Achleitner, Ann-Kristin; Lutz, Eva; Schraml, Stephanie

Working Paper

Influence of internal factors on the use of equity- and mezzanine-based financing in family firms

CEFS working paper series, No. 2009-14

Provided in Cooperation with:
Center for Entrepreneurial and Financial Studies (CEFS), Technische Universität München

Suggested Citation: Achleitner, Ann-Kristin; Lutz, Eva; Schraml, Stephanie (2009) : Influence of internal factors on the use of equity- and mezzanine-based financing in family firms, CEFS working paper series, No. 2009-14

This Version is available at:
http://hdl.handle.net/10419/48409

Terms of use:
Documents in EconStor may be saved and copied for your personal and scholarly purposes.
You are not to copy documents for public or commercial purposes, to exhibit the documents publicy, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.
If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.
Working Paper No. 2009-14

Influence of Internal Factors on the Use of Equity- and Mezzanine-based Financing in Family Firms

ANN-KRISTIN ACHLEITNER
EVA LUTZ
STEPHANIE SCHRAML

WORKING PAPER SERIES

Center for Entrepreneurial and Financial Studies

December 2009

INFLUENCE OF INTERNAL FACTORS ON THE USE OF EQUITY- AND MEZZANINE-BASED FINANCING IN FAMILY FIRMS

Abstract

The paper analyzes internal factors which influence the use of equity- and mezzanine-based financing instruments in German privately held family firms. Based on a sample of 195 surveys of family firms, we investigate the impact of family specific goals and corporate governance structures on the use of financial instruments such as retained earnings, private equity and silent partnerships. We find that family goals have a complex impact on the decision to use or not to use these instruments and parallel existing goals can result in diverging financing preferences. Furthermore, we find that the impact of corporate governance structures on financing decisions is mainly driven by the existence of an advisory board and the involvement of external managers in the management board.

Our findings contribute to a better understanding of financing decisions in family firms and demonstrate the necessity to include family firm specific characteristics such as family goals and corporate governance structures in the analysis of financing decisions.

Keywords: Entrepreneurial finance, family firms, equity, mezzanine, retained earnings, private equity, silent partnership

JEL Codes: G32, G30, G24, M13
Influence of internal factors on the use of equity- and mezzanine-based financing in family firms

Ann-Kristin Achleitner, Eva Lutz and Stephanie Schraml

1. Introduction

Family firms have an important role in economies around the globe. For instance in Germany, the majority of companies can be considered to be family firms and other countries, particularly in continental Europe, show similar patterns (Klein 2004). Family firms usually follow an overall business strategy targeted towards sustainability which is a success model in line with the preferences of different stakeholders of the company as well as policy makers. However, the complex interplay of the family and the business may not only be a source of competitive advantage, but may also pose specific challenges on family firm owners (Habbershon, Williams, and MacMillan 2003). It is necessary to solve family conflicts and to focus on policies which safeguard the long term existence of the company (Kets de Vries 1993). In this context, financing decisions are important as they are the basis for future company growth and survival. Despite their important role, current knowledge on family firms is still limited in this area. In particular, scholars have not yet investigated specific drivers of financing decisions in privately held family firms and have primarily focused on analyzing differences to non-family firms in their overall capital structure (Coleman and Carsky 1999; Gallo, Tàpies, and Cappuyns 2004; López-Gracia and Sánchez-Andújar 2007; Mishra and McConaughy 1999). The unique structure in family firms allows the family owners to influence the firm’s strategy with their personal preferences or objectives. Therefore, it is particularly important to understand internal drivers of financing decisions in the specific context of a family firm.

We address this research gap and analyze factors which influence the use of financial instruments in privately held family firms. We investigate the impact of family specific factors such as goals of the family as well as corporate governance structures on the use of different
financial instruments including retained earnings, private equity and silent partnerships. Thereby, we contribute to a better understanding of financing decisions in family firms and demonstrate the necessity to include family firm specific characteristics in the analysis of the use of financial instruments.

2. Theoretical background and hypotheses

2.1. Family specific goals and corporate governance structures

In traditional finance theories, it is usually not analyzed how financial decisions are made within the firm as the company is treated as a managerial black box (Barton and Gordon 1987). On the contrary, scholars adopting the strategy paradigm have called for a more holistic analysis of financing decisions within firms. They account for complex dependencies between the goals of the management as well as owners of a company and the decision for certain financial instruments (Barton and Gordon 1987; Gallo, Tàpies, and Cappuyns 2004). This can be expected to be particularly relevant for family firms as they are characterized by complex dependencies between the family and the company (Wu, Chua, and Chrisman 2007). Hence, their financing decisions are the result of multidimensional decision making processes which have to take account of the multifaceted preferences of the parties involved. Therefore, we set out to analyze the role of internal factors in deciding for or against different financial instruments in family firms.

Family firms are usually defined by the strong influence of the family on the company. This influence usually stems from the majority ownership of the company in the hands of the family. In addition, family members often have an important role in the management or supervisory board of the firm (Klein 2000; Astrachan and Shanker 2003; Sharma 2004). The system of the family and the system of the company are intertwined and the complex goals of different family members have an influence on the strategy in a company, but also on operational decisions (Sharma, Chrisman, and Chua 1997). Therefore, the overall objective in a family firm
goes beyond maximizing profits and also includes many non-financial objectives. Families are shown to follow a diverse set of goals with their role in a company (Tagiuri and Davis 1992; McCann, Leon-Guerrero, and Haley 2001; Westhead 2003). We are going to focus on six family specific goals which were found to be important: (i) independence and control, (ii) financial security, (iii) low financial risk, (iv) company growth, (v) long term orientation and (vi) social responsibility.

An important goal for family firms is to be independent and to have full control over the company as external influence could prevent them from pursuing family values. Therefore, the objectives independence and control are the basic prerequisite for achieving other family specific goals. In addition, strong power of the family can increase efficiencies and flexibility in operational and financial decisions as the interests within a family are usually more aligned compared to the interests of external parties (Levin and Travis 1987; Kets de Vries 1993; Gersick et al. 1997).

Another objective for families is to secure their financial situation through their family business. Particularly in the initial stages of company development, family owners often invest a high portion of their personal wealth into the company. Once the family firm is established and realizes stable earnings, the family owners then expect to be rewarded for their input through dividends, salaries or cash withdrawals. Their aim is to reach and maintain a certain standard of living and to secure financial flexibility (Tagiuri and Davis 1992; Ward 1997; McCann, Leon-Guerrero, and Haley 2001; Yilmazer and Schrank 2006).

