?**

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# *Do the Investment Behaviors of Family Firms and Non-Family Firms Differ?*

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## **ABSTRACT**

The aim of this study is to investigate whether family firms and non-family firms differ in investment behaviors. The sample consists of small private family and non-family firms. The results show that family firms are more likely than their non-family counterparts to reject an investment. However, the findings suggest that family and non-family firms do not seem to differ in the amount of investment. These results could imply that when firms have made an investment decision, family ownership does not necessarily affect the amount of investment. Furthermore, family firms seem to be more financially constrained—or pursue more risk-avoiding investment strategies—because these firms are more likely to reject an investment. Agency theory and the pecking order approach seem to be relevant theories explaining the investment behaviors of small family and non-family firms. The findings imply that policy makers should consider creating some tax incentives or other financial incentives that might enhance investment activity and reduce financial constraints among small firms.

Keywords: Family firms, investments, rejection of investments, small firms

# *Introduction*

A firm's ability to survive in the competition is dependent on its ability to generate future earnings, develop its activities and invest. Investments are important also to the national economy and its performance because investments increase employment, productivity and welfare. The impact of funding on investment decisions has been investigated by policy makers and researchers. The underlying assumption is that the availability of internal funds, access to new debt or equity and other financial factors may shape a firm's investment decisions. However, the empirical findings that internally generated funds and financial constraints play a role in determining firm investment decisions have been mixed, e.g. Cleary (1999), Georgen and Renneboog (2001), Audretsch and Elston (2002) and Gugler (2003).

It has been suggested that the growth of small firms is constrained by the availability of finance (Myers & Majluf, 1984; Carpenter & Petersen, 2002). Family firms, in particular, may suffer from information asymmetry and agency problems between the firm and its outside suppliers of funds, which may lead to financial constraints and not only higher cost of external funding but also disadvantageous loan terms (Myers & Majluf, 1984). Furthermore, family firms tend to rely on traditional funding sources, and they are reluctant to issue outside equity, as an increase in share capital will dilute their equity stake and undermine their controlling position (Poutziouris, 2001; Gallo, Tàpiens, & Cappuyns, 2004). Due to agency problems and financial constraints, firms' investments and growth may be restricted or even hampered (Myers & Majluf, 1984; Degryse & Jong, 2006). Moreover, agency problems and financial constraints may lead to inefficient investment decisions that are based primarily on the availability of internally generated funds (Georgen & Renneboog, 2001).

The aim of this study is to investigate whether family ownership has an impact on investment behavior in small private family and non-family firms. More precisely, this study focuses on whether family firms are more likely than non-family firms to reject investments, and whether family firms and non-family firms differ in the amount of investment. Family firms constitute a remarkable proportion of businesses around the world, and there has been increasing interest in investigating family firms in different contexts. However, the investment-behavior literature has paid little attention to family firms because the availability of reliable data on small firms is, in general, difficult to obtain.

The rationale for this investigation is the generally held view that family firms are more risk-averse than are non-family firms because of the higher share of the owner's wealth invested in the firm and the desire to transfer the firm to the next generation (Anderson, Mansi, & Reeb, 2003; Naldi, Nordqvist, Sjögren, & Wiklund, 2007). Family firms may also be more prone to financial constraints than non-family firms due to agency problems between the firm and its potential



outside suppliers of funds (Myers & Majluf, 1984; Niskanen & Niskanen, 2010), and they are more dependent on internally generated funds when undertaking investments (Poutziouris, 2001). Furthermore, family firms are more likely than their non-family counterparts to adopt more conservative and less risky investment strategies (Naldi et al., 2007).

This study contributes to empirical literature in four ways. First, many studies investigate the relationship between the impact of liquidity on investment, such as those by Kadapakkam, Kumar, and Riddick (1998); Georgen and Renneboog (2001) and Audretsch and Elston (2002), without considering whether family ownership may affect investment behavior.

Second, the number of studies exploring the differences in investment behavior of small private family and non-family firms is scarce because data on small and medium-sized firms are more difficult to obtain than for larger firms. Most prior studies, such as those by Gugler (2003) and Andres (2011) use data on large listed firms. This study uses data on small private family and non-family firms in Finland. Thirdly, the country context should be taken into account because corporate governance structures, the legal protection of investors and financial markets differ by country. Ownership structures tend to be more concentrated in countries where the protection of investors in terms of debts is greater than that of equity holders (La Porta, Lopez-de-Silanes, & Shleifer, 1999). Consequently, the lower protection of equity holders makes investing in terms of equity riskier and less attractive. In contrast to many other bank-based financial markets, the Finnish financial markets are characterized by a very low number of banks operating in the country (Niskanen & Niskanen, 2006), making the markets very concentrated. In bank-based systems, banks monitor the performance of customers more closely than in other kinds of systems, and small firms may be financially more constrained than their larger counterparts. This funding gap may be even more severe for family firms because, as a number of studies (e.g., Niskanen, Niskanen, & Laukkanen, 2010b) suggest, banks are averse to lending to small- and medium-sized firms that can be characterized as family firms.

Fourthly, this study uses data collected through a private survey, which consists of detailed information on the size of investment and on the rejection of investment. The data on small firms are, in general, difficult to obtain, and therefore a private survey was conducted. This study uses a different proxy for investment than do prior studies, which use proxies calculated from financial statements, e.g. Gugler (2003) and Andres (2011). Furthermore, the context of rejection of investment and the reason behind firms' rejection of investments provide new insights on the investment behavior of family and non-family firms. In this study, "investment" refers to a fixed asset capital expenditure, and the definition of "family firms" is similar to that used in López-Gracia and Sánchez-Andújar (2007) and Niskanen, Karjalainen and Niskanen (2010a), which is that a private firm is regarded as a family firm when family ownership exceeds 50%.

The remainder of this paper is organized as follows. The next section reviews the related literature and presents the hypotheses. Then the data, methodology and variables are described. Next, the results are presented. The last section includes the discussion and concludes the paper.

# *Theoretical Conceptualization*

The theory of finance implies that every positive net present value project should be taken, regardless of whether internal or external funds are used to cover it (Myers & Majluf, 1984). However, empirical studies suggest that investment decisions are associated with both financial factors (Myers & Majluf, 1984; Poutziouris, 2001; Gugler, 2003) and ownership (Gallo et al., 2004; Naldi et al., 2007).

