Family Ownership as the Optimal Organizational Structure?

Christian Andres
University of Bonn
Chair of Banking and Finance
Adenauerallee 24-42
53113 Bonn
Germany
Tel. +49 228 739209
Fax +49 228 735924
andres@uni-bonn.de

February 2006

Family Ownership as the Optimal Organizational Structure?

ABSTRACT

Using panel data on 275 German exchange-listed companies I examine the relationship between founding-family ownership and firm performance. My results show that family firms are not only more profitable than widely-held firms but also outperform companies with other types of blockholders. However, the performance of family businesses is only better in firms where the founding-family is still active either in the executive or the supervisory board. The positive effect of family involvement is found to be strongest when the founder serves as CEO. These findings suggest that family ownership might be the optimal organizational structure to balance the two agency problems that minority shareholders are exposed to.

JEL Classification: G32, G34

Keywords: Family Firms, Ownership Structure, Blockholders, Agency Theory

I. Introduction

Recent empirical evidence suggests that founding-family ownership is associated with superior firm performance when compared to widely-held companies, both in terms of accounting performance and market valuation (Anderson and Reeb, 2003; Villalonga and Amit, 2004; Barontini and Caprio, 2005). This result is found to be particularly strong for founder-led companies. Obviously, families as large blockholders successfully mitigate the owner-manager agency problem described by Jensen and Meckling (1976). The effect thus seems to outweigh the possible counter-argument that large shareholders may use their position to extract private benefits at the cost of minority shareholders. However, empirical studies so far only show that family ownership leads to a better performance when compared to non-family firms. It remains unclear whether families as blockholders are more successful than other controlling shareholders.

In order to provide an answer to this question I examine a sample of 275 German listed companies from 1998 through 2004. The results show that firms with family blockholders outperform firms with other types of blockholders as well as widely-held firms. It thus appears that not only the blockholder position and the monitoring incentives it entails are relevant, but also the identity of the blockholder. In cross-sectional time-series regressions of performance measures on different blockholder types, family block ownership is the only variable showing positive and significant coefficients. The results are robust to alternative econometric specifications.

These findings are relevant for countries where a high percentage of firms have a dominant shareholder. In fact, several studies show that the image of the publicly traded company with a dispersed ownership structure, free-rider problems and the classical owner-manager conflict is not appropriate for most countries (Claessens et al., 2000; Faccio and Lang, 2002; La Porta et al., 1999). Widely-held corporations are primarily present in the U.S.,

the UK and in Japan, whereas concentrated ownership is typical for Western Europe and Asia. Family-controlled firms in particular are found to account for up to 60%-70% of all companies in these countries, with an average of roughly 30% in the study by La Porta et al. (1999). Given these findings, it is not surprising that previous studies on the U.S. do not specifically control for blockholdings. It is pretty obvious that in a capital market which is characterized by dispersed ownership structures, this is not an issue. Therefore, the German market provides an ideal environment to gain deeper insight into the performance of family-controlled firms as compared to companies controlled by other types of blockholders. To the best of my knowledge, this is the first large sample study examining the relationship between family shareholdings and firm performance in Germany.

In my study, family firms make up 37.5% of the sample. Families, on average, own voting rights of as much as 63.0% in their company. As one would expect, the average family share of cash flow rights is lower, at 48.7%. Moreover, results that are comparable to previous studies are consistent with prior evidence on the U.S. and other European countries. Based on accounting measures, firm performance turns out to be superior for family businesses with both, a family member (either founder or descendant) or a hired professional as CEO. However, a positive effect on market valuation can only be identified for founder-led firms.

The remainder of the paper is organized as follows. The next section provides a brief outline of the literature related to family firm performance. Section III focuses on the construction of the dataset and presents descriptive statistics as well as univariate results. Section IV contains the multivariate analysis based on different panel regressions. Section V concludes.

II. Related Literature

Founding-family ownership has long been regarded as a less efficient ownership structure when compared to widely-held firms. This view is primarily based on the assumption that large (and undiversified) shareholders might pursue non-profit maximising objectives whereas small and usually well-diversified investors choose investments that maximise the firms' residual cash flows (Fama and Jensen 1985). The potential costs of family ownership include various forms of private benefits: Demsetz and Lehn (1985) propose the term "amenity potential", standing for nonpecuniary income that does not (directly) come at the expense of profits. They name sports and media as two examples for industries with a particularly high amenity potential. Irrespective of a specific industry, a founder could derive pleasure from having a family member leading the company even though a professional manager might be better qualified. Moreover, a founder who has rendered outstanding services to the company in the past might not be called on to retire by his family or other minority shareholders even though he is no longer competent. According to Shleifer and Vishny (1997) this is one of the greatest costs that large shareholders can impose.

On the other hand, a high ownership concentration mitigates the conflicts of interests between managers and owners as suggested by Berle and Means (1932). Typically, families have invested a large part of their wealth in the company and are thus not well-diversified. Therefore, their incentive to control management should be particularly high. In many cases owner-manager conflicts are less likely to arise in the first place since the families are part of the executive board. Other possible benefits of family ownership arise from their long presence in the firm: The willingness to invest in favourable long-term projects due to a

longer investment horizon (Stein 1988, 1999) as well as positive reputation effects when dealing with external stakeholders (Anderson et al. 2003).[1]

These conflicting ideas have recently evoked a number of empirical examinations of the relationship between family ownership and firm performance. In a panel study on S&P 500 firms, Anderson and Reeb (2003) find family firms to perform better than non-family firms, both in terms of market and accounting measures. Their results point in the same direction as findings by McConaughy et al. (1998). Morck et al. (2000) show contradictory evidence for Canada, arguing that family ownership leads to poor financial performance.

