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Jorn H. Block

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Family Management, Family Ownership and Downsizing: Evidence from S&P 500 Firms

Jörn Hendrich Block*

* Technische Universität München, Germany

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FAMILY MANAGEMENT, FAMILY OWNERSHIP AND DOWNSIZING: EVIDENCE FROM S&P 500 FIRMS *

JÖRN HENDRICH BLOCK
Technische Universität München
Dr. Theo Schöller Chair in Technology and Innovation Management
Arcisstr. 21, D-80333 München
Tel: 0049 89-28925746
Fax: 0049 89-28925742
e-mail: block@wi.tum.de

ABSTRACT

Little is known about the relationship between family firms and their employees. This paper aims to close this gap. We distinguish between family management and family ownership as two dimensions of family firms and analyze their respective influence on downsizing. Our findings show that family management decreases the likelihood of downsizing, whereas the extent of family ownership decreases the likelihood of downsizing only with regard to deep job cuts (above 6%). We conclude that family managers have a strong long-term perspective, which is in line with both agency and stewardship theory. Yet, the idea that reputation concerns lead family owners to shy away from downsizing is only partially supported.

JEL Codes: G34, L21, M12, M13, M14, M51
Keywords: Family firms, family management, family ownership, job cuts, downsizing; layoffs

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FAMILY MANAGEMENT, FAMILY OWNERSHIP AND DOWNSIZING: EVIDENCE FROM S&P 500 FIRMS

Family firms are sometimes regarded as being particularly socially responsible towards their own employees (Dyer & Whetten, 2006; Guzzo & Abbott, 1990). Although this question is important from a perspective of society, little is known about the relationship between family firms and their employees. In this paper, we shed light on this issue and analyze whether family firms treat their employees differently than non-family firms. More specifically, we wish to explore whether family management and family ownership has an influence on the likelihood and size of job cuts.

Previous research has led to no clear conclusions regarding the relationship between family firms and their employees. Some scholars argue that family firms pursue a more long-term oriented strategy than non-family firms (James, 1999), seeing this strong long-term orientation as one of the main competitive advantages of family firms (Anderson & Reeb, 2003; Le Breton-Miller & Miller, 2006; Miller & Le-Breton Miller, 2005). Other authors argue that the large overlap between the family and the firm in terms of people and assets leads to strong feelings of social identity in relation to the firm among family managers (Dyer & Whetten, 2006; Guzzo & Abbott, 1990). In both of the above arguments, family firms would be expected to be unlikely to engage in short-term, cost-saving-oriented job cuts. In an alternative view, family owners are described as being primarily interested in gaining private benefits of control (e.g., Claessens, Djankov, Fan, & Lang, 2002; Shleifer & Vishny, 1997) or as being exposed to a self-control problem that leads to nepotism (e.g., Morck & Yeung, 2004; Schulze, Lubatkin, Dino, & Buchholtz, 2001). Both managerial entrenchment and nepotism are counterarguments against the idea of a socially responsible family firm. Consequently, according to those who argue the above point, the likelihood and size of job cuts should not differ between family and non-family firms.

To address our research questions, we created a panel data set of large, publicly-traded U.S. firms for the years 1994-2003. We distinguished between family-managed, family-owned and non-family firms and used panel data regressions as well as a Heckman model to determine the impact of family management and family ownership on changes in employment. Our findings are surprising. Family ownership and family ownership were found to have differing effects. Family management was found to reduce the likelihood of downsizing. Yet, family management was also found to increase the degree of downsizing. In contrast to this, the extent of family ownership does not seem to reduce the likelihood of downsizing in general. Interestingly however, we found a negative effect on the likelihood of downsizing when it comes to deep job juts of above 6%.

With these results, this study contributes to family business research in various ways. First, we will show that strong differences in type between family firms should be considered in studies that compare levels of social responsibility in family and non-family firms. Seeing family and non-family firms as polar opposites may not be an appropriate approach (see also Wiklund, 2006). Second, both stewardship and agency theory help to explain our findings. Stewardship theory (in combination with agency theory) explains the negative influence of family management on the likelihood of downsizing, but it fails to explain the positive influence of family management on the degree of downsizing. Agency theory in turn explains why family owners shy away from extremely deep job cuts. Again, we will strongly argue for a multi-facetted approach. Stewardship theory explains our findings with regard to family management, whereas agency theory explains our findings with regard to family ownership.

From a practical perspective, our results show that there could be a problem of corporate governance in firms that are managed by professional (non-family) managers. Our findings,

suggesting that firms managed by non-family managers are more likely to cut their workforce compared to other firms, might be explained by noting that non-family managers want to signal decisiveness and, in some cases, act just for the sake of acting. This interpretation is also supported by previous research findings showing that no positive relationship between employment downsizing and later financial performance exists (e.g., Cascio, Young, & Morris, 1997) as well as by studies indicating that family management in particular seems to create firm value (e.g., Villalonga & Amit, 2006). Finally, our findings relate directly to the attractiveness of family firms as employers. In particular, firms with family management can use our results for the purposes of attracting employees who value job stability.