The theoretical framework used in this study is agency theory. Agency problems may arise from the divergence of interests between owners and managers (Jensen & Meckling, 1976), which may lead to a situation in which managers may prefer growth to the value of the firm, and therefore, they may overinvest (Jensen, 1986). Suboptimal investments or investments with negative net present value may be undertaken when interests of shareholders and managers are not aligned (Jensen, 1986). But, this is not the most obvious case in small firms, such as family firms, because of the overlapping owner–manager role. Therefore, family firms should be exempt from agency problems between owners and managers (Jensen & Meckling, 1976). However, agency problems may arise from altruism or because the managers are acting for the controlling family (Schulze, Lubatkin, & Dino, 2003; Chrisman, Chua, & Litz, 2004; Morck & Yeung, 2003). Furthermore, because family firms cannot be regarded as a homogeneous group of people with joint interests (Sharma, Chrisman, & Chua, 1997), it may lead to conflicts of interest between majority and minority shareholders (Morck, Shleifer, & Vishny, 1988; La Porta et al., 1999). Problems of underinvestment may occur if owners with different levels of ownership stakes have different goals, prefer to divert resources away from the firm or possess different risk-tolerance levels. However, Poutziouris (2001) and Chrisman et al. (2004) implied that agency problems may be less severe in family firms because they also have non-economic goals.

In small firms, agency problems are more likely to arise between owner–managers and outside suppliers of funds (Myers & Majluf, 1984). The level of information asymmetry between the firm and potential investors may be more severe for smaller firms (Myers & Majluf, 1984), such as family firms, because managers and other insiders are assumed to possess better and more information about the firm's future earnings, cash flow and investment opportunities (Harris & Raviv, 1991). Consequently, outside suppliers of funds may demand an increased premium paid for external financing, which drives a gap between the costs of internal and external funding (Myers, 1984; Myers & Majluf, 1984). Therefore, agency problems may lead to financial constraints, and firms have to forgo investment opportuni-

ties (Hyytinen & Väänänen, 2006) unless the firms can rely on internally generated funds (Myers & Majluf, 1984; Degryse & Jong, 2006). Family firms may be even more likely to suffer financial constraints because banks tend to be averse to lending to small and medium-sized firms that can be characterized as family firms (Niskanen et al., 2010b).

Due to agency problems, small firms tend to finance their investment needs in a hierarchical fashion—first using internally generated funds, then short- and long-term debts and finally, only as a last resort, outside equity (Myers, 1984; Myers & Majluf, 1984). This pecking order approach is relevant especially for family firms because family firms are characterized by avoiding the use of external capital both in terms of debt and equity (Gallo & Vilaseca, 1996; Romano, Tanewski, & Smyrniotis, 2001) and preferring to safeguard ownership, control and financial independence (Neubauer & Lank, 1998; Poutziouris, 2001). Family firms tend to rely on internal funds to cover their funding needs (Poutziouris, 2001). However, family firms' financial decisions are driven by owner–managers' preferences, and by economic and non-economic considerations (Chrisman et al., 2004; Gallo et al., 2004). These may be reflected in funding and investment behavior by the avoidance of debt and outside equity and by lower growth orientation.

As far as profitability and internally generated funds are concerned, the literature is unanimous about whether family firms outperform non-family firms. Some studies, e.g., Allouche, Amann, Jaussad and Kurashina (2008) and Andres (2008) found that family ownership is associated with better firm performance, at least under certain conditions, such as when the founding family is still active (Andres, 2008). Similarly, Villalonga and Amit (2006) showed that family firms with the founder as the board chair have the highest performance. However, Lopez-Gracia and Sanchez-Andujar (2007) suggested that there is no significant difference in terms of profitability between family and non-family firms. If family firms outperform non-family firms, they could have more internal funds available for investment projects, but owner–managers may prefer to withdraw funds for personal use, such as in the form of dividends that might otherwise be used for investment projects (Jensen, 1986; Dyer, 2006). This notion is supported by Setia-Atmaja, Tanewski and Skully (2009), who found that family-controlled firms employ higher dividend payout ratios. Accordingly, owner–managers of family firms may be more dependent on steady dividend payments (Andres, 2011) because their firms often constitute a primary—or at least to some extent a significant—source of income for them. This may be even more likely in Finland, because dividends have been tax-free to a certain extent.

If retained earnings are insufficient, family firms tend to use debt to finance their investments (Blanco-Mazagatos, Quevedo-Puente, & Castrillo, 2007). Despite that, aversion to external long-term debt is particularly strong in family firms, and they tend to prefer short-term debt funding (Romano et al., 2001; Poutziouris, 2001) because short-term funding does not require security arrangements or sharing of information such as annual accounts with the creditors (Michaelas, Chittenden, & Poutziouris, 1999). Family firms are also reluctant to use long-term external capital

in terms of equity (Gallo & Vilaseca, 1996; Romano et al., 2001; Poutziouris, 2001) because it dilutes family control and reduces financial independence (Neubauer & Lank, 1998). Outside investors such as business angels and venture capitalists represent a relatively small proportion of small-business finance, including that of family firms, because they invest very selectively and target their investments to firms with high growth potential (Berger & Udell, 1998). However, Storey (1994) implies that small firms with growth ambitions have above-average access to external finance.

Empirical studies imply that the preference of certain funding sources affects firms' capital structure (Romano et al., 2001). The characteristics of the owner and the firm as well as owners' beliefs and attitudes are determinants of financing behavior and firms' capital structure (Michaelas, Chittenden, & Poutziouris, 1998; Michaelas et al., 1999; Gallo et al., 2004; Vos et al., 2007). Koropp, Grichnik and Kellermans (2013) have suggested that family firm owner-managers' attitudes toward debt funding are influenced by financial knowledge and prior experience with creditors. As far as the use of debts is concerned, some studies find that family firms use less debt to minimize the probability of bankruptcy and the risk of losing control (Mishra & McConaughy, 1999; McConaughy, Matthews, & Fialko, 2001; Anderson et al., 2003), while other studies argue that family firms use debt as much as non-family firms (Coleman and Carsky, 1999) or that family firms use more debt (Blanco-Mazagatos et al., 2007).

## **HYPOTHESES DEVELOPMENT**

In firms with financial constraints, investment spending is positively related to internally generated funds (Georgen and Renneboog, 2001; Fazzari, Hubbard, and Petersen, 1988), while some other studies find opposite results (Kaplan and Zingales, 1997; Cleary, 1999; Kadapakkam et al., 1998). But, Kadapakkam et al. (1998) suggested that smaller firms may be forced to undertake investments independent of funding due to lower flexibility of timing investments. Consequently, in small firms there might be a weaker link between investments and cash flows. In line with that, some other studies argue that investment-cash flow sensitivity is higher in medium-sized firms than in their smaller or larger counterparts (Audretsch & Elston, 2002). Pawlina and Renneboog (2005) argued that investment and cash flow are related in a non-monotonic way, while Hadlock (1998) found that investment-cash flow sensitivity increases with managerial alignment. Moreover, a positive relationship between investment and cash flow exists in family firms (Gugler, 2003). Contrary to this, Andres (2011) suggested that family firms are more responsive to investment opportunities, and investment decisions seem to be undertaken irrespective of availability of internal funds.