When investigating family firm performance more closely, a so-called "founder effect" can be identified. Founders seem to have a special influence and put forth unique value-adding skills that lead to a better performance. Based on accounting performance measures, Anderson and Reeb's (2003) results indicate that family firms only perform better when a family member is in the position of CEO. Founder descendants as CEOs seem not to affect market performance.

For a sample of Fortune 500 firms, Villalonga and Amit (2004) find that family ownership creates value only when the founder serves as CEO or as chairman of the supervisory board with a professional CEO. Contrarily to Anderson and Reeb (2003), they find that firm value even declines when descendants serve as CEOs. The use of control mechanisms like multiple share classes, pyramids, cross-holdings or voting agreements have a negative effect on firm value, particularly in founder-led companies.

Concerning European evidence, Sraer and Thesmar (2004) show in a sample of French stock market-listed companies that family firms outperform widely held corporations. Their results hold for founder-CEO firms as well as for heir-managed firms. They explain this finding through implicit insurance contracts with the labour force in heir-managed firms: employment is less sensitive to industry shocks and as a consequence heirs pay lower wages.

[1] For a more extensive discussion on the potential costs and benefits of family ownership see Anderson and Reeb (2003).

Finally, in a cross-country study of Continental European firms, Barontini and Caprio (2005) confirm the finding that market valuation and operating performance are higher in founder-controlled corporations and at least not worse in descendant-controlled firms.

Turning the focus to Germany, empirical evidence is scarce. Ehrhardt et al. (2004) investigate a sample of 62 family and 62 non-family firms. They find family businesses to outperform non-family firms in terms of operating performance. However, the results imply a strong survivorship bias since they compare these firms over a 100 year time-span and thus require all firms to survive from 1903 till 2003.

III. Data

A. Data Sources and sample selection

The sample for this investigation is based on all companies listed on the official market (*Amtlicher Handel*) on the Frankfurt Stock Exchange on December, 31 1998. Banks and insurance companies were dropped due to problems calculating Tobin's q and a lack of comparability concerning other performance variables based on EBIT or EBITDA. Furthermore, four companies had to be excluded because they were already insolvent at the beginning of the sample period and liquidated only shortly afterwards. For the remaining companies, I collected data until the end of 2004. This procedure results in a final sample of 275 firms and 1,701 firm-year observations.

In order to classify these companies as family or non-family firms, data on the composition of executive boards (*Vorstand*), supervisory boards (*Aufsichtsrat*) as well as detailed information on the shareholder structure were manually collected from Hoppenstedt yearbooks. These books provide in-depth information about all market-listed German companies. Names of the board members were gathered for every other year, shareholdings on a yearly basis.

For some companies, the affiliation of board members to a family is not obvious at first sight. In particular for families with a long presence in the company, last names can be different from the founder's name due to marriages. In these cases, the family affiliation had to be confirmed by at least two publicly available sources (e.g. newspapers) or one official company publication (annual statement, ad hoc announcement, anniversary publication…). Accounting and share-price data as well as industry-classifications were taken from Datastream databases.

B. Family Firms

In order for a firm to qualify as a family business it has to meet at least one of the following two criteria: a) the founder and/or family members hold more than 25% of the voting shares, or b) if the founding family owns less than 25%[2] of the voting rights they have to be represented in either the executive or the supervisory board.

The term 'founder' requires some remarks concerning its exact meaning: First, a person is considered the founder if he or she founded the sample company or the predecessor company (in case of a change in the legal form).

Second, when a person acquires a majority stake in a company and runs the company as CEO, he/she is treated as a founder if he/she changes the company's operational business significantly. For instance, Stolberger Zink AG, formerly a mining company which gave up its business in the 1970s, was bought by Günter Minninger who then took over several telecom companies and set up a telecom business. In 1999, the name was changed to Stolberger Telecom AG. In the opposite case - a family business is taken over - it is no longer treated as a family firm, although the founding family might still have a stake in the new company.

[2] Holdings of more than 5% have to be registered with the German Financial Supervisory Authority (BaFin). Shareholdings of less than 5% - however reported in Hoppenstedt – were excluded for reasons of data consistency. Thus, a family (or any other shareholder) has to hold at least 5% of the shares.

Third, if a firm was founded by more than one person they are together treated as one family. Among the different possibilities, this approach makes the most sense since the founders usually act coordinated and almost always even pool their votes. For example, the three founders of SAP, Hasso Plattner, Dietmar Hopp and Klaus Tschira only dissolved the contract pooling their votes because of "international capital market conventions".[3]

Following Anderson and Reeb (2003) I then broke down family-owned firms into three sub-categories: "founder-controlled" if the founder still acts as the company's CEO, "descendant-controlled" if the founder is no longer active in the executive board or has passed away and one of his/her descendants is in the position of CEO. And last, a firm is "professionally managed" if it is categorized as a family firm, but has hired a professional management team and the family is thus no longer present in the executive board. Figure 1 depicts the distribution of these categories by percentage. It is not surprising that the share of founder-managed firms decreases over time. However, the decline is quite sharp considering the length of the observation period (7 years), from 20.39% in 1998 to 12.86% in 2004. Comparing the shares of descendant- and professional-managed firms reveals a clear trend towards the appointment of professional managers.

[Insert Figure 1 about here]

Compared to other empirical studies (e.g. Anderson and Reeb, 2003; Villalonga and Amit, 2004; Górriz and Fumás, 2005) my family-firm definition is rather restrictive. Górriz and Fumás classify a company as family-owned if the family is the largest shareholder, the others require a founding-family stake larger than 0%.[4]

Based on the definition above, family firms represent 37.5% of the sample (in 1998),[5] a figure roughly in line with previous studies.[6] Taken into account that the definition applied

[3] Official SAP press release, September 3rd, 2002.
[4] Villalonga and Amit (2004) use several alternative definitions.
[5] The share of family firms remains stable throughout the observation period: 36.9% in 2000, 35.1% in 2002 and 38.3% in 2004.
[6] Anderson and Reeb (2003) find a percentage of 35.0%, Villaloga and Amit 38.0%.

in my study is more restrictive, the percentage of exchange-listed family firms (under similar conditions) seems to be larger in Germany compared to the U.S.