In the long term, a large share of family wealth usually remains tied to the company and the family has only limited diversification opportunities for their financial resources. A negative company development hence has a high impact on the family wealth and may lead to liquidity problems in the family. In addition, the family invests a large portion of its human capital into the company through family employment. Therefore, family firms aim to lower the overall risk
of the company and show a higher risk aversion compared to non-family firms (McMahon and Stanger 1995; Mishra and McConaughy 1999).

Company growth in order to secure and gain market share is also an important goal for family firms. Family firms have to grow in the long term to be able to fulfil the demands of a growing family (Ward 1997; Gersick et al. 1997). However, it can also be argued that family firms shy away from high company growth to sustain their independence and, therefore, they rather follow a conservative approach to company development with moderate company growth (Poutziouris 2001). The conflict between growth and independence becomes apparent if an external financing, particularly equity financing, is required to finance growth because this type of financing is usually accompanied with a loss in control.

In a family firm, the owner family is willing to support the company development in the long term through investment of financial as well as human resources. The so called patient capital of a family is an important source of competitive advantage for family firms (Sirmon and Hitt 2003). Family firms have the goal of long term orientation because they aim to hand down the company to the next generation (James 1999). The company does not only represent an investment or employment opportunity, but also represents family tradition and capability (Le Breton-Miller and Miller 2006).

Family firms often feel socially responsible to secure the long term existence of their company and, thereby, to protect the jobs of their employees (Uhlner, van Goor-Balk, and Ma-surel 2004; Stavrou, Kassinis, and Filotheou 2007). For family owners, employee satisfaction in their daily work life is of high priority to increase employee retention, but also because their reputation in society is important – particularly if the company name entails the family name (Dyer and Whetten 2006).

We have identified six key family specific goals and we are going to build on these goals to formulate hypotheses how they impact financing decisions in family firms. In addition to the complex goal structure, family firms are also characterised by a unique corporate governance
structure. We focus on three bodies in the corporate governance structure of family firms: (i) ownership, (ii) management board and (iii) supervisory board.

Ownership of family firms is usually highly concentrated on the family. For Germany, it was shown that in a large majority of family firms the family holds 100% of the equity (Klein 2004). On the one hand, this concentrated ownership gives the family the power and incentive to monitor and control the management closely (Shleifer and Vishny 1997; Blanco-Mazagatos, de Quevedo-Puente, and Castrillo 2007). On the other hand, the family is in the position to abuse its role and make decisions which serve only their own interest and are not necessarily in the interest of the company (Claessens et al. 2002). Furthermore, without any non-family owners the ownership structure may lack diversity in experience with operational and/or financial decisions (Le Breton-Miller and Miller 2006). In this context, the active generation and the number of family owners are relevant. With each succession from one generation to the next, the number of family owners is likely to increase due to the increasing family size. Therefore, the ownership structure becomes more complex. For instance, in a more fragmented ownership base of a fourth generation family firm, each single family owner has less decision power compared to a more concentrated ownership base in a first generation family firm. The individual goals of family owners can differ which may lead to conflicts (Lubatkin et al. 2005). In addition, in later generations it is likely that family owners have different roles with some being actively involved and others being mainly passive shareholders (Blanco-Mazagatos, de Quevedo-Puente, and Castrillo 2007). This can also imply a decreasing identification with the family firm in later generations (Karra, Tracey, and Phillips 2006). These circumstances may hinder the efficient control and monitoring of the company despite concentrated ownership in the hands of the family clan.

The management board in family firms can either consist of family members, of external managers or of a mixture of the two. KLEIN shows that in 44% of German family firms, exclusively family members sit on the management board and in only 14% exclusively external man-
agers (Klein 2004). Family firms often decide against external managers because they believe that the objective of external managers differs from family specific goals (Daily and Dollinger 1992). In addition, they may fear that false decisions of external managers are going to harm the family reputation even though the family was not responsible for them (Schachner, Speckbacher, and Wentges 2006). Furthermore, external managers may consider family firms to be a less attractive career option as their career possibilities are limited due to the dominant role of the family (Sirmon and Hitt 2003).

From the perspective of the family, the presence of external managers leads to a need for control mechanisms as the goals of the management may not be inline with family goals (Westhead and Howorth 2006). Principal-agent-relationships may emerge due to the separation of ownership and management (Jensen and Meckling 1976) and, hence, special mechanisms such as the establishment of a supervisory or advisory board may be required. However, in the light of the resource based view the inclusion of external managers can also broaden the heterogeneity and objectivity of managerial resources in the company.

Specific control mechanism may also be necessary in an all family member management board due to principal-agent-relationships. This is the case if the management board is characterized by one-sided altruism and free-riding family members (Schulze et al. 2001; Schulze, Lubatkin, and Dino 2003). In addition, the problem of self control exists in case of the union of ownership and management. However, in case the management board entails intrinsically motivated family members with similar objectives, stewardship structures are likely (Chrisman et al. 2007) and, hence, control mechanisms should be of minor importance or even counter productive.

In Germany, the two tier system requires the separation of executive directors in the management board from non-executive directors in a supervisory or advisory board. Depending on the legal form and the size of a company, a supervisory board is mandatory. For the German limited liability company GmbH, the most common legal form for privately held family firms, a
supervisory board has to be formed if the company has more than 500 employees. In addition, 
employee representation is required in case of a mandatory supervisory board. For companies 
with more than 500 and less than 2,000 employees, the supervisory board has to consist of one 
third of employee representatives. In companies with more than 2,000 employees, half of the 
members of the supervisory board have to be employee representatives (Wiedemann and Kögel 
2008). Companies with less than 500 employees may decide voluntarily to set up a non-
executive board which is then called advisory board and normally does not include employee 
representatives.

Despite different legal regulations across countries with a two tier system and a one tier 
system, the supervisory board or non-executive directors generally share the same main func-
tions of monitoring and advising the management board or executive directors (Hillman and 
Dalziel 2003). In a family firm, the supervisory/advisory board is often in a sandwich position 
between the family owner and the family manager who are either the same person or at least in 
close relations to each other. This makes it more difficult to monitor the family manager (Klein 
2005). Furthermore, family owners often decide to appoint family members or external parties 
who are in friendship or good business terms with the family to the supervisory/advisory board 
(Schulze, Lubatkin, and Dino 2003). It is questionable whether the supervisory/advisory board 
then fulfils the monitoring function (Corbetta and Salvato 2004), especially in case of a volun-
tary advisory board. Apart from the controlling function, the supervisory/advisory board is also 
expected to advise the management by using their own capabilities and networks (Hillman and 
Dalziel 2003). From a resource based view, the supervisory/advisory board can therefore add 
important human resources to a company. Furthermore, the supervisory/advisory board can 
potentially act as a mediator between different parties. Conflicts between family managers and 
external managers might be easier to solve with the presence of another, third party 
(Blumentritt, Keyt, and Astrachan 2007). In order to fulfil the advisory function, trust between 
the family members and the members of the supervisory/advisory board is required. Existing
ties to the members of the supervisory/advisory board can be helpful to establish this trust and to foster the advisory function, but at the same time existing ties are likely to make the monitoring function more difficult (Klein 2005).