But, are family firms then more or less likely to reject an investment than are non-family firms? Hutchinson (1995) suggested that, in small owner-managed firms, investment and financing strategies are interdependent. This is supported

by Carpenter and Petersen (2002), who argued that the growth of small firms is constrained by internal finance. Small firms may have to reject investment opportunities in case of financial constraints (Myers & Majluf, 1984; Hyytinen & Väänänen, 2006) and because creditors include higher interest premiums in loans reflecting the risk of an average investment project (Stiglitz & Weiss, 1981; Myers & Majluf, 1984). The main cost of debt may be caused by creditors when a firm is prevented from undertaking good projects because of debt covenants.

Family firm characteristics that may impact investment behavior are: They are more risk-averse (Naldi et al., 2007), less growth-oriented (Poutziouris, 2001) and conservative in their funding behavior due to their personal preferences concerning ownership-control (Gallo & Vilaseca, 1996; Gallo et al., 2004). Consequently, family firms' investments are based on the availability of internally generated funds (Hadlock, 1998; Poutziouris, 2001), because they avoid obtaining loans from financial institutions (Gallo & Vilaseca, 1996; Romano et al., 2001; Poutziouris, 2001). Furthermore, family firms may face financial constraints due to weaker loan availability (Myers & Majluf, 1984; Niskanen & Niskanen, 2010). When investment opportunities outstrip operating cash flows, firms with higher leverage forgo investments rather than raise equity (Myers & Majluf, 1984). Moreover, in order to protect the longevity of the business as well as to keep control in the family, family firms may forgo growth and other opportunities (Mishra & McConaughy, 1999), and they are more likely to postpone an investment rather than give up control over their company (Gugler, 2003). Based on these factors, the hypothesis is:

H1: Family firms are more likely to reject an investment than are non-family firms.

Jensen and Meckling (1976) implied that ownership structure affects firm value by its effect on investment. Empirical literature suggests a non-monotonic association between the ownership structure and the value of the firm, implying that an increase in lower levels of managerial ownership increases the value of the firm (Morck et al., 1988; McConnell & Servaes, 1990). In line with Jensen and Meckling (1976), Cho (1998) suggested that ownership structure affects investments and, therefore, firm value. He found that a non-monotonic relationship exists between insider ownership and capital expenditures and between insider ownership and R&D expenditures. However, Croci, Doukas and Gonenc (2009) and Block (2012) proposed that family firms seem to invest more in low-risk, fixed-asset capital expenditure than in high-risk, R&D expenditure, which confirms their non-risk-seeking behavior. As far as the amount is concerned, Gallo et al. (2004) argued that family businesses devote a smaller proportion of sales revenue to their own mid- and long-term development than non-family firms do. This could partly result from the fact that family firms are less growth-oriented (Poutziouris, 2001) and, therefore, they may invest less.

As noted earlier, family firms have both financial and non-financial goals (Chrisman et al., 2004), and their business represents a significant proportion of

their wealth (Naldi et al., 2007). One of the primary objectives is to transfer business ownership to the next generation (Anderson et al., 2003; Naldi et al., 2007). Consequently, family firms are concerned with the long-term survival and the reputation of their firms and the reputation of the family (Anderson et al., 2003), and family firm owner–managers’ decision making is influenced by family commitment (Koropp et al., 2013). It has been argued that owner–managers make better investment decisions because they have more specific knowledge of the firm (James, 1999; Sirmon & Hitt, 2003; Bartholomeusz & Tanewski, 2006). Furthermore, due to longer investment horizons, they are more likely to tackle investment opportunities (Zellweger, 2007). However, owner–managers consider the effect of decisions on other family members and their wealth in order to avoid endangering it (Koropp et al., 2013).

In general, economic goal orientation may lead to higher risk taking. But, family firms also have non-economic goals (Chrisman et al., 2004). Zellweger (2007) argued that family firms could accept riskier investments because family firms have longer investment horizons and consequently, marginal riskiness of an investment is lower. However, family business owners feel that business reputation is the same as individual and family reputation, i.e., business bankruptcy may be regarded as personal bankruptcy (Zellweger & Nason, 2008). As a result, family firms are more likely to adopt more conservative and less risk-oriented investment strategies, and they take risks to a lesser extent than do non-family firms (Naldi et al., 2007). This view is also supported by Shleifer and Vishny (1986) and Hutchinson (1995), who argued that firms with large, undiversified investors and owner–managers will exercise risk-reduction investment strategies to moderate the level of business risk.

As far as the relationship between financing and investment is concerned, in small firms financial constraints are one of the most important barriers to growth (Storey, 1994), and investment levels are more dependent on cash flows (Fazzari et al., 1988; Hoshi, Kashyap & Scharfstein, 1991; Gilchrist & Himmelberg, 1995). This is supported by Niskanen et al. (2010b), who suggested that financial institutions are averse to lending to small and medium-sized firms that can be characterized as family firms. Consequently, this may lead to funding gaps unless family firms have sufficient internal funds to cover funding needs. Family firm owner–managers have personal preferences concerning growth, risk and ownership control, which leads family firms to follow “peculiar financial logic” (Gallo et al., 2004). Because family firms avoid using external funding sources in terms of both debt and equity, it may lead to financial constraints and reduce firms’ resources to invest (Gallo et al., 2004). Based on the discussion, the hypothesis is:

H2: Family firms invest lesser amount than non-family firms do.

# Methods

## DATA AND METHODOLOGY

The data for this study were collected through a private survey in autumn of 2006, and the financial data were collected from the Voitto+ register, compiled by Asiakastieto Oy, a Finnish financial and credit information company. Voitto+ register is a commercial and comprehensive database with financial statement information. The sample consists of small and medium-sized enterprises (SMEs) operating in four regions in Finland, and observations cover the years from 2000 to 2005. Questionnaires were sent to the CEOs. Of the 3,262 questionnaires sent, a total of 621 responses were usable, which resulted in an effective response rate of 19%. The final sample consists of 600 SMEs, because firms outside the European Union (EU) definition of small and medium-sized firms were dropped. According to the EU commission's classification (96/280/CE), a micro-sized firm is a firm that employs fewer than 10 people and whose maximum annual turnover or total assets are € 2m. A small firm is a firm that employs fewer than 50 people and whose maximum annual turnover or total assets are € 10m. A medium-sized firm is a firm that employs fewer than 250 people and whose maximum annual turnover is € 50m or maximum total assets are € 43m.

The sample firms are limited-liability companies with at least two employees, and they represent all sectors of industry, excluding primary production. Other legal forms than limited liabilities are excluded because the financial statement data is not available on them. Primary production is excluded because of its different nature compared to other businesses. The firms were asked to provide information on their ownership structure, their willingness to grow and the amount of investments from 2000 to 2005 (for each year separately). The firms were also asked whether they had rejected investment opportunities during the years from 2000 to 2005 and, if so, the reasons why. The total number of available observations per firm per year varies because, in some cases, information is available for less than six years. In individual regression models, the number of observations varies because of missing observations on some variables. Furthermore, the use of lagged values leads to a lower number of observations in regressions.