C. Descriptive Statistics

Among these family firms the average family ownership stake is 63.0%. For most families it is reasonable to suppose that most of their wealth is invested in the company. If the family cannot extract funds through an executive position, private consumption will usually only be satisfied by dividends or the sale of shares. Since the latter will always involve a loss in control one could hypothesize that families decrease their share in the company over time. This effect should be particularly severe through generations since inheritance taxes accrue when the company is passed on. However, the statistics in table 1 show that the ownership stake of families remains at about the same level, irrespective of generation. At this point, following the same companies over a number of generations would certainly produce more meaningful results. Nevertheless, these findings are in line with results by Ehrhardt et al. (2004), who find that “family ownership is not declining and remains very strong even for later generations”.

[Insert Table 1 about here]

As can be seen in Table 2 family firms are present in all kinds of industries. A closer look at the SIC-Codes reveals that family ownership prevails in electronic and other electrical equipment (SIC code 36), transportation equipment (37), building materials, hardware and gardening (52), miscellaneous retail (59) and business services (73). The distribution of family firms indicates the importance to control for industry effects in the regressions. Therefore, industry-dummies for each two-digit SIC code are used.

[Insert Table 2 about here]

Table 3 presents descriptive statistics for the sample, subdivided into family and non-family firms. For the univariate analysis, means are first calculated per company and then averaged across all sample firms.[7]

[Insert Table 3 about here]

Family firms are on average significantly younger than non-family firms. However, the average age of family businesses suggests that these are well-established companies that have not recently gone public. Rows 3, 4 and 5 give information about the size of family firms. They are, on average, smaller (in terms of total assets, sales and employees) than non-family firms, but only partly significantly. These findings are consistent with the existing literature on the U.S. Moreover, family firms use significantly more debt[8] in their capital structures (23.58% compared to 19.99% for non-family firms). This might be an explanation for the finding that family ownership is (more or less) stable throughout generations. If families extract dividends and are not willing to give up control rights (through an increase in share capital) in order to raise funds for profitable investment opportunities, they are – eventually – forced to rely more on debt financing. Row 7 indicates that family stocks are significantly riskier, showing a higher return volatility. [9]

Row 8 refers to a distinctive feature of the German corporate governance system. According to law, German companies have to allow for employees in their supervisory boards (*Aufsichtsrat*). The percentage of workers' representatives varies between one third and 50% of the board members, depending on the total number of employees.[10] One of few exceptions is the case of a family firm, whose shareholder is a single person or a group of individuals who are related to each other. The analysis shows that the proportion of companies with workers' participation is smaller for family firms, yet not significantly. Since companies with

[7] If a company changes its status from family to non-family firm two means are computed and then assigned proportionately (years as family firm in proportion to years in sample) to the relevant group.
[8] Leverage is defined as total debt/total assets.
[9] Return volatility is measured as the standard deviation of share price returns for the previous 60 months.
[10] Special regulations apply to mining and steel industries.

less than 500 employees do not require workers' participation in the supervisory board, the lower share among family firms might probably be caused by their smaller size.

Moreover, family-owned companies' propensity to issue preferred stock is significantly higher. Among non-family firms the share of companies that have issued preferred shares is as low as 9.83%, in contrast to 26.21% for family firms (1998 data). This is an obvious indication that families use control structures in order to hold control (or voting) rights in excess of cash flow rights. While preferred shares without voting rights (granting the holder an extra dividend) are the ordinary case, they are sometimes endowed with super-voting rights. For instance, from 1920 till 1999 Siemens had issued preferred shares with six times (!) the voting rights of ordinary shares. These preferred shares that were completely in the hands of the Siemens family increased their cash-flow rights of 6.94% to a voting stake of 14.03%. Towards the end of the observation period the proportion of companies with different share classes that cause a divergence of cash flow and voting rights declines. This trend is more pronounced for larger and index-listed companies (DAX or MDAX) and could be interpreted as a move towards the requirements of international investors. In the multivariate performance analysis this issue will be covered in more detail, including other control-enhancing mechanisms.

Different performance measures are presented in rows 10, 11 and 12. The mean Tobin's q of family firms is higher by 0.27, but the difference is not statistically significant. Like other recent empirical corporate finance studies, I use market-to-book value as a proxy for Tobin's q, the ratio of the firm's market value to its replacement cost. For companies with several share classes of which one is not traded on a stock exchange, I adopt the price of the publicly listed class for the unlisted shares. In terms of accounting variables, the univariate

analysis shows a highly significant difference (at the 0.01-level), indicating that family firms are more profitable[11] than non-family firms.

Despite the comparatively high age of family firms one might raise concerns that - due to the high market-to-book values - a large part of these companies are growth stocks. However, the typical and (in retrospect) highly overvalued growth-stocks of the late 1990s were listed on the *Neuer Markt*. Since this trading segment was not part of the official market, young start-up companies are not included in the sample. Due to the high percentage of founder-led (and hence family) firms and the high market valuation in this segment, an inclusion would undoubtedly have biased the results towards an overperformance of family firms.

Data on the distribution of the different CEO-types as well as on the ownership stake are provided in rows 13-16.