The remainder of this paper is organized as follows: In Section 2, we use theory to develop our hypotheses about the impact of family management and family ownership regarding workforce reduction. Section 3 summarizes relevant extant empirical studies. Section 4 describes the construction of our sample as well as the measures and methods used. Section 5 reports the results of our univariate and multivariate analyses. Finally, in Section 6, we will both discuss some of this study's implications for theory and practice and give a short conclusion.

THEORY AND HYPOTHESES

Before developing the hypotheses of our study, some general comments on downsizing and related concepts shall be made. In this paper, we will explore whether family managers and family owners have a stronger commitment to their employees than other types of managers and owners do. More specifically, we investigate the likelihood and, if relevant, the degree of workforce reduction for various types of family and non-family firms. To measure workforce reduction, we simply compared the number of employees as reported by the company in a

particular period with the number of employees in the previous period. Our research question differs from the concept of layoffs as well as from the concept of organizational decline.

Layoffs can be defined as a termination of the contract of employment with or without prior notice. This concept differs in two ways from our research question. First, a firm may reduce its workforce without layoffs by using e.g. "natural fluctuation", incentives for early retirement, outplacement or non-extension of a fixed term contract. Layoffs thus represent only one of several operational mechanisms for workforce reduction (Greenhalgh, Lawrence, & Sutton, 1988). Second, workforce reduction is a concept that focuses on the organizational level of analysis, whereas investigations of layoffs mostly take place at the individual level of analysis (Freeman & Cameron, 1993).

There is a wealth of literature on organizational decline (for a summary, see Cameron, Sutton, & Whetten, 1988). In most definitions, organizational decline is described as something that "happens" to an organization, not intended by the organization or its managers (Freeman & Cameron, 1993). Furthermore, decline does not necessarily involve a reduction in personnel. For example, an organization may experience a decline in market share, but this does not necessarily lead to a reduction in workforce. In our view, a reduction in workforce can be seen as one of several potential responses to decline. In this paper, we will use decline in financial performance and decline in sales as control variables.

Family Management and Its Influence on Employment Downsizing

Stewardship theory has increasingly been employed in the context of family business research (e.g., Chrisman, Chua, Kellermanns, & Chang, 2007; Corbetta & Salvato, 2004; Eddleston & Kellermanns, 2007). Stewardship theory, rooted in psychology and sociology, describes situations in which executives, acting as stewards, are motivated to work for the best interests of

their organization (Davis, Schoorman, & Donaldson, 1997; Donaldson & Davis, 1991). Contrary to agency theory (Eisenhardt, 1989; Fama, 1980; Jensen & Meckling, 1976), stewardship theory proposes that pro-organizational, collectivistic behavior gives a higher utility than individualistic, self-serving behavior does. Davis *et al.* (1997) compare the management philosophies of stewards and agents. The time frame of stewards is suggested to be long-term, that of agents, short-term. Additionally, the main objective of stewards is suggested to be performance enhancement, the main objective of agents, cost control. Both arguments suggest that managers who act as stewards are less likely to undertake short-term, cost-saving-oriented job cuts. For what reason should family managers be assumed to act as stewards rather than as agents? Some arguments are listed below. Interestingly, two of the four arguments relate directly to agency theory, which shows how strongly agency and stewardship theory are interconnected.

First, with their status and family membership, family managers often stay in the job for lengthy tenures (Le-Breton Miller & Miller, 2006), allowing them to benefit from decisions not to downsize (and thereby not to drain the resources that have been built up in the past). Second, for family managers, the firm is part of the family identity. Often, it is their main intention to pass the firm and its inherent resources (e.g., in the form of employees' knowledge) to the next generation (Casson, 1999; James, 1999; Tagiuri & Davis, 1992). Large job cuts would contradict this goal. Third, due to their rather safe position, family managers do not need to engage in signaling in order to increase their reputation on the corporate executive market. They are therefore not obliged to show regular increases in operating efficiency or profitability. This argument can be extended even further. The fact that family managers are related to the founding (and business-owning) family by kinship ties might prevent them from moving to another (rival) company. Effectively, they do not take part in the market for corporate executives, thus reducing

the problems of managerial myopia (Campell & Marino, 1994; Holmstrom, 1982). Finally, by using social identity theory, one can argue that family managers are more likely to be emotionally attached to their firm and their employees than non-family managers would be. Generally, social identity theory asserts that group membership can create in-group enhancement in ways that favor group members at the expense of non-group members (Ashforth & Mael, 1989; Tajfel & Turner, 1986). Due to the large overlap between the family and the firm, in terms of people and assets as well as due to the co-evolution of the two systems (Kepner, 1983), family managers have a strong identification with the firm (Guzzo & Abbott, 1990). Strong feelings of social identity may then lead to stewardship-like behavior that favors the members of the firm over pressures from outside groups or institutions, such as financial analysts or the capital market, thus making employment downsizing less likely. Based on these four arguments, we propose the following two hypotheses:

Hypothesis 1: *There is a negative relationship between family management and the likelihood of a decrease in workforce.*

Hypothesis 2: *There is a negative relationship between family management and the degree of workforce decrease.*

Family Ownership and its Influence on Employment Downsizing

We will use agency theory (Eisenhardt, 1989; Fama, 1980; Jensen & Meckling, 1976) to form our hypotheses about the role of family ownership with regard to workforce reduction. Our first argument concerns the relationship between management and owners of a family firm. We argue that information asymmetry between owners and management should be less of a problem with family owners than with non-family owners. Contrary to other owners, family owners often know the business for a long time and have a good understanding of the underlying business

model and the particularities involved. Consequently, there is less need for a manager (family or non-family) to use strong short-term results (e.g., achieved through means of cost-cutting) as a signaling device (Thakor, 1990). Our second argument uses agency theory on a different level in that we regard the relationship between family owners and society. Family owners now correspond to agents, being monitored and sanctioned by society (the principal). In line with Wiklund (2006), we argue that family owners can be more easily monitored and sanctioned by society than other types of owners can. Contrary to financial owners, family owners often have their wealth tied to a particular firm and are more easily identifiable, as they are often well-known and bear the same name as the company does. Thus, compared to other types of owners, family owners should be more likely to care about their reputation for social responsibility. This greater concern for reputation makes them more fearful of the negative image associated with deep job cuts than non-family owners are. Thus, we propose the following two hypotheses:

Hypothesis 3: *There is a negative relationship between the extent of family ownership and the likelihood of a decrease in workforce.*

Hypothesis 4: *There is a negative relationship between the extent of family ownership and the degree of workforce decrease.*

EXTANT EMPIRICAL WORK

Little empirical work has been done on long-term orientation and social responsibility in family firms. In this section, we will summarize some of the few papers. Using data on R&D spending as a proxy for long-term orientation, Block and Thams (2007) found only a few differences between family and non-family firms in general. When using a sub-sample of family firms only, however, they found that family management is positively related to a higher level of R&D spending, whereas family ownership seems to have a negative impact on R&D spending. They

concluded that, when analyzing strategies of family firms, the impacts of family ownership and family management may actually go in different directions. Using qualitative data about long-term orientation in various strategy contexts, such as innovation, brand building, or deal making, Miller and Le-Breton Miller (2005) show that long-term orientation may constitute an important competitive advantage for large family firms. Dyer and Whetten (2006) find that family firms to a greater extent refrain from socially irresponsible actions, supporting the view of family owners as being more interested in a positive reputation. In the same line, Uhlaner, Goor-Balk, and Masurel (2004) found that the inclusion of the family surname in the business name increases perceived social responsibility. Finally, in a paper close in nature to this one, Stavrou, Kassinis, and Filotheou (2007) explored the relationship between family firms and the likelihood of downsizing. They found that family firms generally seem to be less likely to downsize relative to other firms. We have extended their study insofar as we distinguish between family ownership and family management, understanding them as being two distinct dimensions of family firms. Furthermore, we use longitudinal data, which allow us to include lagged values, therefore making our findings more robust regarding issues of causality.

DATA AND METHOD

Sample Construction

The Standard & Poor's 500, as of July 31, 2003, was used as a starting point for constructing our sample.[1] Starting from this basis, we collected more detailed data about the ownership structures and management compositions of the companies from corporate proxy statements submitted to

[1] We chose this particular date because an issue of BusinessWeek indicates the family firms in the S&P 500 at this date (BusinessWeek, 2003). This issue gives us helpful qualitative information about the ownership structure and the management composition of the family firms covered.

the U.S. Securities and Exchange Commission in the years 1994-2003.[2] We then checked and expanded our data with information from Hoover's Handbook of American Business, Gale Business Resources, the Twentieth Century American Business Leaders Database at Harvard Business School, Forbes' Lists of 400 Richest Americans, Marquis Who's Who in America, and information available on the websites of the companies. Our final estimation sample covers 2,234 observations from 390 firms.

Measures

Dependent variables. The following measures were used as the study's dependent variables. Our first dependent variable, *workforce decreased*, is an indicator variable that takes the value of one if the firm's workforce decreased compared to the previous period and is otherwise zero. Our second dependent variable, *percentage change in workforce*, gives the percentage of workforce increase or decrease in period t compared to the total workforce in period t-1. In order to determine the size of the firm's workforce, we used the number of employees as reported by the firm itself. The remaining dependent variables, *percentage increase in workforce* and *percentage decrease in workforce*, are constructed from the variable *percentage change in workforce* (for more details, see Table A1).