As far as macroeconomic conditions in Finland during this study period are concerned, the Statistics Finland indicate that during the years 2000–2005 the change in GDP was positive and varied between +1.2% and 6.4%. The Euribor 1 month interest rate varied between 2.131% and 4.943% and was declining toward the year 2005. Based on the survey of the Central Bank of Finland, during the years 2000–2005, availability of bank loans was very good and debt ratios and other funding terms were advantageous and inexpensive in Finland. A firm-specific availability of finance is captured in the regression models by adding the financial

ratios such as profitability, liquidity and leverage as control variables. In Finland, tax incentives concerning investments are minor. Only firms representing manufacturing or tourism sectors in certain regions are allowed to higher depreciation. The sample firms are located in the regions where higher depreciation for certain sectors of business is possible.

Because of the quantitative nature of the data, quantitative research methods are used to investigate whether the rejection of investments and the amount of investment differs between family firms and non-family firms. Logit regression is used to explore the association between the rejection of investment and family influence because the dependent variable is dichotomous. Ordinary least square regression (OLS) and the panel data estimation method, random effects method, are employed in analyzing the relationship between the amount of investments and family influence. Alpha .01, .05 and .10 are used to indicate Type 1 error rate. Non-respondent tests were performed for the database, and they suggest that the firms that responded to the survey are statistically significantly similar to the whole sample. The possibility of common method bias is also taken into account, and Harman's single-factor test is applied. All variables are loaded into a principal component factor analysis, and a rotated factor solution is examined. None of the factors account for more than 15.98% of the total variance. The model is also investigated with a VIF-test to test for multicollinearity.

## **DEPENDENT VARIABLES**

### **Rejection of investments**

Firms were asked whether they had rejected investments (fixed asset capital expenditure) or not during the years 2000–2005. This variable is a dummy variable accorded the value of 1 if the firm had rejected an investment; otherwise, it was accorded a value of 0.

### **LnInvestments**

Firms were asked to state the amount of investments (fixed asset capital expenditure) for each year separately. The proxy for investment is the LnInvestments, which is the natural logarithm of investment. Prior empirical studies on investment behavior used proxies of investment extracted from financial statements (Cleary, 1999; Degryse & Jong, 2006; Andres, 2011).

## **EXPLANATORY VARIABLES**

### **Family firms/non-family firms and family ownership rate**

This study uses alternative indicators of family influence. First, a binary variable is used to identify family firms and non-family firms. A firm is regarded as a family firm if family ownership exceeds 50%; otherwise, a firm is regarded as a non-family firm (López-Gracia & Sánchez-Andújar, 2007; Niskanen et al., 2010a).



Second, a continuous variable, family ownership rate, is the alternative proxy. Third, an alternative family firm dummy, family firm 25, is constructed based on the ownership levels above and below 25%. A firm is regarded as a family firm if family ownership exceeds 25%; otherwise, a firm is regarded as a non-family firm. Fourth, the percentage of family members on the board is used as an explanatory variable. Finally, family ownership is also divided into four size categories by family ownership rates, 0–25%, 26–50%, 51–75% and 76–100%. For a robustness check (not reported), a binary variable large family, constructed based on family ownership and the presence of family on the board, and a dummy variable, the presence of family on the board, are also used.

## **CONTROL VARIABLES**

Gibrat's law implies that the expected growth rate is the same across all size classes of firms, although empirical evidence has yielded mixed results. Previous literature suggests that growth of small firms is constrained by the availability of finance and smaller firms may experience greater difficulty in getting funding than larger firms (Michaelas et al., 1999). Furthermore, larger firms may have greater flexibility in timing investments, and they may postpone investments until internal funds are available (Kadapakkam et al., 1998). LnTotalassets is used as a proxy for firm size.

Younger firms are more likely to grow more (Glancey, 1998). Younger firms are more likely to face information asymmetry with potential lenders because younger firms may have a lower level of assets to secure debts. The measure of firm age is expressed in years, specifically, the difference between the foundation year and the observation year.

Sales capture output level, and sales growth reflects changes in the level of output (Gugler, 2003). The annual logarithmic growth rate of sales LnChSales is used as a measure of firm growth.

Financial constraints have been suggested to be one of the most important barriers to growth (Storey, 1994). Leverage is included as a control variable because high leverage typically makes it difficult for a firm to borrow additional money. The debt-to-total-assets ratio is used as a proxy for leverage.

Georgen and Renneboog (2001) and Fazzari et al. (1988) suggested that in firms with financial constraints, investment spending is positively related to internally generated funds. The proxies for the firms' internal funding resources are the return on assets (ROA), the current ratio and cash flow. Cash flow is also a proxy measure of the degree to which a firm is subjected to liquidity constraints (Audretsch & Elston, 2002). Cash flow is calculated as (earnings+depreciation). Lagged value of cash flow (t-1) is also used in models.

According to Storey (1994), SMEs with above-average growth ambitions have better access to external finance. Willingness to grow is a dummy variable that is accorded a value of 1 if the firm is willing to grow; otherwise, it is accorded a value of 0.

Harris and Raviv (1991) suggested that firms within an industry have more in common with each other than with firms in different industries, and that there are differences in industry leverage ratios. Coleman and Carsky (1999) found that firms in the service sector may need less capital and have less capital expenditure. Industry dummies are binary variables that capture industry-fixed effects. Seven industry dummies included in specifications are manufacturing, construction, trade, hotels and restaurants, transportation, knowledge intensive business services (KIBS) and other services.

# Results

## DESCRIPTIVE STATISTICS

Table 1: Descriptive statistics by family ownership

Variables	Family firm		Non-family firm		Probability of difference
	n	Mean (Std. deviation)	n	Mean (Std. deviation)	
Family ownership %	1714	<b>95.45</b> (11.829)	1535	4.26 (13.395)	<b>0.000</b>
Return on assets	1196	<b>18.39</b> (22.667)	1042	15.01 (26.111)	<b>0.001</b>
Sales	1203	1658.155 (5494.881)	1054	<b>2194.754</b> (7739.891)	<b>0.056</b>
Change in sales %	1055	23.92 (312.845)	902	38.33 (354.453)	0.340
LnChange in sales	687	2.465 (1.349)	608	<b>2.676</b> (1.513)	<b>0.018</b>
Total assets	1227	902.824 (3610.245)	1073	<b>2916.082</b> (15920.020)	<b>0.000</b>
Retained earnings	1173	218.733 (895.152)	1017	<b>342.085</b> (2373.642)	<b>0.099</b>
Depreciation	1207	58.587(233.409)	1041	<b>94.031</b> (515.160)	0.032
Firm age	1612	13.77 (12.242)	1456	<b>14.65</b> (14.566)	<b>0.069</b>
Current ratio	1195	2.199 (2.111)	1040	<b>2.545</b> (4.889)	<b>0.026</b>
Leverage	1196	58.73 (30.527)	1042	<b>66.62</b> (72.219)	<b>0.001</b>
Cash flow	1207	138.859 (523.656)	1036	<b>236.241</b> (1097.844)	<b>0.006</b>
Investments	771	111.16 (513.346)	719	<b>250.61</b> (1084.846)	<b>0.001</b>
Rejection of investments	1597	0.09 (0.291)	1452	0.08 (0.274)	0.269
Willingness to grow %	1639	31.67 (0.460)	982	<b>35.80</b> (0.476)	<b>0.015</b>
Manufacturing %	1678	21	1517	21	0.887
Construction %	1678	14	1517	14	0.836
Trade %	1678	<b>21</b>	1517	16	<b>0.000</b>
Accommodation and restaurants %	1678	5	1517	6	<b>0.037</b>
Transport %	1678	11	1517	10	0.483
KIBS %	1678	15	1517	<b>20</b>	<b>0.000</b>
Other services %	1678	7	1517	7	0.960