IV. Multivariate Analysis

The results of the univariate analysis suggest that family firms are not only better performers, but also smaller and younger. Besides that, they differ from non-family firms in terms of share price volatility and capital structure and seem to operate in (slightly) different industries. These findings point out the necessity of a multivariate analysis controlling for these influences.

A. Empirical Design

In order to gain insight into the relation between firm performance and family ownership I employ the following regression model:

[11] Return on assets is EBIT or EBITDA divided by the book value of total assets.

$$y_{it} = \beta_0 + \beta_1 (family\ firm) + \beta_2 (control\ variables) \quad (1)$$

$$+ \beta_3 (industry\ dummies) + \beta_4 (year\ dummies) + \varepsilon_{it},$$

where y_{it} = firm performance measured as ROA (based on EBIT/EBITDA) and Tobin's q. *Family firm* is a dummy variable that equals 1 if a company is categorized as a family firm. The *control variables* comprise firm size (natural log of total assets), natural log of firm age, dividends divided by book value of equity, capital structure and share price volatility, both as defined above. Workers' participation in the supervisory board is also included as a dummy variable. One might argue that workers' representatives could successfully attempt to restrain efforts to increase efficiency at the cost of employees and thus be a competitive disadvantage. In addition, a dummy variable captures control-enhancing measures like pyramids, cross-holdings[12] and share classes which dilute the one-share-one-vote principle. *Industry dummies* are based on two-digit SIC codes, controlling for possible effects of the 45 sample industries. Lastly, each year of the sample period is assigned a dummy variable.

By nature, fixed effects models require longitudinal variation in the data. Since only very few companies in the sample change their industry affiliation over the sample period, fixed effects cannot be identified by this equation. I therefore use random effects GLS regressions. In the appendix (table A1) I present an alternative econometric method (pooled OLS-regressions) to test the robustness. The results from these specifications are quantitatively and qualitatively similar to the random effects results.

B. Family Firm Performance

Table 4 reports the results of random effects regressions of the different performance measures on several firm characteristics. In columns 1 to 4 I use ROA (with EBITDA and

[12] Cross-holdings imply that a company holds own shares or shares in another firm that is under the influence of the family and consequently increase the voting power of the existing shares.

EBIT as numerator) as measure for accounting performance, in columns 5 and 6 Tobin's q as market performance measure.

[Insert table 4 about here]

Columns 1, 3 and 5 confirm the univariate differences and show strong evidence for the superior performance of family firms compared to non-family firms. The coefficients of the family dummy are 0.043 and 0.045 (both significant at the 0.01-level) for the accounting performance measures and also positive and significant with Tobin's q as dependant variable.

Both theory and former empirical research suggest the occurrence of the so-called "founder-effect", meaning that the performance of family firms is particularly strong when the founder is still active as CEO. The regression results in columns 2, 4 and 6 shed light on the question if the performance of family firms is indeed stronger for founder-led firms. The family dummy is therefore broken down into firms with their founder, a descendant or a professional manager hired as CEO by the controlling family. As expected, founder-CEOs do significantly better than descendants or professionals in all regressions. In terms of accounting performance, the coefficients of Descendant CEO and Professional CEO are about equal (and significant), suggesting that founder descendants and professional managers are equally successful and still perform better than CEOs in non-family firms. When using Tobin's q as dependant variable, the coefficients of Descendant CEO and Hired CEO are not significant, indicating that market participants assess heir CEOs and professional CEOs in family-firms similar to CEOs in non-family firms.

These results are more or less consistent with evidence on the U.S. by Anderson and Reeb (2003) but stand (partially) in contrast with Sraer and Thesmar (2004). They find descendant CEOs to be as successful as founders (based on ROA).

C. Is family control special?

Given the results of the performance analysis, founding-family ownership can be regarded as an efficient ownership structure. Since families have strong incentives to diminish agency costs and maximise firm value, companies under family-control do not suffer from the free-rider problem associated with atomistic shareholders. However, these incentives do not apply solely to families but also to any other investor or group of investors with an appreciable equity stake. The empirical evidence so far only responds to the question whether family ownership leads to a better performance compared to any other ownership structure. It might be the case that family ownership is just as beneficial as other large blockholders with comparable incentives.

Therefore, I estimate additional regressions including dummy variables for different blockholder types. Blocks are defined as shareholdings of at least 25% of the voting shares. Shareholders who reach this threshold are subdivided into the following categories: government (all public authorities), financials (banks, insurances), strategic investors (other companies), individuals (wealthy investors who invested part of their private wealth without being linked to the company), families (as defined above) and others (management teams, foundations).[13] A share of 25% is chosen because it represents a vetoing minority and should be high enough to ensure both sufficient incentives to monitor and the power to exert control. Columns 1, 3 and 5 in table 5 present panel regression results including these blockholder dummies.

[Insert table 5 about here]

Concerning the influence of family ownership on firm performance, all regressions confirm the previous results, showing positive and significant coefficients. With respect to accounting performance measures the coefficients of "government" are negative and significant, suggesting that privatized companies where the government is still a controlling

[13] If two or more shareholders exceed the 25%-threshold and these investors belong to different categories, the block is assigned to the largest stake.

shareholder are less efficient or at least less profitable than widely-held firms. It should be noted that firms with other blockholder types are less profitable, yet not significantly. The results in column 5 (based on Tobin's q) point in the opposite direction, with higher market valuations for firms with blockholders. Again, the coefficients are not significantly different from zero. Evidently, families add value to a company in a way that distinguishes them from all other types of blockholders.