Independent variables. Our independent variables fell into several conceptual categories. Our main interest was to determine the impact of family management and family ownership on the likelihood and, if relevant, the degree of workforce reduction. The variable *family management* is constructed as an indicator variable that equals one if a member of the founding family is either CEO or chairman. The variable *ownership by family* gives the percentage of stock owned by the founding family.

[2] The Securities Exchange Act of 1934 requires officers, directors, and five-percent owners to disclose their holdings. We collected this information from the definitive proxy statements (DEF 14A).

To distinguish between family ownership and other types of ownership, we constructed two further ownership variables. The variable *ownership by financial investors* measures the percentage of stock owned by large banks (e.g., Citigroup or JP Morgan), insurance companies (e.g., The Prudential Insurance Company or AXA), mutual funds (e.g., Fidelity Investments or Putnam Investments), private equity firms (e.g., KKR or Permira) or large individual financial investors (e.g., Warren Buffet, Kirk Kirkorian, or Philipp Anschutz).[3] The variable *ownership by employees* measures the percentage of stock owned by employees through various types of employee stock ownership plans (ESOP).

In order to assess the impact of a given firm's characteristics, we calculated the following variables: *firm age* (number of years since the firm was founded), *firm size* (value of assets), *leverage* (value of debt divided by the value of assets), *average sales growth in the last five years*, and *personnel-intensity* (number of employees divided by the value of assets). Finally, to control for the impact of corporate restructuring activities of firms, such as divestitures or acquisitions, we constructed the variable *change in property, plant and equipment* (PPE) (PPE_t minus PPE_{t-1}) (Morris, Cascio, & Young, 1999).

In order to measure the impact of the CEO's strength and experience, we included both the variable *CEO tenure* (the number of years the individual is CEO) and the variable *CEO duality* (an indicator variable that equals one if the CEO also serves as chairman of the board of directors). Furthermore, in order to measure the effect of incentive compensation, we calculated both the variable *share of option-based compensation* and the variable *share of stock-based compensation*. Both variables are measured in percent of total payment.

[3] We were not able to apply a more fine-grained measure because it is often difficult to distinguish between the different types of financial investors. The reason for this is that large banks and insurance companies are also sometimes active in the private equity business.

To control for firm performance, market valuation and investment opportunities in the year before the change in workforce occurred, we calculated the following variables: *ROA*, *change in sales* (sales decrease or increase divided by sales in the previous period) and *market-to-book value*.

Finally, two-digit SIC codes were used to construct indicator variables for the industries in our sample (55 categories), and time dummies for the years 1994-2003 were used to control for macro-economic effects.

As the distributions of the variables *firm size* and *firm age* are highly skewed, logarithmic values were taken. Most of the independent variables were lagged by one year to avoid problems of endogeneity. For more details regarding the construction of the variables, see Table A1 in the appendix.

Method

In order to analyze whether family-owned and family-managed firms are more likely to increase their workforce than other types of firms are, we estimated a random effects logit model. The dependent variable is the *workforce decreased* variable. The independent variables are as shown in Table A1. To measure the impact of family ownership and family management on the size of workforce increase/ decrease, we estimated GLS random-effects models and, when appropriate, pooled OLS models. The corresponding dependent variables are as follows: *percentage change in workforce, percentage increase in workforce*, and *percentage decrease in workforce*. The independent variables are the same as in the logit model. To determine whether a random effects model should be preferred to a pooled OLS model, we calculated the Breusch-Pagan Lagragian Multiplier Test, which examines whether or not the firm-specific intercepts differ from one another. If the test is significant, a random effects model should be preferred to a pooled OLS

model and vice versa (Breusch & Pagan, 1980). Typically, in a next step, a Hausman (1978) specification test is applied to determine whether a random effects or a fixed effects model is more appropriate. However, since the variable *family management* is, to a large degree, time-invariant[4], and since the industry variables are completely time-invariant, we were not able to estimate a (interpretable) fixed-effects model; the Hausman test is therefore inappropriate. For this reason, we used a random effects model, justified for the reason that we do not know of any variable captured by the error term that might be correlated with our two main independent variables, *family management* and *family ownership*. To find out whether the coefficients in our linear models are influenced by selection, we estimated a two-step Heckman model (Heckman, 1979), with the percentage change in workforce as dependent variable and the logit model as selection equation. As a further robustness check, we used various definitions of employment downsizing, ranging from a decrease by 2% up to a decrease by 10%, and estimated the corresponding logit models.