Table 1 lists the descriptive statistics for the key variables when firms are split into family and non-family firms. The numbers represent average rates across the entire period of the survey. Family firms seem to have, on average, higher return on assets but lower retained profits and growth rates than do non-family firms. Family firms are younger and smaller in terms of sales and total assets, but, on average, they have lower leverage, current ratio, amount of cash flows, depreciation and investments. Furthermore, family firms are less growth-oriented. Family firms are represented proportionally more in trade but less in KIBS than are non-family firms.

This table presents the descriptive statistics on the sample firms. Column I presents the variables, column II presents descriptive statistics for the family firms and column III shows descriptive statistics for the non-family firms. Column IV presents the  $p$ -values of the  $t$ -test for the equality of means between the two sub-samples.

Table 2 presents the number of observations, means, standard deviations and Pearson correlations on all variables used in this study. The correlations between the variables are not high except between LnInvestments and LnTotalassets, between cash flows and investments and between cash flows and LnTotalassets. Any other serious correlations, i.e. those over 0.5, between the variables, are not observed. Although the correlation results indicated no serious correlation between the variables, the model is investigated with a VIF-test. The highest VIF-value is 2.380, except in industry dummies, which are control variables; VIF values indicate no serious multicollinearity because they do not exceed the value of 10.

Table 2: Correlation matrix

Variable	N	Mean	Std.	Family ownership	Family/non-family	Investments	LnInvestments	Rejection of investments	LnTotalassets	Firm age	LnChSales	Current ratio	Return on assets	Leverage	Willingness to grow	Cash flow	Manufacturing	Construction	Trade	Accommodation & restaurants	Transportation	KIBS	Other services	
Family ownership	3249	52.36	47.241	1																				
Family/non-family	3249	52.75		<b>.964</b>	1																			
Investments	1560	185.90	830.954	<b>-0.77</b>	<b>-0.83</b>	1																		
LnInvestments	1237	3.655	1.780	.055	.045	<b>.519</b>	1																	
Rejection of Inv.	3265	0.09		.015	.020	-.029	.016	1																
LnTotalassets	1102	5.796	1.518	<b>.082</b>	<b>.080</b>	<b>.459</b>	<b>.564</b>	-.035	1															
Firm age	3328	14.19	13.458	-.035	-.033	-.035	<b>-.085</b>	<b>.062</b>	-.023	1														
LnChSales	1408	2.544	1.410	<b>-0.89</b>	<b>-0.74</b>	-.017	-.019	.044	<b>-0.99</b>	-.039	1													
Current ratio	2402	2.387	4.086	<b>-0.50</b>	<b>-0.47</b>	.001	<b>-.094</b>	<b>-0.49</b>	-.023	-.011	-.018	1												
Return on assets	2405	16.423	24.262	<b>.090</b>	<b>.069</b>	-.046	<b>-1.06</b>	<b>-0.84</b>	-.059	.020	<b>.087</b>	<b>.090</b>	1											
Leverage	2405	61.99	52.879	<b>-0.81</b>	<b>-0.73</b>	-.050	.018	<b>.052</b>	<b>-1.41</b>	<b>-0.42</b>	<b>.077</b>	<b>-1.94</b>	<b>-3.15</b>	1										
Willingness to grow	3308	.3434		<b>-0.44</b>	<b>-0.44</b>	<b>.130</b>	<b>.190</b>	<b>.066</b>	<b>.112</b>	<b>.040</b>	<b>.099</b>	<b>-0.70</b>	<b>-0.98</b>	.021	1									
Cash flow	2425	194.11	825.08	-.037	<b>-0.58</b>	<b>.814</b>	<b>.433</b>	-.038	<b>.514</b>	-.014	-.011	.008	.028	<b>-0.74</b>	<b>-1.51</b>	1								
Manufacturing	3465	.21		.003	-.003	<b>.083</b>	<b>.086</b>	-.022	<b>.244</b>	<b>.052</b>	-.028	.000	-.015	.024	<b>.039</b>	<b>.123</b>	1							
Construction	3465	.14		-.029	-.004	<b>-0.54</b>	<b>-0.78</b>	<b>-0.92</b>	<b>-0.87</b>	-.010	<b>.105</b>	<b>.062</b>	<b>.074</b>	<b>-0.54</b>	<b>-1.19</b>	<b>-0.44</b>	<b>-2.06</b>	1						
Trade	3465	.18		<b>.080</b>	<b>.063</b>	<b>-0.72</b>	<b>-1.22</b>	.019	-.055	<b>-0.37</b>	<b>-1.09</b>	0.016	.004	-.023	.034	<b>-0.67</b>	<b>-2.46</b>	<b>-1.90</b>	1					
Accomm. & Rest.	3465	.06		<b>-0.43</b>	<b>-0.37</b>	-.042	.003	.033	<b>-1.09</b>	.001	.009	<b>-0.59</b>	<b>-0.44</b>	<b>.169</b>	.028	<b>-0.48</b>	<b>-1.28</b>	<b>-0.99</b>	<b>-1.18</b>	1				
Transportation	3465	.11		.016	.012	-.027	<b>.099</b>	<b>.063</b>	<b>.098</b>	.000	.028	<b>-0.70</b>	-.034	.003	.003	<b>-0.04</b>	<b>-1.81</b>	<b>-1.40</b>	<b>-1.67</b>	<b>-0.87</b>	1			
KIBS	3465	.17		-.063	-.064	-.044	<b>-1.15</b>	-.009	-.059	.019	.025	-.030	.033	-.022	<b>.051</b>	<b>-0.51</b>	<b>-2.35</b>	<b>-1.81</b>	<b>-2.16</b>	<b>-1.13</b>	<b>-1.60</b>	1		
Other services	3465	.07		.000	.001	-.024	-.036	<b>.041</b>	<b>-1.91</b>	-.033	-.026	.033	-.007	-.026	-.028	<b>-0.42</b>	<b>-1.42</b>	<b>-1.10</b>	<b>-1.31</b>	<b>-0.68</b>	<b>-0.97</b>	<b>-1.24</b>	1	

This table presents the correlations. Data covers the years from 2000 to 2005. Correlations significant at 1% and 5 % confidence levels are reported in bold.