Having confirmed that family ownership is indeed more beneficial than other blockholdings, it still remains unclear if it is crucial how families use their control rights. Specifically, does it make any difference whether families are represented in the firm (in at least one of the boards) and use their control rights actively or not? Families with large shareholdings may have other means than a seat in the supervisory board to effectively control management. In additional regressions the family-block dummy is now broken down into two 0.1-variables; 1 if the family is present in the firm (either in the executive or the supervisory board), and 0 if not. Note that these variables are different from the CEO-type analysis above. A family with a hired CEO can still make active use of its control rights through the supervisory board! As one would expect, the results in columns 2, 4 and 6 show positive and significant coefficients for families who are present in the company. Contrarily, family firms without representation of the founding-family do not exhibit a significantly better performance (for the accounting measures) compared to firms without blockholders. The results based on the regression of Tobin's q (column 6) indicate that despite of a significantly different operating performance, the market value of family firms is not influenced by the type of control the family exerts.

Concerning the variable on control-enhancing mechanisms in family firms, the coefficient is negative and significant in regressions with operating performance as dependant variable. This finding suggests that families who use mechanisms to hold voting rights in

excess of cash flow rights use their controlling position in the firm at the expense of minority shareholders.

V. Conclusion

Based on the observation that family ownership plays an important role in many countries, the performance of family firms has recently been the object of investigation of empirical research. Most studies find that family firms perform better or at least as well as non-family firms. For this reason, the assumption that family ownership is a less profitable ownership structure (due to the extraction of private benefits of control) seems to be disproved. However, these findings raise another question: is it the mere existence of a blockholder who mitigates owner-manager conflicts that leads to a superior performance of family firms compared to all other companies or is it really the *type* of blockholder that matters?

In my analysis I address this question using a detailed panel dataset of 275 listed German companies from 1998-2004. The results indicate that family firms are indeed more profitable than both companies with a dispersed shareholder structure and other firms with a controlling shareholder. This leads to the conclusion that family ownership might be the ideal ownership structure to balance the two agency problems that minority shareholders are exposed to (owner-manager conflicts on the one hand and minority shareholder expropriation by a controlling shareholder on the other hand).

My results further show that the performance depends upon the role of the family in the firm. The performance of family businesses is better only in firms where the founding-family is still active either in the executive or the supervisory board. The positive effect of family involvement is found to be strongest when the founder serves as CEO.

A possible interpretation of these findings is that families have a deeper relationship with their firms or might even feel themselves responsible to other shareholders as long as

they serve as board members. If the family is just a large shareholder and not represented, family firms seem to face agency-problems similar to other companies with large blockholders. This applies in particular for family firms where control-enhancing mechanisms are employed.

References

Anderson, Ronald C. and David M. Reeb (2003), Founding Family Ownership and Firm Performance: Evidence from the S&P 500, *Journal of Finance*, 58, 1301-1328.

Anderson, Ronald C., Sattar A. Mansi and David M. Reeb (2003), Founding Family Ownership and the Agency Cost of Debt, *Journal of Financial Economics*, 68, 263-285.

Barontini, Roberto and Lorenzo Caprio (2005), The Effect of Family Control on Firm Value and Performance, Evidence from Continental Europe, ECGI working paper No. 88/2005.

Berle, Adolph A. and Gardiner C. Means (1932), The Modern Corporation and Private Property, New York: Macmillan Company.

Claessens, Stijn, Simeon Djankov and Larry H. P. Lang (2000), The Separation of Wnership and Control in East Asian Corporations, *Journal of Financial Economics*, 58, 81-112.

Demsetz, Harold and Kenneth Lehn (1985), The Structure of Corporate Ownership: Causes and Consequences, *Journal of Political Economy*, 93, 1155-1177.

Ehrhardt, Olaf, Eric Nowak and Felix-Michael Weber (2004), Running in the Family. The Evolution of Ownership Control, and Performance in German Family-owned Firms 1903-2003, Working Paper.

Faccio, Mara and Larry H. P. Lang (2002), The Ultimate Ownership of Western European Corporations, *Journal of Financial Economics*, 65, 365-395.

Fama, Eugene and Michael C. Jensen (1985), Organizational Forms and Investment Decisions, *Journal of Financial Economics*, 14, 101-119.

Górriz, Carmen G. and Vincente S. Fumás (2005), Family Ownership and Performance: the Net Effect of Productive Efficiency and Growth Constraints. ECGI Working Paper No. 66/2005.

Jensen, Michael C. and William H. Meckling (1976), Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, *Journal of Financial Economics*, 3, 305-360.

La Porta, Rafael, Florencio Lopez-de-Silanes and Andrei Shleifer (1999), Corporate Ownership around the World, *Journal of Finance*, 54, 471-517.

McConaughy, Daniel L., Michael C. Walker, Glenn V. Henderson Jr. and Chandra S. Mishra (1998), Founding Family Controlled Firms: Efficiency and Value, *Review of Financial Economics*, 7, 1-19.

Morck, Randall, David Strangeland and Bernard Yeung (2000), Inherited Wealth, Corporate Control and Economic Growth: The Canadian Disease, in: *Concentrated Corporate Ownership*, Randall Morck, ed. Chicago: University of Chicago Press, 319-369.

Shleifer, Andrei and Robert Vishny (1997), A Survey of Corporate Governance, *Journal of Finance*, 52, 737-783.

Sraer, David and David Thesmar (2004), Performance and Behaviour of Family Firms: Evidence from the French Stock Market, CEPR Discussion Paper No. 4520.

Stein, Jeremy (1988), Takeover Threats and Managerial Myopia, *Journal of Political Economy*, 96, 61-80.

Stein, Jeremy (1989), Efficient Capital Markets, Inefficient Firms: A Model of Myopic Corporate Behavior, *Quarterly Journal of Economics*, 103, 655-669.

Villalogna, Belén and Raphael Amit (2004), How Do Family Ownership, Control, and Management Affect Firm Value?, Working Paper.