RESULTS

Univariate Analysis

In this sub-section, we will compare the downsizing observations with the upsizing observations by using descriptive statistics. Downsizing observations are defined as those in which a firm's workforce has declined compared to the previous period. Upsizing observations are defined as those in which a firm's workforce has increased over the last year. Our total sample encompasses 2,234 observations (from 390 firms). The downsizing category contains 837 observations (from 319 firms); 1,397 observations (from 359 firms) fall into the upsizing category. Two further remarks should be made. First, there is a substantial overlap between the two categories on the

[4] In 36 cases, a family-managed firm became a non-family-managed firm. In eight cases, a non-family-managed firm became a family-managed firm.

firm level. Over the entire period, about 74% of all firms (288 firms) experienced both an increase and a decrease in their workforce. Second, there is substantial variation in the size of the workforce. The mean percentage change in workforce is about +8% (median is +2.65%); the standard deviation is 31% (Table A2).

Table 1 presents the means and the medians of the independent variables grouped by downsizers and upsizers. Furthermore, Table 1 also reports the results of tests for equality of means or proportions and the results of Wilcoxon rank-sum tests. The results are as follows. We found the proportion of family-managed firms to be higher in the upsizing than in the downsizing group (0.41 versus 0.25 with $p<0.001$). In addition to this, the average percentage share of family ownership is higher in the upsizing than it is in the downsizing group (6.03% versus 4.70% with $p=0.018$). Univariate results thus seem to indicate a negative relationship between family management and the likelihood of downsizing.

Interestingly, the results of the univariate analysis do not indicate a significant relationship between ownership by financial institutions and the likelihood of belonging either to the upsizing or to the downsizing group (mean of 13.71% versus mean of 13.20% with $p=0.318$). The same result is true for ownership by employees (mean of 2.07% versus mean of 1.75% with $p=0.149$). Concerning the remaining firm characteristics, we found that larger, older and faster-growing firms, as well as firms with more debt, are more likely to belong to the downsizing group.

Some interesting results emerged regarding individual CEO characteristics. The average tenure of a CEO is higher in the upsizing than in the downsizing group (median of 14 years versus median of 9 years with $p<0.001$). In addition to this, the proportion of firms in which the CEO is also chairman of the board of directors is higher in the downsizing group than it is in the upsizing group (0.82 versus 0.77 with $p=0.002$). The univariate results do not indicate a

relationship between option-based payment and the likelihood of downsizing (mean of 43.0% versus mean of 43.8% with p=0.503). The situation is different with stock-based payment. The average share of stock-based payment is higher in the upsizing than it is in the downsizing group (7.46% versus 5.81% with p=0.011).

Finally, prior firm performance and investment opportunities seem to be a strong indicator of downsizing decisions. Market-to-book ratio, return on assets, and change in sales are all significantly higher in the upsizing group than they are in the downsizing group.

Regression Results

Table A2 in the appendix gives summary statistics and correlations for the dependent and independent variables in our regressions. Multicollinearity seems to be of minor concern, as is indicated by the low variance inflation factors (the maximum is at 2.45).

Insert Table 2 about here

Table 2 shows the results of the random effects logit regression. Hypothesis 1 is supported. Controlled for firm age, firm size, the CEO's tenure, and other firm and CEO characteristics, we found that *family-managed* firms are less likely to decrease their workforce than are non-family managed firms (ß=0.451 with p<0.01). Hypothesis 3, however, is not supported. The variable *family ownership* does not exhibit a statistically significant influence (ß=0.333 with p>0.1). The results concerning the control variables are as follows. Personnel-intensive and larger firms are more likely to cut their workforce. In contrast to this, firms with a high market-to-book ratio, a high ROA, and a positive development in sales are less likely to cut their workforce.

Interestingly, there is a negative relation between the length of the CEO's tenure and the likelihood of downsizing. Industry and time variables are found to be jointly significant.

Insert Table 3 about here

Table 3 gives pooled OLS and random effects GLS regressions on the percentage change in workforce. The first column displays an estimation model for the full sample; the second column displays an estimation model that includes only upsizing observations; and the third column displays an estimation model that includes only downsizing observations. The results concerning our main variables of interest differ strongly between the three models. When using the full sample, we found that both family management and family ownership seem to have a positive effect on job growth. Analyzing the sub-samples only, however, the picture becomes different. In contrast to this, the variable *family management* has a significant positive influence on the size of workforce decrease (ß=0.018 with $p<0.1$). Hypothesis 2 is thus not supported. The variable *family ownership* has a significant negative influence on the size of workforce decrease (ß=-0.090 with $p<0.01$). Hypothesis 4 is therefore supported.