## REJECTION OF INVESTMENT

Table 3 presents the results regarding the influence that family ownership may have on the rejection of investment using logit regression. The firms were asked whether they had rejected investments or not during the years 2000–2005. Rejection of investments is a dummy variable that is given a value of 1 if the firm has rejected an investment; otherwise, it is given a value of 0. In column I the result shows that family firms are more likely to reject an investment. This finding supports Hypothesis 1 and is in line with the findings of Mishra and McConaughy (1999), Poutziouris (2001), Gugler (2003), Hyytinen and Väänänen (2006) and Naldi et al. (2007). In column II, the finding indicates that when family ownership increases, so does the likelihood that family firms are more likely to reject investment. Similarly, in column III, the result is similar when using family firm 25 dummy. However, column IV presents the result of family on the board, but the finding is insignificant.

As far as the control variables are concerned, the results show that firms that are older, have lower liquidity and have higher leverage are more likely to face a situation in which an investment will be rejected. This could imply that family firms may be more financially constrained than are non-family firms. Another potential explanation could be that family firms may be more risk-averse, and they avoid using more outside funding in terms of debts. For a robustness check, the model is run by using other family influence variables: a dummy variable denoting the presence of family on the board, and a dummy variable composed of family ownership and family ratio on the board. The results are qualitatively similar and, thus, are not reported. The rejection of investment is also investigated by using probit regression, and the results remain qualitatively similar (not reported).

The firms were also asked qualitative information about the rejection of investments. More precisely, they were asked an open question about why they had rejected investments: “If you have rejected investments, what has been the main reason for the rejection?” Their answers reveal that, both in family and in non-family firms, the most common reason for rejecting investment was lack of funding, the second was reluctance to take risks, the third was an unwillingness to take loans and the fourth was lack of internal funds. Furthermore, in family firms, the other reasons for rejecting investments were unwillingness to invest, lack of collaterals and a requirement for personal security and pledging. These findings suggest that both family and non-family firms are financially constrained, but family firms may be even more constrained.

Table 3 presents the results of regressing rejection of investment on explanatory variables using logit regression analysis. Rejection of investment is a dummy variable. Explanatory variables are a family/non-family firm 50 dummy, a continuous variable family ownership, a family/non-family firm 25 dummy and family on the board. Column I presents the results of the family/non-family firm 50 dummy, column II on the family ownership rate, column III on the family/non-family firm 25 dummy and column IV on the ratio of family members on the board. Coefficients are unstandardized. Significance at: \*\*\*0.01, \*\*0.05, \*0.10; *p*-values are shown in parentheses.

Table 3: Rejection of investment

	<b>Column I</b>	<b>Column II</b>	<b>Column III</b>	<b>Column IV</b>
	<b>Rejection of investment</b>	<b>Rejection of investment</b>	<b>Rejection of investment</b>	<b>Rejection of investment</b>
	<b>Coefficient (p-value)</b>	<b>Coefficient (p-value)</b>	<b>Coefficient (p-value)</b>	<b>Coefficient (p-value)</b>
Constant	-2.900 (0.061)	-2.632 (0.083)	-2.316 (.118)	-.929 (.490)
<b>Explanatory variables</b>				
Family/non-family firm 50	<b>.972**</b> (.011)			
Family ownership %		<b>.009**</b> (0.032)		
Family /non-family firm 25			<b>.661*</b> (.081)	
Family on the board %				.003 (.526)
<b>Firm characteristics</b>				
LnTotalassets	.043 (.772)	.033 (.818)	.001 (.995)	-.075 (.487)
Firm age	<b>.020*</b> (.081)	<b>.021*</b> (.063)	<b>.021*</b> (.070)	<b>.029***</b> (.007)
Growth	.098 (.414)	.098 (.405)	.099 (.393)	.130 (.266)
ROA	-.004 (.472)	-.004 (.464)	-.004 (.496)	-.005 (.344)
Leverage	<b>.010*</b> (.067)	<b>.010*</b> (.079)	<b>.009*</b> (.088)	.003 (.621)
Current ratio	<b>-.637**</b> (.015)	<b>-.650**</b> (.013)	<b>-.660**</b> (.012)	<b>-.772***</b> (.005)
<b>Industry dummies</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>
Cox&Snell R <sup>2</sup>	.120	.117	.114	.088
Nagelgerke R <sup>2</sup>	.263	.255	.249	.194
Number of observations	528	528	528	545

Table 4 presents the results regarding the influence that family ownership may have on the rejection of investment using logit regression. The firms were asked whether they had rejected investments or not during the years 2000–2005. Rejection of investments is a dummy variable that is given a value of 1 if the firm has rejected an investment; otherwise, it is given a value of 0. The explanatory variable family ownership is divided into four categories based on the family ownership rates 0–25%, 26–50%, 51–75% and 76–100%. In column I, the result shows that at the lowest level of family ownership, 0–25%, the rejection of investment and family ownership are negatively associated. This finding supports Hypothesis 1. In columns II and III, findings are insignificant, but in column IV, at the highest

level of family ownership rates, 76–100%, the rejection of investment and family ownership are positively related. These results confirm the results obtained and reported in Table 3. These findings support Hypothesis 1 and are in line with the findings of Mishra and McConaughy (1999), Poutziouris (2001), Gugler (2003), Hyytinen and Väänänen (2006) and Naldi et al. (2007). The findings suggest that as family ownership increases, firms are more likely to reject investments. Also, control variables reveal that older firms with higher leverage and lower liquidity are more likely to reject an investment.