Figure 1

Distribution of CEO-types in Family Firms from 1998-2004

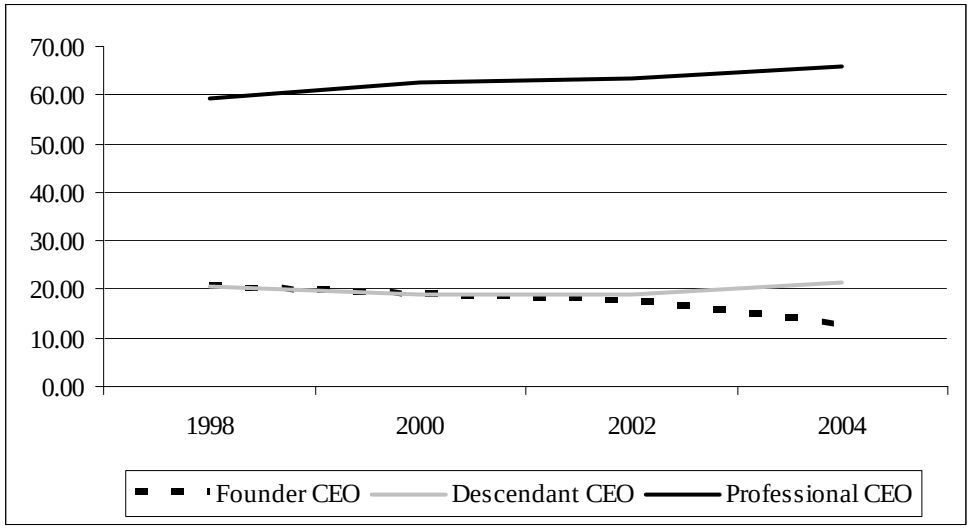

Table 1
Ownership Stake of Families by Generation

Average voting rights of families by generation based on ownership data in 1998.

Generation	Number of Firms	Average Family Ownership
Founder	39	61.97%
2nd Generation	20	65.36%
>2nd Generation	44	62.83%
Total	103	63.00%

Table 2
Number and Percentage of Family and Non-Family Firms by SIC-Code

Number and Percentage of firms by two-digit SIC-Codes (n = 275). Family firms are defined as companies with a founding-family ownership of at least 25% or family members in either the executive or supervisory board.

SIC-Code	Industry Description	Family Firms	Non-Family Firms	Percentage Family Firms in Industry
13	Oil and gas extraction	0	1	0.00%
14	Non-metallic minerals, except fuels	0	2	0.00%
15	General building contractors	3	4	42.86%
16	Heavy construction contractors	0	3	0.00%
20	Food and kindred products	7	8	46.67%
22	Textile mill products	2	2	50.00%
23	Apparel and other textile products	3	3	50.00%
24	Lumber and wood products	2	1	66.67%
25	Furniture and fixtures	1	0	100.00%
26	Paper and allied products	3	5	37.50%
27	Printing and publishing	1	1	50.00%
28	Chemicals and allied products	8	10	44.44%
30	Rubber and miscellaneous plastic products	1	6	14.29%
31	Leather and leather products	0	1	0.00%
32	Stone, clay, glass, and concrete products	4	7	36.36%
33	Primary metal industries	2	2	50.00%
34	Fabricated metal products	1	6	14.29%
35	Industrial machinery and equipment	9	25	26.47%
36	Electrical and electronic equipment	8	7	53.33%
37	Transportation equipment	8	7	53.33%
38	Instruments and related products	1	1	50.00%
41	Local and interurban passenger transit	0	1	0.00%
45	Transportation by air	0	1	0.00%
47	Transportation services	0	2	0.00%
48	Communications	1	1	50.00%
49	Electric, gas, and sanitary services	0	16	0.00%
50	Wholesale trade--durable goods	5	8	38.46%
51	Wholesale trade--nondurable goods	6	7	46.15%
52	Building materials, hardware and gardening	3	0	100.00%
53	General merchandise stores	0	1	0.00%
54	Food stores	0	3	0.00%
55	Automotive dealers and gasoline service stations	0	2	0.00%
56	Apparel and accessory stores	1	1	50.00%
57	Furniture, home furnishings and equipment stores	0	1	0.00%
59	Miscellaneous retail	3	0	100.00%
61	Non-depository credit institutions	0	1	0.00%
62	Security, commodity brokers, and services	2	1	66.67%
64	Insurance agents, brokers, and service	1	0	100.00%
65	Real estate	8	16	33.33%
67	Holding and other investment offices	1	5	16.67%
70	Hotels, camps, and other lodging places	0	1	0.00%
73	Business services	3	0	100.00%
75	Automotive repair, services, and parking	1	0	100.00%
78	Motion pictures	1	0	100.00%
80	Health services	3	1	75.00%

Table 3
Summary Statistics for Family and Non-Family Firms

Descriptive Data for family and non-family firms. The sample comprises 275 companies listed on the Frankfurt Stock Exchange (official market) on December, 31 1998. Mean values are first calculated per company and then averaged across all sample firms. Family firms are defined as those where members of the founding-family hold at least 25% of the voting rights or (if less) a family member serves as either executive or supervisory board member. Leverage is defined as total debt divided by total assets. Return volatility is measured as the standard deviation of share price returns for the previous 60 months. Asterisks denote statistical significance at the 0.01(***), 0.05(**) and 0.10(*)-level.