Robustness Checks

Table A3 shows a two-step Heckman model on the size of workforce decrease, which is used as a robustness check. The selection equation differs from the estimation equation by the variable *personnel-intensity* (this makes sense because the variable was found to have a significant impact on the likelihood of downsizing, but was found to have no impact on the degree of downsizing; see Tables 2 and 3). The results of the Heckman model are as follows. Selection is an issue; Rho, which measures the correlation between the error terms of the selection and the estimation

equation, is significantly different from zero. The results regarding our main variables of interest are confirmed. Family management has a negative impact on the likelihood of downsizing (ß=-0.269 with $p<0.01$, selection equation), but has a positive impact regarding the degree of downsizing (ß=0.022 with $p<0.1$, estimation equation). Family ownership seems not to have an impact on the likelihood of downsizing (ß=-0.092 with $p>0.1$, estimation equation), but does seem to have a negative impact regarding the size of downsizing (ß=-0.091 with $p<0.05$, estimation equation). As a further robustness check, we defined employment downsizing in various degrees, ranging from an employment change of -2% (681 obs.) to an employment change of -10% (252 obs.). Table A4 in the appendix shows the results of random effects logit regressions on these newly defined dependent variables. The basic results are in line with our other estimations. The variable *family management* was found to have a statistically significant negative effect only in the models in which employment downsizing is defined as an employment change of at least -0.1%, -2%, and -4%. In contrast to this, the variable *family ownership* was found to have a statistically significant negative effect only when it comes to deep job cuts of more than 6%.

Limitations

The generalization of our results is limited in that we only regard large public U.S. firms. Small to medium-sized firms, as well as private firms, are not part of our sample. We believe, however, that our findings, that family-managed firms are less likely to engage in downsizing, are even stronger for small to medium-sized and private family firms. In contrast to large, publicly quoted family firms, smaller and private family firms are not under as much pressure to satisfy the demands of the capital market and its institutions. Another important point concerns the national context. We believe that some of our results are specific to the U.S., where the relationship

between firms and the capital market is presumed to be more short-term than in other countries (Porter, 1992).

DISCUSSION AND CONCLUSION

Implications for Theory

Family firms and employment downsizing. One of our central conclusions is that family management and family ownership have different impacts regarding the respective firms' engagement in downsizing. The two dimensions may actually go into different directions. Family management was found to decrease the likelihood of downsizing, whereas family ownership was found to have an impact only when it comes to deep job cuts. With this result, we have contributed to the debate on whether family firms are more socially responsive towards their own employees than non-family firms are (e.g., Dyer & Whetten, 2006; Stavrou *et al.*, 2007; Wiklund, 2006). Our main conclusion is that there is not a clear answer to this question. Any study that aims to analyze employment downsizing in family and non-family firms will run into difficulties of finding a "clear" definition of a family firm. A polarized approach that only compares family and non-family firms thus runs into the danger of producing incomplete results. It seems more promising instead to have a closer look at the different dimensions that characterize family firms (see also Miller, Le Breton-Miller, Lester, & Cannela, 2007; Wiklund, 2006).

Agency and/or stewardship theory. Our findings support both an agency and stewardship theory view of the family firm. In our arguments concerning the relationship between family ownership and workforce reduction, we used agency theory and argued that, from the perspective of society, family owners are easier to monitor and sanction. The reason for this is that family owners are not faceless and are more visible to the public than other types of owners

such as financial investors are. We found some support for this argument in that family ownership decreases the likelihood of deep job juts of above 6%. The result regarding the variable *family management* is interesting as well. Our finding that family-managed firms are less likely to downsize than non-family managed firms are is aligned with both agency and stewardship theory. An agency theorist might argue as follows: Due to their kinship ties, family managers are in a more secure position than non-family managers are. The threat of dismissal should therefore be lower for them. In addition to this, due to their strong links with the firm, family managers do not compete on the market for corporate executives. Family managers have, consequently, a lower need and a lower incentive to build up their reputation by engaging in downsizing that is aimed at increasing short-term performance. This explanation is in line with several agency theory contributions that explain managerial opportunism by signaling and reputation building (e.g., Campbell and Marino, 1994; Hirshleifer and Thakor, 1992; Narayanan, 1985; Thakor, 1990). Stewardship theory, however, can also account for our findings. As noted above, due to the large overlap between family and place of work, family managers are more likely to have strong feelings of social identity than non-family managers have (Guzzo & Abbott, 1990). Strong feelings of social identity lead to a stewardship-like behavior that favors the members of the family firm (i.e., its employees) over pressures from the (outside) capital market, which then makes downsizing less likely. Summarizing, we believe that both agency and stewardship theory play a vital role in explaining the extent of social responsibility of family firms.