Based on the family specific goals as well as corporate governance structures in family firms, we formulate hypotheses on how they influence the decision to use certain financial instruments including retained earnings, private equity and silent partnerships.

2.2. Use of retained earnings

According to a number of descriptive studies, retained earnings as a form of internal equity financing are most often used to finance family firms (Dunn and Hughes 1995; Ou and Haynes 2006). This preference confirms pecking order theory which postulates that internal financing is preferred over external forms of financing as they often lead to undervaluation because of informational asymmetries between the company and external capital providers (Myers and Majluf 1984). However, particularly in family firms with their unique objectives and corporate governance structure other reasons may also call for the use of retained earnings.

Family specific goals

The preference for retained earnings can also be explained with the goal of independence and control in family firms. The company remains independent from external debt or equity providers if it relies on this internal form of financing (Romano and Ratnatunga 1994). Therefore, we hypothesize:

*Hypothesis 1.1: The goal of independence and control positively influences the use of retained earnings in family firms.*

In general, earnings can be used for different purposes and in addition to using them as an internal form of financing e.g. for growth investments, they can also be paid out as dividends. Family owners expect to be financially rewarded for taking over the entrepreneurial risk and to
be able to secure a certain standard of living (Ward 1987). The financial expectation of the family competes with the capital requirements of the company (Dreux 1990). A dividend policy in favour of the family can therefore hinder opportunities to use retained earnings. Hence, we postulate:

*Hypothesis 1.2: The goal of financial security of the family negatively influences the use of retained earnings in family firms.*

Family firms often follow the goal of lowering their financial risk exposure and, as a consequence, they may follow a conservative approach of financing through the use of retained earnings (McConaughy, Matthews, and Fialko 2001). The company is then not burdened by additional interest payments or debt repayments and no additional equity provider with dividend or payout expectations comes into play. Therefore, we posit:

*Hypothesis 1.3: The goal of lowering the financial risk positively influences the use of retained earnings in family firms.*

The objective of company growth is also likely to influence the use of retained earnings in family firms. On the one hand, a growth strategy may lead to the policy that a large portion of earnings is going to be used to finance the growth and the family, therefore, foregoes receiving dividends or pay-outs (Adams et al. 2004). On the other hand, a growth strategy may also be accompanied by higher leverage (Mizruchi and Stearns 1994). As earnings are usually volatile and not a secure, long term source of financing, a growth strategy usually can not solely rely on the use of retained earnings and often requires additional debt financing (Kotey 1999). Due to tax deductible interest payments, this is going to lower the available earnings and the opportunity to use them as an internal form of financing is squeezed. Hence, we formulate two opposing hypotheses:

*Hypothesis 1.4a: The goal of company growth positively influences the use of retained earnings in family firms.*
Hypothesis 1.4b: The goal of company growth negatively influences the use of retained earnings in family firms.

The goal of long term orientation is likely to lead to a family policy towards reinvesting earnings into the company instead of extracting them for private use of the family (Sirmon and Hitt 2003). A focus on social responsibility is also likely to manifest itself in a company focused policy on the use of earnings instead of a focus on increasing the personal wealth of the family (Sirmon and Hitt 2003). Therefore, we postulate:

Hypothesis 1.5: The goal of long term orientation positively influences the use of retained earnings in family firms.

Hypothesis 1.6: The goal of social responsibility positively influences the use of retained earnings in family firms.

Corporate governance structures

The use of earnings as internal form of financing competes with the use of earnings as dividends to family members. With an increasing number of family owners in later generations, the absolute amount of expected payouts to the family is going to increase. In addition, a higher number of passive family owners is likely to alter the family’s overall identification with the company. With a larger set of owners, a high portion of them may focus less on the company and put more emphasize on maximizing their own return (Gersick et al. 1997). Therefore, we postulate:

Hypothesis 1.7: The number of family owners negatively influences the use of retained earnings in family firms.

The presence of external managers in the management board may lead to lower use of retained earnings. In case of low or no involvement of family members in the management board, the family is likely to not identify themselves strongly with the company and, hence, their focus lies on gaining high dividends which decrease the share of earnings available to use as internal financing (Davis, Schoorman, and Donaldson 1997). Furthermore, a management board domi-
nated by external managers can create agency problems as the managers act as agent with different objectives than the family as principal (Westhead and Howorth 2006). A policy towards paying out a large portion of earnings can then, similar to higher leverage, act as a mechanism to discipline the management towards increasing efficiencies in the company. Hence, we posit:

\textit{Hypothesis 1.8: The presence of external members on the management board negatively influences the use of retained earnings in family firms.}

2.3. Use of private equity

As financial investors, private equity firms invest external equity in private or public companies with the aim to increase the value of their equity share and to then create a return upon their exit (Wright and Robbie 1998). For family firms, private equity is an alternative way of external equity financing which offers in addition to financial resources non-financial support from the private equity firms. However, many family firms shy away from private equity even though the structure of this form of financing is highly flexible and can range from majority to minority investments (Achleitner, Schraml, and Tappeiner 2008). The reasons for reservations against private equity are manifold and also include psychological barriers as well as negative perceptions from the media (Poech, Achleitner, and Burger-Calderon 2005). Our aim is to shed more light on family firm specific characteristics which foster or hinder the use of private equity.

\textbf{Family specific goals}

An important objection against private equity lies in the loss of family control over the business. Private equity firms become new shareholders of the company and usually receive additional information, control and liquidation rights. Particularly in majority investments this implies an extreme reduction in the independence and control of the family (Easterwood, Seth, and Singer 1989; Berg and Gottschalg 2005). But also in minority investments, private equity
firms often gain special control or veto rights and the family has to share the control over the company (Achleitner, Schraml, and Tappeiner 2008). Therefore, we posit:

*Hypothesis 2.1: The goal of independence and control negatively influences the use of private equity in family firms.*

In contrast, the family goal to foster company growth can lead to a higher preference for the use of private equity. Sustainable, long term growth often requires investments which cannot be financed through internal forms of financing. In comparison to debt financing, private equity offers the advantage of a positive capital structure effect due to the increase in equity (Berggren, Olofsson, and Silver 2000). In addition, private equity firms do not only provide financial resources, but also non-financial support for the family firm. By giving access to their experience and networks, private equity firms can be helpful in realizing company growth (Poutziouris 2001; Upton and Petty 2000). Hence, we hypothesize:

*Hypothesis 2.2: The goal of company growth positively influences the use of private equity in family firms.*

The goal of long term orientation in family firms is not in line with the limited time horizon of a private equity firm. They aim to realize an exit after three to five years after their investment and this exit poses a threat to the continuity and long term orientation in family firms. The form of exit highly depends on external circumstances, such as the current status of public capital markets and the merger environment (Wright et al. 2008). Therefore, the type of exit usually remains unclear until shortly prior to the actual exit. In some cases, families arrange a call option to be able to buyback the shares from the private equity firms (Achleitner et al. 2008; Achleitner, Schraml, and Tappeiner 2008). However, they are not common and families are then often not in the position to exercise the option. In addition, the focus on realizing a return in the mid term is not in line with the long term approach of family firms towards value generation (Achleitner, Schraml, and Tappeiner 2008). Hence, we propose:
Hypothesis 2.3: The long term orientation negatively influences the use of private equity in family firms.