		Family Firms	Non-Family Firms	t-statistic
1	Number of firms	103	172	
2	Age [years]	82.27	92.13	3.77 ***
3	Total assets [Mio. Euro]	2,830	5,408	2.95 ***
4	Sales [Mio. Euro]	3,378	4,801	1.96 **
5	Employees	17,430	18,837	0.51
6	Leverage	23.58	19.99	- 3.80 ***
7	Return Volatility	0.113	0.106	- 2.36 **
8	Workers' participation [%]	83.65	84.37	0.39
9	Preferred shares [%]	26.21	9.83	- 3.65 ***
10	Tobin's q	2.73	2.46	- 1.38
11	Return on assets (EBIT) [%]	7.85	5.68	- 3.00 ***
12	Return on assets (EBITDA) [%]	13.54	11.01	- 3.44 ***
13	Family ownership [%]	62.81	0.13	- 33.38 ***
14	Founder CEO [%]	18.37	0.00	- 15.54 ***
15	Descendant CEO [%]	19.65	0.00	- 16.20 ***
16	Professional CEO [%]	61.98	100.00	- 41.83 ***

Table 4
Firm Performance and Founding-Family Ownership

This table contains results of random effects GLS regressions of performance measures on several firm characteristics. Return on assets is defined as EBITDA or EBIT divided by total assets. Tobin's q is measured as the ratio of the firm's market value to total assets. Family firm is a dummy variable that equals one if members of the founding-family hold at least 25% of the voting rights or (if less) a family member serves as either executive or supervisory board member. Founder equals one if the CEO is the founder of the firm and Descendant CEO equals one if the CEO is a founders' descendant. Professional CEO equals one if the CEO of a family firm is not a member of the family. Control-enhancing measures is a dummy variable that equals one if a family firm employs measures that dilute the one-share-one-vote principle. Workers' participation is a dummy variable that equals one if employees are supervisory board members. Return volatility is measured as the standard deviation of share price returns for the previous 60 months. All regressions include dummy variables for each year of the sample period and for two-digit SIC codes. The sample comprises 1,701 firm-year observations. Asterisks denote statistical significance at the 0.01(***), 0.05(**) and 0.10(*)-level.

	Return on Assets (EBITDA)		Return on Assets (EBIT)		Tobin's q	
	(1)	(2)	(3)	(4)	(5)	(6)
Family Firm	0.043 (3.80)***		0.045 (4.35)***		0.618 (1.74)*	
Founder CEO		0.065 (3.06)***		0.069 (3.45)***		3.186 (4.86)***
Descendant CEO		0.039 (2.21)**		0.040 (2.45)**		0.031 (0.06)
Professional CEO		0.040 (3.24)***		0.042 (3.73)***		0.341 (0.88)
Control-enhancing mechanisms	- 0.021 (-1.61)	- 0.020 (-1.55)	- 0.025 (-2.04)**	- 0.024 (-1.97)**	- 0.427 (-1.06)	- 0.355 (-0.88)
Workers' participation	- 0.020 (-1.29)	- 0.020 (-1.34)	- 0.023 (-1.62)	- 0.024 (-1.68)*	0.221 (0.46)	0.145 (0.31)
Ln (firm age)	- 0.007 (-1.37)	- 0.006 (-1.08)	- 0.006 (-1.22)	- 0.004 (-0.89)	- 0.197 (-1.12)	- 0.032 (-0.18)
Ln (total assets)	0.006 (1.89)*	0.006 (2.00)**	0.007 (2.38)**	0.007 (2.48)**	- 0.141 (-1.44)	- 0.097 (-0.97)
Dividends/Book value of equity	- 0.002 (-0.90)	- 0.002 (-0.86)	- 0.002 (-0.67)	- 0.001 (-0.61)	0.282 (3.94)***	0.291 (4.10)***
Total debt/Total assets	- 0.261 (-11.50)***	- 0.260 (-11.43)***	- 0.250 (-11.67)***	- 0.249 (-11.60)***	- 1.740 (-2.50)**	- 1.643 (-2.36)**
Return volatility	- 0.000 (-0.94)	- 0.000 (-1.02)	- 0.000 (-0.62)	- 0.000 (-0.70)	0.001 (2.07)**	0.001 (1.74)*
Intercept	0.162 (2.93)***	0.146 (2.56)**	0.094 (1.87)*	0.077 (1.49)	5.992 (3.36)***	4.11 (2.25)**
R-squared	0.204	0.205	0.185	0.187	0.309	0.315

Table 5
Blockholder Types and Firm Performance

This table contains results of random effects GLS regressions of performance measures on different blockholder types. Return on assets is defined as EBITDA or EBIT divided by total assets. Tobin's q is measured as the ratio of the firm's market value to total assets. Family firm is a dummy variable that equals one if members of the founding-family hold at least 25% of the voting rights or (if less) a family member serves as either executive or supervisory board member. The different blockholder variables are dummies that equal one if the respective shareholder type holds voting rights of 25% or more. Control-enhancing measures is a dummy variable that equals one if a family firm employs measures that dilute the one-share-one-vote principle. Workers' participation is a dummy variable that equals one if employees are supervisory board members. Return volatility is measured as the standard deviation of share price returns for the previous 60 months. All regressions include dummy variables for each year of the sample period and for two-digit SIC codes. The sample comprises 1,701 firm-year observations. Asterisks denote statistical significance at the 0.01(***), 0.05(**) and 0.10(*)-level.