Table 4: Rejection of investment

	<b>Column I</b>	<b>Column II</b>	<b>Column III</b>	<b>Column IV</b>
	<b>Rejection of investment</b>	<b>Rejection of investment</b>	<b>Rejection of investment</b>	<b>Rejection of investment</b>
	<b>Coefficient (p-value)</b>	<b>Coefficient (p-value)</b>	<b>Coefficient (p-value)</b>	<b>Coefficient (p-value)</b>
Constant	-1.655 (.237)	-1.732 (.235)	-1.641 (.248)	-2.393 (.107)
<b>Explanatory variables</b>				
Family ownership 0–25%	<b>-.661*</b> (.081)			
Family ownership 26–50%		-18.784 (.998)		
Family ownership 51–75%			.484 (.444)	
Family ownership 76–100%				<b>.794**</b> (.030)
<b>Firm characteristics</b>				
LnTotalassets	.001 (.995)	.022 (.881)	-.023 (.864)	.030 (.834)
Firm age	<b>.021*</b> (.070)	<b>.023**</b> (.035)	<b>.021*</b> (.069)	<b>.024**</b> (.034)
Growth	.099 (.393)	.096 (.425)	.098 (.395)	.095 (.421)
ROA	-.004 (.496)	-.003 (.524)	-.003 (.574)	-.004 (.438)
Leverage	<b>.009*</b> (.088)	.006 (.220)	.007 (.159)	<b>.009*</b> (.093)
Current ratio	<b>-.660**</b> (.012)	<b>-.765***</b> (.005)	<b>-.733***</b> (.006)	<b>-.661**</b> (.011)
<b>Industry dummies</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>
Cox&Snell R <sup>2</sup>	.114	.118	.109	.117
Nagelgerke R <sup>2</sup>	.249	.258	.240	.255
Number of observations	528	528	528	528



Table 4 presents the results of regressing rejection of investment on explanatory variables using logit regression analysis. Rejection of investment is a dummy variable. Explanatory variables are the four family ownership categories. Column I presents the results on the family ownership 0–25%, column II on the family ownership 26–50%, column III on the family ownership 51–75% and column IV on the family ownership 76–100%. Coefficients are unstandardized. Significance at: \*\*\*0.01, \*\*0.05, \*0.10; *p*-values are shown in parentheses.

## THE AMOUNT OF INVESTMENT

The investment behaviors of family and non-family firms are explored by investigating the amount invested and whether there are differences between family and non-family firms. The dependent variable is the natural logarithm of the amount of investment. Column I in Table 5 shows the results on Ordinary Least Square (OLS) regression when regressing LnInvestments on family/non-family firm 50 dummy. The result suggests that family firms invest more than non-family firms do. This finding is contrary to the hypothesis; that is, Hypothesis 2 is not supported. This result is in line with the findings of Kadapakkam et al. (1998), Zellweger (2007) and Andres (2011) and contrary to those of Naldi et al. (2007) and Koropp et al. (2013). Furthermore, larger firms and firms with more willingness to grow and higher cash flow tend to invest more. This could imply that willingness to grow may enhance the level of investments. Furthermore, firms may make their investments based on cash flows and prefer to use internal funding sources, as suggested by Myers and Majluf (1984) and Poutziouris (2001). This finding is also in line with that of Jensen (1986), who argues that firms increase investment in response to the availability of cash flows.

Columns II and III in Table 5 present the results on the amount of investments when using a random effects model. A family/non-family firm 50 dummy is used as an explanatory variable in column II, and a continuous family ownership rate is used in column III. The results in columns II and III show that neither the family/non-family firm dummy nor the family ownership rate is statistically significant. This suggests that, although family ownership has an impact on rejection of investments, it does not have an impact on the amount of investment when firms have decided to invest. As far as firm characteristics are concerned, the results in Table 5 show that the level of investment is positively related to firm size and age, which suggests that larger and older firms invest more.

For a robustness check, the model is run by using several alternative family influence variables. The model is also run by using Ordinary Least Square (OLS) regression when regressing LnInvestments on family ownership, which is divided into four categories based on the family ownership levels of 0–25%, 26–50%, 51–75% and 76–100%. The results (not reported) suggest that at the lower levels of family ownership, firms invest less, but at the higher levels of family ownership, they invest more. The model is also run by using random effects model when re-

gressing LnInvestments on the following alternative family influence variables: a family/non-family firm 50 dummy, a dummy variable family on the board and a dummy variable composed of family ownership and family's presence on the board. The results (not reported) are qualitatively similar to those when using family/non-family firm 50 dummy or family ownership rate.

This table presents the results of regressing the amount of investment LnInvestments on family ownership variables. The OLS regression and random effects model are used in regressions. Explanatory variables are a family/non-family firm 50 dummy and a continuous variable family ownership rate. Column I presents the results on OLS regression on the family firm dummy variable, and columns II and III present the results on the family firm dummy and the continuous variable family ownership rate. Coefficients are unstandardized. Significance at: \*\*\*0.01, \*\*0.05, \*0.10.

Table 5: Amount of investment

	Column I OLS		Column II Random effects		Column III Random effects	
	LnInvestments		LnInvestments		LnInvestments	
	Coeff.	p	Coeff.	p	Coeff.	p
Constant	1.73263	.133	-.29688	.864	-.30702	.859
<b>Explanatory variables</b>						
Family/non-family firm 50	<b>.47835**</b>	.017	.23013	.402		
Family ownership %					.00180	.547
<b>Firm characteristics</b>						
LnTotalassets	<b>.39062***</b>	.000	<b>.59634***</b>	.000	<b>.59962***</b>	.000
Firm age	-.00207	.814	<b>.01471*</b>	.094	<b>.01502*</b>	.087
Growth	-.06210	.378	-.04295	.454	-.04272	.457
Leverage	.00421	.295	.00648	.138	.00629	.150
Current ratio	.02838	.690	.02199	.788	.02150	.793
ROA	-.00039	.926	.00581	.114	.00574	.118
Willingness to grow	<b>.42129*</b>	.057	.41373	.193	.40757	.203
Cash flow	<b>.00024***</b>	.010				
Cash flow (t-1)			.00004	.676	.00004	.711
Industry dummies	YES		YES		YES	
Adjusted R <sup>2</sup>	.3782					
F statistics	9.39	0.000				
R <sup>2</sup> within			.1503		.1497	
R <sup>2</sup> between			.3708		.3694	
R <sup>2</sup> overall			.3793		.3746	
Wald chi <sup>2</sup>			73.18	.000	72.64	.000
Number of observations	208		208		208	
Number of groups			106		106	

Table 6 presents the results on regressing the amount of investment LnInvestments on family influence variables using random effects model and the same control variables as in models in Table 5 except that cash flow is not lagged value. Coefficients are based on standard errors clustered at the firm level. In columns I-III, family influence, measured by the family/non-family firm 50 dummy, family ownership rate and family on the board ratio is, again, insignificant. However, some control variables become significant in all regressions. The results on the control variables suggest that larger, older and more profitable firms invest more. Furthermore, a positive relationship exists between investments and cash flows, suggesting that investments are sensitive to cash flows. The result may imply that firms' investment spending is based on cash flows, and firms prefer to use internal funds to finance their investments. Alternatively, this could be a sign of financial constraints, i.e., small firms not only prefer but also have to finance their investment needs by using internally generated funds. This is in line with pecking order theory (Myers & Majluf, 1984) and Poutziouris (2001). Also, the finding supports Jensen (1986), who argues that firms increase investment in response to the availability of cash flows.

Table 6 presents the results of regressing the amount of investment LnInvestments on family influence variables using the random effects model. Explanatory variables are a family/non-family firm 50 dummy, a continuous variable family ownership rate and the ratio of family members on the board. Column I presents the results on the family firm 50 dummy variable, column II shows results on the family ownership rate and column III presents the results on the ratio of family members on the board when using random effects model. Coefficients are based on standard errors clustered at the firm level. Significance at: \*\*\*0.01, \*\*0.05, \*0.10.