In regard to the goal of social responsibility, the use of private equity can also be problematic. The aim of private equity firms is often to create value through increasing efficiencies in the companies they invest in. It is then likely that organizational slack is reduced, but this slack offers some flexibility to safeguard employment even in difficult circumstances (Fox and Marcus 1992). However, social responsibility can also imply that family owners focus on safeguarding company survival and private equity may be the last resort to do so. In financial distress, despite initial objections family owners may therefore turn to private equity. Following pecking order theory, private equity is the least preferred option, but in certain situations it can be the only option available to the family (Berggren, Olofsson, and Silver 2000). Therefore, we propose two opposing hypotheses:

Hypothesis 2.4a: The goal of social responsibility positively influences the use of private equity in family firms.

Hypothesis 2.4b: The goal of social responsibility negatively influences the use of private equity in family firms.

Corporate governance structures

Following the resource based view, a supervisory/advisory board can broaden the pool of human resources of the company. In a family firm, a supervisory/advisory board with additional financial experience is potentially able to reduce reservations of the family against less conservative forms of financing such as private equity (Poutziouris 2001; Poech, Achleitner, and Burger-Calderon 2005). The supervisory/advisory board can then act as mediator between the family and private equity firms. In addition, an existing supervisory/advisory board may serve as positive signal for interested private equity firms (Hillman and Dalziel 2003). Hence, the existence of a supervisory/advisory board may foster the use of private equity. However, an existing supervisory/advisory board may also decrease the likelihood of using private equity. A supervi-
sory/advisory board which provides the management with helpful advice and contacts and which monitors the company closely may already offer the required non-financial support to the management (Achleitner, Schraml, and Tappeiner 2008). Therefore, the advantage of private equity firms as smart money providers is less relevant and private equity would be a less attractive option. Hence, we formulate two opposing hypotheses:

**Hypothesis 2.5a:** The existence of a supervisory/advisory board positively influences the use of private equity in family firms.

**Hypothesis 2.5b:** The existence of a supervisory/advisory board negatively influences the use of private equity in family firms.

2.4. Use of silent partnerships

Mezzanine capital describes all hybrid forms of financing which can not be clearly classified as equity or debt because they have characteristics of both (Tirole 2006). We focus on the silent partnership as equity linked mezzanine capital. The silent partner provides the company with equity and participates in its profits, but he is not explicitly involved in the management. However, he has the right to get access to annual reports of the company (Achleitner, Schraml, and Tappeiner 2008). It remains to be analyzed how family specific goals and corporate governance structures influence the use of silent partnerships.

**Family specific goals**

Apart from the access to annual reports of the company, a silent partner usually has no further control rights. The independence and control of the family is therefore safeguarded to a high degree. Particularly in comparison to a private equity investment, the silent partnership has the advantage of still leading to a positive capital structure effect, but without the loss of control as in a private equity investment (Achleitner, Schraml, and Tappeiner 2008). Therefore, we posit:
Hypothesis 3.1: The goal of independence and control positively influences the use of silent partnerships in family firms.

The goal of financial security of the family can also have an impact on the decision to use a silent partnership. The profit participation of the silent partnership can be flexibly designed, but usually it entails a fixed rate of return and a flexible return depending on the profits. Both, the fixed and variable financial obligations can decrease the financial flexibility and liquidity of the family. Hence, we propose:

Hypothesis 3.2: The goal of financial security of the family negatively influences the use of silent partnerships in family firms.

Family firms with the goal of company growth are likely to not only rely on volatile internal forms of financing, but also to use external capital sources. Silent partnerships are often used in this respect to finance growth projects for which a debt financing is not suitable or available (Coleman and Carsky 1999; Cassar and Holmes 2003). Therefore, we hypothesize:

Hypothesis 3.3: The goal of company growth positively influences the use of a silent partnership in family firms.

Following similar arguments as for private equity, the goal of social responsibility may enforce or hinder the use of silent partnerships. The ongoing return expectations of the silent partner may hinder a company policy focussed on long term survival of the company and securing employment (Berman et al. 1999). However, in certain circumstances the company may be in desperate need of external financing to keep up the operations and the family is then likely to also consider alternative ways of financing it would otherwise disregard. Hence, we test two opposing hypotheses:

Hypothesis 3.4a: The goal of social responsibility positively influences the use of silent partnerships in family firms.

Hypothesis 3.4b: The goal of social responsibility negatively influences the use of silent partnerships in family firms.
Corporate governance structures

A silent partner is usually entitled to a fixed rate of return on his investments and, in addition, expects to receive variable return based on the company’s earnings. The payments to the silent partner reduce the amount available for dividends to straight equity holders (Brezski et al. 2006). With an increasing number of family owners in a company, this can lead to reservations against this type of financing because the family owners then generally put more emphasis on maximizing their own return (Miller and Le Breton-Miller 2006). Therefore, we hypothesize:

*Hypothesis 3.5: The number of family owners negatively influences the use of silent partnerships in family firms.*

The payments to the silent partner can be interpreted as a mechanism to discipline external managers because it reduces the free cash flow available for investments. It thereby reduces the risk of over investments by the management and agency costs can be reduced. Therefore, we posit:

*Hypothesis 3.6: The presence of external managers positively influences the use of silent partnerships in family firms.*

Similar to the arguments presented for the use of private equity, an existing supervisory/advisory board can influence the preference for silent partnerships in two opposing directions. On the one hand, external members of the supervisory/advisory board can potentially reduce existing reservations against the silent partnership as a less conservative financing approach. Furthermore, a supervisory/advisory board may act as positive signal to potential silent partners who are then more likely to invest in the company. On the other hand, a supervisory/advisory board usually already fulfills a control function over the management which may make it less important to put additional discipline mechanisms, such as a mezzanine financing through a silent partnership, in place. Therefore, we formulate two opposing hypotheses:
Hypothesis 3.7a: The existence of a supervisory/advisory board positively influences the use of silent partnerships in family firms.