	Return on Assets (EBITDA)		Return on Assets (EBIT)		Tobin's q	
	(1)	(2)	(3)	(4)	(5)	(6)
Family blockholder	0.033 (2.44)**		0.032 (2.58)***		0.970 (2.30)**	
Family representation		0.035 (2.53)**		0.034 (2.74)***		0.874 (2.04)**
No family representation		0.020 (0.92)		0.014 (0.69)		0.716 (2.52)**
Government blockholder	- 0.074 (-2.31)**	- 0.075 (-2.34)**	- 0.082 (-2.86)***	- 0.084 (-2.91)***	1.288 (1.20)	1.342 (1.31)
Financial blockholder	- 0.025 (-1.08)	- 0.025 (-1.07)	- 0.032 (-1.56)	- 0.032 (-1.55)	0.044 (0.06)	0.032 (0.04)
Strategic blockholder	- 0.019 (-1.41)	- 0.019 (-1.43)	- 0.023 (-1.90)*	- 0.024 (-1.93)**	0.845 (1.94)*	0.858 (1.97)**
Individual blockholder	0.002 (0.06)	0.002 (0.07)	- 0.008 (-0.31)	- 0.007 (-0.29)	0.038 (0.04)	0.020 (0.02)
Other blockholder	- 0.013 (-0.39)	- 0.012 (-0.36)	- 0.008 (-0.27)	- 0.007 (-0.23)	0.677 (0.61)	0.629 (0.56)
Control-enhancing mechanisms	- 0.023 (-1.72)*	- 0.021 (-1.66)*	- 0.027 (-2.23)**	- 0.025 (-2.00)**	- 0.416 (-1.02)	- 0.520 (-1.25)
Workers' participation	- 0.020 (-1.28)	- 0.020 (-1.26)	- 0.023 (-1.57)	- 0.022 (-1.55)	0.223 (0.46)	0.215 (0.44)
Ln (firm age)	- 0.009 (-1.61)	- 0.009 (-1.66)	- 0.008 (-1.52)	- 0.008 (-1.61)	- 0.178 (-1.00)	- 0.160 (-0.89)
Ln (total assets)	0.007 (2.21)**	0.007 (2.27)**	0.008 (2.70)***	0.008 (2.80)***	- 0.140 (-1.37)	- 0.153 (-1.48)
Dividends/Book value of equity	- 0.002 (-0.93)	- 0.002 (-0.94)	- 0.002 (-0.71)	- 0.002 (-0.73)	0.284 (3.96)***	0.284 (3.97)***
Total debt/Total assets	- 0.267 (-11.61)***	- 0.269 (-11.61)***	- 0.256 (-11.82)***	- 0.259 (-11.87)***	- 1.506 (-2.13)**	- 1.393 (-1.96)**
Return volatility	- 0.000 (-1.09)	- 0.000 (-1.15)	- 0.000 (-0.74)	- 0.000 (-0.83)	0.001 (2.13)**	0.001 (2.22)**
Intercept	0.169 (2.86)***	0.169 (2.86)***	0.105 (1.96)**	0.105 (1.97)**	5.150 (2.71)***	5.151 (2.70)***
R-squared	0.210	0.211	0.195	0.197	0.311	0.310

Appendix

Table A1
Pooled OLS regressions of Blockholder Types and Firm Performance

This table contains results of pooled OLS regressions of performance measures on different blockholder types. Return on assets is defined as EBITDA divided by total assets. Tobin's q is measured as the ratio of the firm's market value to total assets. Family firm is a dummy variable that equals one if members of the founding-family hold at least 25% of the voting rights or (if less) a family member serves as either executive or supervisory board member. The different blockholder variables are dummies that equal one if the respective shareholder type holds voting rights of 25% or more. Control-enhancing measures is a dummy variable that equals one if a family firm employs measures that dilute the one-share-one-vote principle. Workers' participation is a dummy variable that equals one if employees are supervisory board members. Return volatility is measured as the standard deviation of share price returns for the previous 60 months. The regressions include dummy variables for each year of the sample period and for two-digit SIC codes. The sample comprises 1,701 firm-year observations. Asterisks denote statistical significance at the 0.01(***), 0.05(**) and 0.10(*)-level.

	Return on Assets (EBITDA)		Tobin's q	
	(1)	(2)	(3)	(4)
Family blockholder	0.035 (3.64) ***		0.333 (1.71) *	
Family representation		0.038 (3.86) ***		0.329 (1.12)
No family representation		0.014 (0.88)		0.369 (0.77)
Government blockholder	- 0.070 (-3.19) ***	- 0.072 (-3.28) ***	0.695 (1.06)	0.699 (1.06)
Financial blockholder	- 0.022 (-1.47)	- 0.022 (-1.45)	- 0.296 (-0.65)	- 0.296 (-0.65)
Strategic blockholder	- 0.013 (-1.42)	- 0.138 (-1.48)	0.457 (1.64)	0.458 (1.64)
Individual blockholder	- 0.001 (-0.03)	0.001 (0.01)	0.002 (0.07)	- 0.007 (-0.29)
Other blockholder	- 0.006 (-0.26)	- 0.004 (-0.19)	- 0.208 (-0.36)	- 0209 (-0.36)
Control-enhancing mechanisms	- 0.029 (-2.89) ***	- 0.026 (-2.57) ***	- 0.172 (-0.57)	- 0.176 (-0.58)
Workers' participation	0.001 (0.05)	0.001 (0.08)	0.170 (0.48)	0.170 (0.48)
Ln (firm age)	- 0.007 (-1.96) **	- 0.008 (-2.12) **	- 0122 (-1.10)	- 0.121 (-1.09)
Ln (total assets)	0.005 (2.20) **	0.005 (2.37) **	- 0.059 (-0.89)	0.060 (-0.90)
Dividends/Book value of equity	- 0.001 (-0.27)	- 0.001 (-0.31)	0.338 (4.34) ***	- 0.338 (4.34) ***
Total debt/Total assets	- 0.210 (-11.55) ***	- 0.214 (-11.67) ***	- 2.544 (-4.63) ***	- 2.539 (-4.59) ***
Return volatility	0.000 (0.05)	- 0.000 (-0.13)	- 0.001 (3.53) ***	0.001 (3.52) ***
Intercept	0.142 (3.49) ***	0.142 (3.51) ***	4.867 (4.04) ***	4.186 (3.44) ***
Adjusted R^2	0.180	0.184	0.289	0.288