Likelihood or degree of downsizing. The results of our regressions show that the influence of family management differs depending on whether the likelihood or the degree of downsizing is explained. The results indicate that family management seems to reduce the

likelihood of downsizing but also increases the degree of downsizing. Although, at first sight, this result seems puzzling, it can be explained. In fact, this surprising result shows the great complexity of family firms. As explained in the previous paragraph, the finding that family-managed firms are less likely to downsize can be explained by both agency and stewardship theory. The second result, that family management seems to increase the degree of downsizing, is more difficult to explain. Our first explanation goes into the direction of nepotism or altruism. Previous literature argues that family members may use their firm as a vehicle to gain perquisites and privileges that they otherwise would not receive (e.g., Schulze *et al.*, 2001). In this view, family management reduces the disciplining forces of the market for corporate control, which then may lead to a severe self-control problem (Becker, 1981; Thaler & Shefrin, 1981). One may argue that once family managers have taken the difficult decision to cut the workforce (which, as our results show, is less likely than in non-family-managed firms), they regard the firm more as a vehicle to provide the family with perquisites and privileges. In a situation in which the family's privileges are at stake and downsizing can no longer be avoided, the feeling of responsibility towards the ownership family seems to be stronger than the feeling of responsibility towards the firm's employees (Morck & Yeung, 2004). Nepotism or altruism towards the ownership family becomes important. Large job cuts are the result. Yet, there is also an alternative explanation. It might be that once family managers have taken the difficult decision to cut the workforce, they are better able to follow the chosen path. In other words, family managers are more effective in downsizing than non-family managers are. An explanation for this greater effectiveness would be their strong position in the firm, which allows them to overcome resistance from trade unions and other stakeholders that are against large job cuts. Future research is needed to find out which of these two explanations is true.

Implications for Practice

Downsizing and financial consequences. The extant literature suggests that pure employment downsizing seems to have neither a positive impact on shareholder value (Cascio *et al.*, 1997; Worrell, Davidson, & Sharma, 1991; for a summary, see Gerpott, 2007) nor a positive impact on profitability measures such as ROA (Cascio *et al.*, 1997). Two interesting and related questions now arise: (1) Why do firms, often as a first reaction to decline, engage in employment downsizing if, on average, it does not lead to significant improvements in terms of shareholder value or profitability? (2) Why, according to our findings, are family-managed firms less likely to cut their workforce? Our arguments in the theory section help to answer these questions. We suggest that family managers are in a more comfortable position regarding financial market pressures. They need neither to consider their value on the market for corporate executives nor act for the sake of acting. This argument is supported by financial studies which find that family management in particular (and not family ownership) seems to create firm value (Mishra, Randoy, & Jenssen, 2001; Villalonga & Amit, 2006). From a perspective of corporate governance, the question is how to stop managers from engaging in value-destroying (or at least non-value-enhancing) programs of employment downsizing. The main problem is that the knowledge about the effects of downsizing is often the private information of the management. Although we cannot give a comprehensive answer, our finding that family managers are less likely to downsize may lead the way. We argue that, even in times of crisis, it might not be a good idea to replace a manager who grew up in the organization with an outsider, as the latter is more oriented towards the outside market for corporate executives.

Family-managed firms as attractive employers. Our findings directly relate to the attractiveness of family firms as employers. Concerning job cuts, family-managed firms seem to

be a more stable employer than other types of firms. In particular, employees who undertake high relationship-specific investments (e.g., employees in an R&D or a specialized sales department) benefit from this relatively higher job stability. Family-managed firms can use this higher degree of job stability as an argument when recruiting specialized personnel.

Conclusion

Our paper extends the literature on the relation between family firms and their employees. Contrary to most other studies in the field of family business research, our findings relate to different types and dimensions of family firms. Our main finding that the impact of family management and extent of family ownership, being two dimensions of family firms, go into different directions indicate strong differences regarding social responsibility within the population of family firms. Future research on the relations between family firms and their various stakeholders should take this great heterogeneity within the group of family firms into account.

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APPENDIX

Table A1: Description of variables

Variables	Description
Dependent variables	
Workforce decreased	Dummy=1 if workforce is decreased [source: ExecuComp]
Percentage change in workforce	(Number of employees $_{t}$ – number of employees $_{t-1}$) divided by number of employees $_{t-1}$ [source: ExecuComp]
Percentage increase in workforce	Equals variable *percentage change in workforce*; observations, where the workforce is decreased are indicated as as missing values
Percentage decrease in workforce	Inverse of variable *percentage change in workforce*; observations, where the workforce is increased are indicated as missing values
Independent variables	
Family management [a]	Dummy=1 if CEO or chairman is from family [source: own construction]
Ownership by family [a]	Percentage of stock owned by family [source: own construction]
Ownership by financial investors [a]	Percentage of stock owned by financial institutions (large banks, insurance companies, investment funds, etc.) [source: own construction]
Ownership by employees [a]	Percentage of stock owned by employees [source: own construction]
Personal intensity [a]	Number of employees divided by total assets; [source: ExecuComp database]
Change in property, plant, and equipment (PPE)	PPE $_{t}$ – PPE $_{t-1}$ (in mn $) [source: Compustat]
Firm size [a]	Log (total assets) [source: Compustat]
Firm age [a]	Log (number of years since the firm was founded) [source: own construction]
Sales growth in last 5 years [a]	5-year least squares annual growth rate of sales [source: ExecuComp]
Leverage [a]	Long-term debt divided by total assets [source: Compustat]
CEO's tenure [a]	Number of years the individual has served as CEO [source: ExecuComp]
CEO duality [a]	Dummy=1 if CEO is also chairman of the board of directors [source: own construction]
Share of option-based payment [a]	Value of option-based compensation divided by total compensation [source: ExecuComp]
Share of stock-based payment [a]	Value of stock-based compensation divided by total compensation [source: ExecuComp]
Market-to-book ratio [a]	Sum of market value of equity and book value of debt divided by book value of total assets [source: Compustat]
ROA [a]	Return on assets [source: ExecuComp]
Change in sales [a]	(Sales $_{t}$ – sales $_{t-1}$) divided by sales $_{t-2}$ [source: Compustat]
Industry dummies	2-digit SIC codes indicating industry membership (55 different industries) [source: ExecuComp]
Time dummies	10 Dummy variables indicating year of observation (1993-2003) [source: own construction]