Hypothesis 3.7b: The existence of a supervisory/advisory board negatively influences the use of silent partnerships in family firms.

3. Sample description and methodology

Our study is based on a survey of German privately held family firms. The questionnaire included 22 questions in four categories: goals of the family, the use of different financial instruments, the corporate governance structure and general business statistics. The questionnaire was targeted towards family owners and the questions regarding family goals were specifically linked to overall family goals and not personal goals. Our aim was to capture the aggregated objectives of the family. Prior to sending out the questionnaire, we conducted a pre-test of it with three owners and managers of family firms to detect issues the respondents might have with filling it out (Bradburn, Sudman, and Wansink 2004) and to ensure that the time to fill out the questionnaire did not exceed 15 minutes.

We used the Hoppenstedt database and the member list of AlphaZirkel, an association of family firms in Germany, to compile a list of 1,818 German family firms. In mid 2007, we sent out the final questionnaire to family owners and, four weeks later, a follow-up via telephone was carried out in order to increase the response rate. Prior to the follow-up, initial checks of the representativeness of our sample showed high similarities with the large samples in IfM Bonn 2007 and Klein 2004, e.g. in terms of size, age and industry. However, we found that Bavaria was slightly overrepresented in the initial sample and, therefore, we concentrated our follow-up on other regions to avoid a geographic bias.

We received a total of 247 questionnaires which represents a response rate of 13.6%, but we were not able to use all of them. Our aim was to ensure that in our sample the family has a relevant influence on company policies. We included companies in which the family either held
100% of the ownership and/or had majority control over the management or supervisory board (Klein 2000). In addition, we excluded publicly listed companies and companies from the financial sector. We were able to identify a total of 237 questionnaires representing a response rate of 13.0%. However, due to missing data we were only able to use 195 questionnaires for the analysis on the financial instruments presented here (response rate 10.7%).

Our analysis is focused on three dependent variables: (1) use of retained earnings (Use_RE), (2) use of private equity (Use_PE), and (3) use of silent partnership (Use_SP). All three variables are binary variables with one representing the current use of the instrument and zero representing the non-use.

As independent variables, we use different variables representing the family specific goals as well as corporate governance structures. As independent variables for family objectives we include independence and control (G_Control), financial security (G_FinSecurity), low financial risk (G_LowRisk), company growth (G_Growth), long term orientation (G_LongTerm) and social responsibility (G_SocialResp). The importance of these goals for the family was surveyed using a nine point likert scale (1 = highly irrelevant, 9 = highly relevant). We decided for this broad scale to allow for sufficient nuances and higher variance in the replies (Alwin 1997). Furthermore, we include three independent variables representing the corporate governance structure: number of family owners (CG_FamOwners), presence of external managers on the management board (CG_ExtManagers) and presence of a supervisory/advisory board (CG_SupBoard). While the variable for the number of family owners is a metric variable, the two other corporate governance specific variables are binary variables with one indicating the presence of external managers or a supervisory/advisory board and zero indicating the non-presence.

Furthermore, we use different control variables to take account of potential differences due to company size, age, industry and level of financing need. In order to control for company size, we use the natural logarithm of the revenue in the last financial year as given by the re-
spondents (Revenue\_ln). The company age was also surveyed in the questionnaire and represents the number of years since the founding date (Age). The level of financing need is likely to influence the choice of financial instruments. Following pecking order theory, companies in financial distress may decide for a certain financial instruments because they require additional financing and have no alternative. We use two control variables as proxy for the level of financing need. First, we use the level of financial distress (FinDistress) which was surveyed based on a seven point likert scale (1 = very little, 7 = very high). Second, we refer to revenue growth over the past three years as compound annual growth rate to include a proxy for the level of internal financing ability (RevGrowth). We want to exclude industry effects and, therefore, differentiate between three industries: manufacturing, service and retail. In our regression analysis, we include two binary industry variables for manufacturing industries (Manufact\_Ind), and service industries (Service\_Ind). Table 1 shows descriptive statistics of our dependent, independent and control variables.

Our aim is to explain the use of different financial instruments in family firms and, more specifically, the impact of family specific goals and corporate governance structures on the use of retained earnings, private equity and silent partnerships. We follow a rather explorative approach and, hence, we do not try to find the most efficient model to explain our dependent variables. Therefore, we include all independent and control variables which we have identified in our models in order to then support or reject our hypotheses. We do not try to optimize our statistical models in a second step through the exclusion of certain variables. We use binary logit regressions to analyze the use of different financial instruments.

As recommended for questionnaire based studies, we undertook a number of robustness tests. First, we checked for an early- versus late respondent-bias in our data. It can be expected that late respondents are similar to companies who do not respond at all. Therefore, this tests indirectly checks whether a non-response-bias exists (Oppenheim 1966). Based on a discriminant analysis, we tested whether the respondents prior to the follow-up were significantly dif-
ferent to the respondents thereafter. The difference in means analysis did not reveal any significant differences between the two groups.

Furthermore, we tested for multicollinearity in our data. As many of the variables are dichotomous or categorical, we use Kendall’s tau to analyze correlations. Table 2 depicts the correlation matrix and reveals high correlations only for our industry variables. This correlation analysis only reveals bivariate relationships; so we also checked tolerance and variance inflation factors as additional indicators for multicollinearity (Studenmund 2006), and we did not find any indication for multicollinearity problems in our data. Finally, we tested for extreme values and found it to be necessary to use the natural logarithm for the variable revenue because we found extreme values which might otherwise distort our results.

4. **Empirical results on the use of financial instruments**

4.1. Retained earnings

Table 3 provides the results of our binary logistic regression with the use of retained earnings as dependent variable. Overall, the model is significant at the 0.05 level and has a Nagelkerke’s $R^2$ of 0.33 and, therefore, we assume to be able to show relevant drivers for the use of this financial instrument in family firms.

The goal of social responsibility has a significant positive influence ($B=0.758; p=0.005$) on the use of retained earnings and we can support Hypothesis 1.6. Furthermore, the results show that the goal to lower financial risk also has a positive impact on the use of retained earnings ($B=0.480; p=0.028$) and support Hypothesis 1.3. Both of these goals represent a sustainable and conservative policy focussed on the interests of the company which manifests itself in the use of retained earnings.

In contrast, the goal of company growth ($B=-0.470; p=0.077$) as well as the presence of external managers ($B=-1.164; p=0.080$) have a significantly negative influence on the use of retained earnings and we can support Hypothesis 1.4b (reject Hypothesis 1.4a) and 1.8.
ing the growth strategy, there could be two rationales for the lower importance of retained earnings. Retained earnings may not be sufficient in order to finance a growth strategy as they are volatile and insecure. Furthermore, alternative financial instruments required for growth investments such as a debt financing may lower the retained earnings due to interest and debt repayments which will then lower the earnings available for internal financing. The presence of external managers seems to lower the willingness of the family to waive dividends or pay-outs in order to reinvest earnings into the company.