Table 6: Amount of investment

	Column I		Column II		Column III	
	LnInvestments		LnInvestments		LnInvestments	
	Coeff.	<i>p</i>	Coeff.	<i>p</i>	Coeff.	<i>p</i>
Constant	1.02047	.364	.99869	.371	.68155	.500
Explanatory variables						
Family/non-family firm 50	.23782	.335				
Family ownership %			.00242	.356		
Family on the board %					-.00278	.265
Firm characteristics						
LnTotalassets	<b>.48731***</b>	.000	<b>.49081***</b>	.000	<b>.53239***</b>	.000
Firm age	.01480**	.028	<b>.01494**</b>	.026	<b>.01524**</b>	.022
Growth	.02346	.601	.02245	.612	.02961	.486
Leverage	.00544	.181	.00539	.179	.00489	.223
Current ratio	.04120	.572	.04191	.563	.03455	.626
ROA	<b>.00574**</b>	.044	<b>.00575**</b>	.043	<b>.00545*</b>	.056
Willingness to grow	.22983	.400	.23649	.387	.13780	.623
Cash flow	<b>.00018**</b>	.022	<b>.00017**</b>	.025	.00016**	.038
Industry dummies	YES		YES		YES	
R <sup>2</sup> within	.1427		.1454		.1486	
R <sup>2</sup> between	.3797		.3772		.3924	
R <sup>2</sup> overall	.3920		.3872		.4014	
Wald chi <sup>2</sup>	733.34	.000	734.45	.000	715.81	.000
Number of observations	233		233		247	
Number of groups	107		107		111	

# *Discussion and Conclusions*

This study explored the investment behaviors of family firms as opposed to those of non-family firms. More precisely, the aim was to investigate whether family ownership increases the likelihood that firms are more likely to reject an investment and whether family ownership is associated with the amount of investment.

The findings indicate that family firms are more likely to reject an investment, as was hypothesized. Furthermore, the reasons why firms have rejected investments confirm that family firms may be more financially constrained than are non-family firms, and that family firms are more likely to face difficulties in obtaining financing, such as that from banks (Niskanen et al., 2010b). However, family firms may be reluctant to take more loans because lower debt levels are preferred to minimize the probability of bankruptcy and due to the fear of losing control (Mishra & McConaughy, 1999; McConaughy et al., 2001; Anderson et al., 2003). However, avoidance of loans leads to the rejection of investments when sufficient internal funds are not available. The rejection of investment seems also to stem from the fact that family firms are more risk-averse (Naldi et al., 2007) and, therefore, they follow more conservative funding behavior (Gallo & Vilaseca, 1996; Gallo et al. 2004). As a consequence, family firm investment spending may be more dependent on internally generated funds (Poutziouris, 2001).

The result on the amount of investment when using OLS regression suggests that family firms may invest more than do non-family firms. This finding could further suggest that family firms may be more likely to tackle investment opportunities (Zellweger, 2007; Andres, 2011). However, the findings on the amount of investment when using a random effects model imply that no statistically significant difference in the amount of investment exists between family firms and non-family firms. The result is similar when using a continuous variable family ownership rate. One potential explanation could be that, although family firms are more likely to reject an investment, they still invest the amount necessary to maintain their ability to generate future earnings when they have finally decided to invest. The result could also indicate that both family and non-family firms may be concerned with the firm's future performance and ability to survive in competition, thus affecting their investment behavior in a similar way. Furthermore, taking into account the data used and the average size of firms, smaller firms may be forced to undertake investments due to lower flexibility in the timing of investments, as suggested by Kadapakkam et al. (1998). The findings further suggest that firms tend to invest more when they have more cash flows available.

These findings add to the previous empirical literature on the investment behaviors of small private family and non-family firms. The findings of this study suggest that the investment behaviors of family and non-family firms differ, at least to some extent. Family firms are more likely to face financial constraints and a situation in which an investment project is rejected. The findings also propose

that increases in family ownership increases the likelihood that firms are more likely to reject investments. The reasons for rejecting investments are associated with financial constraints, an unwillingness to take loans, risk-avoiding behavior and an unwillingness to invest. These arguments support previous literature that family firms are more likely to face financial constraints due to agency problems between the firm and its potential outside suppliers of funds. This could be the case in the countries with bank-centered financial markets, such as Finland, where banks monitor customers more closely than in other kinds of financial markets. The availability of outside funding in terms of equity is more difficult to obtain. Also, family firms are reluctant to share ownership and lose control and, therefore, owner–managers find outside equity a less-attractive source of funding. Consequently, investment behaviors in small firms, both family and non-family firms, may be more sensitive to cash flows.

This research may have some theoretical and practical implications. Agency theory and the pecking order approach seem to be relevant theories explaining the investment behaviors of small family and non-family firms. In bank-centered financial markets and in countries where banks are important sources of funding, family firms may be more susceptible to financial constraints, which limits or even hampers their investments. Potential money lenders should take into account the influence of family business characteristics and family commitment on a family firm's decision making and strategic choices when considering granting funding to family firms. The importance of small firms to the national economic wealth creation and growth has been ignored, but not enough effort has been made to support firms' growth and investments. Policy makers should consider creating some tax incentives or other financial incentives that might enhance investment activity and mitigate financial constraints among small firms. Finally, the findings of this study may be generalizable in the countries with similar operating environments as Finland, that is, countries with similar financial market structures and legal protection of investors.

Although this study contributes to understanding the differences in the investment behavior between family and non-family firms, this study has several limitations. First, it would have shed more light on investment behaviors and investment strategies between family and non-family firms if the investment—i.e., fixed asset capital expenditure—could have been classified as an extension, replacement or compulsory investment. Second, the quality of investment and information on R&D expenditure investments would also have provided more detailed information on investment behaviors and strategies because R&D expenditures are regarded as riskier than other investments. Unfortunately, this information was not available. Third, in this study, family ownership is defined in terms of family members' ownership rates and family's presence on the board. However, more diverse definitions of family firms, such as generation in power and the role of the founding family and their members in the firm, could have been used if data had been available. The use of multidimensional variable F-PEC, as suggested by Klein, Astrachan and Smyrniotis (2005), would also have shed more light on investment behavior of family firms. These data were, unfortunately, not available. This study investigated the investment behaviors of small private family and non-family firms in one country: Finland. It invites a further study in other countries.

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**JAANA LAPPALAINEN**  
*Association Between  
Corporate Governance  
Structures and Agency  
Problems in Small Firms –  
Evidence on Finnish SMEs*

The aim of this dissertation is to address the question whether corporate governance structures are associated with growth and profitability, and whether the funding and investment behaviors of family and non-family firms differ. The sample consists of private small and medium-sized Finnish firms.



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