For all other variables, we did not find significant relationships. For the goals of financial security, long term orientation and the number of family owners, the coefficient is negative as predicted in our hypotheses, but not significant. Therefore, we have to reject Hypothesis 1.2, 1.5 and 1.7. Surprisingly, the coefficient for the goal of independence and control is negative, but again not significant so that we also have to reject Hypothesis 1.1.

The control variables company size (B=0.822; p=0.031) and revenue growth (B=1.025; p=0.019) have significant positive influence on the use of retained earnings. This is an intuitive result because both of them are important factors in order to generate earnings which are high enough after dividends to be reinvested into the company.

4.2. Private Equity

The results of the binary logit regression with the use of private equity as dependent variable are shown in Table 4 and project an overall model significance at the 0.01 level. The Nagelkerke’s $R^2$ of 0.334 gives an indication that we are able to find drivers of the decision to use private equity.

At first glance surprisingly, the goal of social responsibility has a highly significant positive impact on the use of private equity (B=1.094; p=0.003) supporting Hypothesis 2.4a and rejecting Hypothesis 2.4b. It is likely that a strong focus on social responsibility and, hence, the company survival leads to financial decisions which are foremost in the interest of the company.
and interests of the family which may call for other financial instruments are less important. This argument is underlined by the highly significant influence of the control variable of the level of financial distress (B=0.509; p=0.004). In line with the pecking order theory, family firms seem to turn to private equity particularly often if the company is facing difficult circumstances and, possibly, no other alternative is available. Using private equity as a last resort may then safeguard the existence of the company.

Another interesting result can be seen in the impact of the existence of a supervisory/advisory board which has a negative influence on the use of private equity (B=−1.030; p=0.101). Through an existing supervisory/advisory board the need for additional monitoring and support from private equity firms may become less relevant. This argument seems to be stronger than the argument that external board members may reduce negative perceptions towards private equity or that a supervisory/advisory board may act as a positive signal for private equity firms. Hypothesis 2.5a is rejected and, with favourable consideration of the significance level, Hypothesis 2.5b is supported.

For the remaining family specific goals, we were not able to find significant relationships. Even though the coefficients are in line with our hypotheses, the negative influence of the goal of independence and control (Hypothesis 2.1), the positive influence of the goal of company growth (Hypothesis 2.2) and the negative influence of the long term orientation goal (Hypothesis 2.3) are all not significant.

4.3. Silent partnership

The use of silent partnerships was also analyzed based on a binary logit regression and its results are presented in Table 5. The model has a high overall level of significance of 0.000 and the Nagelkerke’s R² of 0.393 indicates that we can identify important factors to explain the use of silent partnerships.
The goal of independence and control has a significant positive influence on the use of silent partnerships ($B=0.443; p=0.022$). Family firms seem to highly appreciate that a silent partnership, particularly in comparison to private equity, is accompanied with lower levels of loss in control so that we can support Hypothesis 3.1. Furthermore, we find a significant negative relationship between the goal of financial security and the use of silent partnerships ($B=-0.427; p=0.082$) and can support Hypothesis 3.2. From the perspective of the family, the continual return expectation of a silent partner lowers the financial flexibility and liquidity of the family.

The coefficients of the remaining independent variables are not significant and we have to reject Hypothesis 3.3, 3.4a/b, 3.5a/b, 3.6 and 3.7a/b. Similar to our results for private equity, the coefficient of the goal of social responsibility is positive, but not significant for the use of silent partnerships. Furthermore, the control variable of financial distress has a highly significant positive influence ($B=0.640; p=0.000$) which is in line with pecking order theory. Under negative circumstances, the family is going to turn towards financial instruments which they would probably not consider otherwise in order to safeguard the existence of the company. The control variable for the company size also has a significant positive influence on the use of silent partnerships ($B=0.868; p=0.000$) and can be explained with a minimum financing volume which is usually required to close a silent partnership.

5. Conclusion

With our paper, we make two main contributions. First, we theoretically analyze in detail how internal factors of privately held family firms such as family specific goals and corporate governance structures shape financial decisions. We follow a holistic view of how financial decisions are made and we try to depict the managerial black box which is usually assumed in financial theory.

Second, we are able to explore our conceptual findings empirically and are able to show important relationships. Our results show that parallel existing goals of privately held family
firms can result in diverging financing preferences. Retained earnings are used more often if the family has the goal to minimize risk or to guarantee company survival and less often if the family goal is focused on company growth. Private equity is more often used if the company is in financial distress and if the family is focused on safeguarding the company’s existence. A silent partnership is more often used if independence and control is a main goal of the family and less often used if the family is focused on providing financial support for family members.

Furthermore, we find that the impact of corporate governance structures on financing decisions is mainly driven by the existence of an advisory board and the involvement of external managers in the management board. Retained earnings are less often used if an external manager is part of the management board and private equity is less often used in case a supervisory/advisory board already exists. Table 6 gives an overview over our hypothesis and summarizes the results.

Our results can help family firms to analyze and to critically assess their internal drivers of financial decisions. In addition, our results can help external capital providers to understand patterns underlying the decision making process in family firms and consultants can use our findings to support family firms with their complex structures to decide for the most suitable financing alternative. An insightful management of the proposed determinants of financial decisions in family firms can allow for an adequate consideration of the manifold objectives of the family and a long term survival of the family firm.

6. Reference list


Table 1: Descriptive statistics

This table reports descriptive statistics for the variables used in our multivariate tests.

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Mean</th>
<th>Median</th>
<th>S.D.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of retained earnings (Use_RE)</td>
<td>191</td>
<td>0.95</td>
<td>1.00</td>
<td>0.23</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Use of private equity (Use_PE)</td>
<td>195</td>
<td>0.07</td>
<td>0.00</td>
<td>0.25</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Use of silent partnership (Use_SP)</td>
<td>192</td>
<td>0.11</td>
<td>0.00</td>
<td>0.31</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Independent variables - family specific goals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence and control (G_Control)</td>
<td>195</td>
<td>7.33</td>
<td>8.00</td>
<td>1.93</td>
<td>1.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Financial security (G_FinSecurity)</td>
<td>195</td>
<td>7.79</td>
<td>8.00</td>
<td>0.92</td>
<td>4.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Low financial risk (G_LowRisk)</td>
<td>195</td>
<td>6.41</td>
<td>7.00</td>
<td>1.49</td>
<td>2.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Company Growth (G_Growth)</td>
<td>195</td>
<td>6.81</td>
<td>7.00</td>
<td>1.26</td>
<td>3.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Long term orientation (G_LongTerm)</td>
<td>195</td>
<td>7.58</td>
<td>8.00</td>
<td>0.96</td>
<td>4.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Social responsibility (G_SocialResp)</td>
<td>195</td>
<td>6.65</td>
<td>7.00</td>
<td>1.39</td>
<td>2.00</td>
<td>9.00</td>
</tr>
<tr>
<td><strong>Independent variables - corporate governance structure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of family owners (CG_FamOwners)</td>
<td>195</td>
<td>3.71</td>
<td>2.00</td>
<td>7.52</td>
<td>1.00</td>
<td>100,00</td>
</tr>
<tr>
<td>Presence of external managers (CG_ExtManage)</td>
<td>195</td>
<td>0.53</td>
<td>1.00</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Presence of supervisory board (CG_SupBoard)</td>
<td>195</td>
<td>0.37</td>
<td>0.00</td>
<td>0.48</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue in the last financial year</td>
<td>195</td>
<td>192.51</td>
<td>65.00</td>
<td>550.76</td>
<td>1.00</td>
<td>7,000.00</td>
</tr>
<tr>
<td>Age</td>
<td>195</td>
<td>69.91</td>
<td>59.00</td>
<td>51.90</td>
<td>4.00</td>
<td>410.00</td>
</tr>
<tr>
<td>Level of financial distress (FinDistress)</td>
<td>195</td>
<td>2.51</td>
<td>2.00</td>
<td>1.64</td>
<td>1.00</td>
<td>7.00</td>
</tr>
<tr>
<td>CAGR of revenue (RevGrowth)</td>
<td>195</td>
<td>0.10</td>
<td>0.09</td>
<td>0.14</td>
<td>-0.54</td>
<td>0.95</td>
</tr>
<tr>
<td>Manufacturing industries (Manufact_Ind)</td>
<td>195</td>
<td>0.66</td>
<td>1.00</td>
<td>0.48</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Service industries (Service_Ind)</td>
<td>195</td>
<td>0.18</td>
<td>0.00</td>
<td>0.38</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Retail/Wholesale (Retail_Ind)</td>
<td>195</td>
<td>0.16</td>
<td>0.00</td>
<td>0.37</td>
<td>0.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Table 2: Correlation matrix

This table presents the correlation coefficients based on Kendall’s tau between the variables used for our multivariate tests. The sample consists of 195 surveys of German family firms.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Correlations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Kendall’s tau</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G_Control</td>
<td>.141*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G_FinSecurity</td>
<td>.141*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G_LowRisk</td>
<td>.071</td>
<td>.200**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G_Growth</td>
<td>.078</td>
<td>.179**</td>
<td>.046</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G_LongTerm</td>
<td>.168**</td>
<td>.480**</td>
<td>.193**</td>
<td>.129*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G_SocialResp</td>
<td>.180**</td>
<td>.246**</td>
<td>.274**</td>
<td>.272**</td>
<td>.200**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CG_FamOwners</td>
<td>.134*</td>
<td>-.093</td>
<td>.013</td>
<td>.001</td>
<td>.063</td>
<td>.038</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CG_ExtManagers</td>
<td>-.034</td>
<td>-.107</td>
<td>-.075</td>
<td>.147*</td>
<td>-.120</td>
<td>-.063</td>
<td>.118*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CG_SupBoard</td>
<td>-.053</td>
<td>-.042</td>
<td>-.130*</td>
<td>-.060</td>
<td>-.092</td>
<td>.157**</td>
<td>.122*</td>
<td>-.279**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue_In</td>
<td>.198**</td>
<td>-.017</td>
<td>-.145**</td>
<td>.145**</td>
<td>-.015</td>
<td>-.060</td>
<td>.196**</td>
<td>.177**</td>
<td>.303**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.139**</td>
<td>-.042</td>
<td>-.050</td>
<td>.009</td>
<td>-.013</td>
<td>.092</td>
<td>.286**</td>
<td>.132*</td>
<td>.115*</td>
<td>.273**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FinDistress</td>
<td>-.213**</td>
<td>-.083</td>
<td>-.058</td>
<td>-.011</td>
<td>.026</td>
<td>-.075</td>
<td>-.074</td>
<td>.061</td>
<td>-.036</td>
<td>-.133**</td>
<td>-.059</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RevGrowth</td>
<td>.034</td>
<td>.069</td>
<td>-.031</td>
<td>.260**</td>
<td>-.016</td>
<td>.048</td>
<td>-.009</td>
<td>.061</td>
<td>.141*</td>
<td>.216**</td>
<td>-.090</td>
<td>-.033</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufact_Ind</td>
<td>.060</td>
<td>-.032</td>
<td>-.045</td>
<td>.012</td>
<td>-.016</td>
<td>.014</td>
<td>.095</td>
<td>.219**</td>
<td>.139*</td>
<td>.130*</td>
<td>.164**</td>
<td>.057</td>
<td>-.038</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service_Ind</td>
<td>-.054</td>
<td>.008</td>
<td>.034</td>
<td>-.014</td>
<td>.040</td>
<td>.072</td>
<td>-.049</td>
<td>-.028</td>
<td>-.126</td>
<td>-.123*</td>
<td>-.169**</td>
<td>.037</td>
<td>.078</td>
<td>-.644**</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at the 5% level
** Significant at the 1% level
Table 3: Logit regression: Use of retained earnings

This table presents the results of the binary logit regression with the use of retained earnings as dependent variable.

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Coefficient B</th>
<th>Exp (B)</th>
<th>Standard error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>G_Control</td>
<td>-.329</td>
<td>.720</td>
<td>.269</td>
<td>.111</td>
</tr>
<tr>
<td>G_FinSecurity</td>
<td>-.146</td>
<td>.864</td>
<td>.240</td>
<td>.271</td>
</tr>
<tr>
<td>G_LowRisk</td>
<td>.480 **</td>
<td>1.616</td>
<td>.251</td>
<td>.028</td>
</tr>
<tr>
<td>G_Growth</td>
<td>-.470 *</td>
<td>.625</td>
<td>.330</td>
<td>.077</td>
</tr>
<tr>
<td>G_LongTerm</td>
<td>-.352</td>
<td>.704</td>
<td>.476</td>
<td>.230</td>
</tr>
<tr>
<td>G_SocialResp</td>
<td>.758 ***</td>
<td>2.134</td>
<td>.297</td>
<td>.005</td>
</tr>
<tr>
<td>CG_FamOwners</td>
<td>-.013</td>
<td>.987</td>
<td>.082</td>
<td>.437</td>
</tr>
<tr>
<td>CG_ExtManagers</td>
<td>-1.164 *</td>
<td>.312</td>
<td>.828</td>
<td>.080</td>
</tr>
<tr>
<td>Revenue_In</td>
<td>.822 **</td>
<td>2.276</td>
<td>.441</td>
<td>.031</td>
</tr>
<tr>
<td>Age</td>
<td>.000</td>
<td>1.000</td>
<td>.010</td>
<td>.485</td>
</tr>
<tr>
<td>FinDistress</td>
<td>-.131</td>
<td>.877</td>
<td>.231</td>
<td>.285</td>
</tr>
<tr>
<td>RevGrowth</td>
<td>1.025 **</td>
<td>2.787</td>
<td>.496</td>
<td>.019</td>
</tr>
<tr>
<td>Manufact_Ind</td>
<td>-1.138</td>
<td>.320</td>
<td>1.172</td>
<td>.166</td>
</tr>
<tr>
<td>Service_Ind</td>
<td>.366</td>
<td>1.441</td>
<td>1.321</td>
<td>.391</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-1.897</td>
<td>.150</td>
<td>5.058</td>
<td>.354</td>
</tr>
</tbody>
</table>

n 191
Significance of overall model (Chi²) .032 **
Nagelkerke’s R² .330

*p<0.1; **p<0.05; ***p<0.01
Table 4: Logit regression: Use of private equity

This table presents the results of the binary logit regression with the use of private equity as dependent variable.

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Coefficient B</th>
<th>Exp (B)</th>
<th>Standard error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>G_Control</td>
<td>-.203</td>
<td>.816</td>
<td>.184</td>
<td>.135</td>
</tr>
<tr>
<td>G_Growth</td>
<td>.017</td>
<td>1.017</td>
<td>.303</td>
<td>.478</td>
</tr>
<tr>
<td>G_LongTerm</td>
<td>-.073</td>
<td>.930</td>
<td>.324</td>
<td>.411</td>
</tr>
<tr>
<td>G_SocialResp</td>
<td>1.094 ***</td>
<td>2.987</td>
<td>.403</td>
<td>.003</td>
</tr>
<tr>
<td>CG_SupBoard</td>
<td>-1.030 (*)</td>
<td>.357</td>
<td>.809</td>
<td>.101</td>
</tr>
<tr>
<td>Revenue_In</td>
<td>.086</td>
<td>1.089</td>
<td>.280</td>
<td>.380</td>
</tr>
<tr>
<td>Age</td>
<td>-.020 **</td>
<td>.980</td>
<td>.012</td>
<td>.038</td>
</tr>
<tr>
<td>FinDistress</td>
<td>.509 ***</td>
<td>1.664</td>
<td>.192</td>
<td>.004</td>
</tr>
<tr>
<td>RevGrowth</td>
<td>.048</td>
<td>1.049</td>
<td>.381</td>
<td>.450</td>
</tr>
<tr>
<td>Manufact_Ind</td>
<td>-1.736 **</td>
<td>.176</td>
<td>.880</td>
<td>.024</td>
</tr>
<tr>
<td>Service_Ind</td>
<td>-1.668 *</td>
<td>.189</td>
<td>1.059</td>
<td>.058</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-7.771 **</td>
<td>.000</td>
<td>4.134</td>
<td>.030</td>
</tr>
</tbody>
</table>

n: 195

Significance of overall model (Chi²): .007 ***
Nagelkerke's R²: .334

*p<0.1; **p<0.05; ***p<0.01
Table 5: Logit regression: Use of silent partnerships

This table presents the results of the binary logit regression with the use of silent partnerships as dependent variable.

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Coefficient B</th>
<th>Exp (B)</th>
<th>Standard error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>G_Control</td>
<td>.443 **</td>
<td>1.557</td>
<td>.220</td>
<td>.022</td>
</tr>
<tr>
<td>G_FinSecurity</td>
<td>-.427 *</td>
<td>.653</td>
<td>.307</td>
<td>.082</td>
</tr>
<tr>
<td>G_Growth</td>
<td>-.209</td>
<td>.812</td>
<td>.243</td>
<td>.195</td>
</tr>
<tr>
<td>G_SocialResp</td>
<td>.254</td>
<td>1.289</td>
<td>.208</td>
<td>.111</td>
</tr>
<tr>
<td>CG_FamOwners</td>
<td>-.050</td>
<td>.951</td>
<td>.104</td>
<td>.315</td>
</tr>
<tr>
<td>CG_ExtManagers</td>
<td>-.298</td>
<td>.742</td>
<td>.565</td>
<td>.299</td>
</tr>
<tr>
<td>CG_SupBoard</td>
<td>-.030</td>
<td>.971</td>
<td>.615</td>
<td>.481</td>
</tr>
<tr>
<td>Revenue_In</td>
<td>.868 ***</td>
<td>2.381</td>
<td>.248</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>-.022 ***</td>
<td>.978</td>
<td>.008</td>
<td>.004</td>
</tr>
<tr>
<td>FinDistress</td>
<td>.640 ***</td>
<td>1.897</td>
<td>.171</td>
<td>.000</td>
</tr>
<tr>
<td>RevGrowth</td>
<td>.343</td>
<td>1.409</td>
<td>.341</td>
<td>.157</td>
</tr>
<tr>
<td>Manufact_Ind</td>
<td>-.647</td>
<td>.524</td>
<td>.756</td>
<td>.196</td>
</tr>
<tr>
<td>Service_Ind</td>
<td>-1.029</td>
<td>.357</td>
<td>.973</td>
<td>.145</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-7.399 **</td>
<td>.001</td>
<td>3.257</td>
<td>.012</td>
</tr>
</tbody>
</table>

n 192
Significance of overall model (Chi²) .000 ***
Nagelkerke's R² .393

*p<0.1; **p<0.05; ***p<0.01
Table 6: Overview of hypotheses and results

<table>
<thead>
<tr>
<th>dependent variables</th>
<th>Use_RE</th>
<th>Use_PE</th>
<th>USE_SP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hypothesis</td>
<td>Sig.</td>
<td>Hypothesis</td>
</tr>
<tr>
<td><strong>G_Control</strong></td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td><strong>G_FinSecurity</strong></td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td><strong>G_LowRisk</strong></td>
<td>+</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td><strong>G_Growth</strong></td>
<td>+</td>
<td>-</td>
<td>*</td>
</tr>
<tr>
<td><strong>G_LongTerm</strong></td>
<td>+</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td><strong>G_SocialResp</strong></td>
<td>+</td>
<td>***</td>
<td>+</td>
</tr>
<tr>
<td><strong>CG_FamOwners</strong></td>
<td>-</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td><strong>CG_ExtManagers</strong></td>
<td>-</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td><strong>CG_SupBoard</strong></td>
<td>+</td>
<td>-</td>
<td>(')</td>
</tr>
</tbody>
</table>

Supported hypotheses indicated in gray

*p<0,1; **p<0,05; ***p<0,01