[a] These variables are lagged by one year.

Table A2: Summary statistics and correlations

	Variables	Mean	Std. Dev.	Min.	Max.	Correlations															VIF
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1	Percentage change in workforce	0.08	0.31	-0.95	6.73																		
2	Family management [b]	0.35	0.48	0	1	0.14																	1.64
3	Ownership by family [b]	0.05	0.13	0	0.89	0.07	0.36																1.54
4	Ownership by financial investors [b]	0.13	0.12	0	0.86	0.08	-0.11	-0.23															1.34
5	Ownership by employees [b]	0.02	0.05	0	0.40	-0.03	0.13	-0.06	-0.20														1.35
6	Personnel-intensity [b]	6.48	13.46	0.04	292.68	-0.03	0.12	0.06	0.05	0.02													1.33
7	Change in PPE / 1000	0.41	1.36	-12	19.53	0.17	0.01	0.02	-0.07	0.04	-0.03												1.19
8	Firm size [b, c]	8.56	1.31	4.75	13.24	0.18	-0.18	-0.09	-0.17	0.11	-0.18	0.24											2.45
9	Firm age [b, c]	3.99	0.82	0	5.36	0.24	-0.35	-0.07	-0.07	0.22	0.02	-0.01	0.34										2.30
10	Sales growth in last 5 years [b]	0.18	0.35	-0.26	7.43	0.24	0.23	0.14	0.01	-0.09	-0.03	0.05	-0.13	-0.43									1.79
11	Leverage [b]	0.24	0.17	0	0.95	-0.09	-0.17	-0.12	0.03	0.18	-0.09	0.09	0.36	0.28	-0.11								1.99
12	CEO's tenure [b]	15.85	13.02	0	50	0.01	0.13	0.06	-0.08	-0.04	0.01	0.04	0.08	0.17	-0.11	0.06							1.39
13	CEO duality [b]	0.79	0.41	0	1	-0.02	-0.21	-0.10	0.04	0.04	-0.01	-0.02	0.04	0.12	-0.12	0.04	0.18						1.18
14	Share of option-based payment [b]	0.44	0.31	0	1	0.07	0.03	-0.09	0.09	-0.11	-0.03	0.02	-0.02	-0.23	0.14	-0.12	-0.13	-0.02					1.38
15	Share of stock-based payment [b]	0.07	0.15	0	0.94	-0.04	-0.13	-0.10	0.00	0.05	0.08	0.03	0.15	0.16	-0.07	0.17	-0.05	0.04	-0.27				1.25
16	Market-to-book ratio [b]	2.19	2.93	0.07	77.49	0.24	0.15	0.09	0.00	-0.11	0.02	-0.02	-0.31	0.31	-0.41	-0.27	-0.05	-0.10	0.16	-0.07			1.62
17	ROA [b]	0.05	0.15	-4.58	0.55	0.11	0.00	0.03	-0.00	-0.01	0.07	0.02	-0.13	0.03	-0.10	-0.07	0.07	-0.05	-0.08	-0.01	0.19		1.17
18	Change in sales [b]	0.15	0.41	-0.87	8.09	0.30	0.14	0.07	0.05	-0.05	-0.03	0.12	-0.07	-0.28	0.47	-0.04	-0.03	-0.04	0.11	-0.07	0.25	0.02	1.50

[a] VIF=variance inflation factor
[b] Variables are lagged by one year
[c] Logarithmized

Table A3: Heckman model

	Estimation equation (Dep. variable: workforce decrease [in %])		**Selection equation** (Dep. variable: workforce decreased)	
Variables	**β (SE)**		**β (SE)**	
Family management [a]	0.022 (0.011)	*	-0.269 (0.089)	***
Ownership by family [a]	-0.091 (0.037)	**	-0.092 (0.348)	
Ownership by financial institutions [a]	-0.042 (0.034)		-0.212 (0.340)	
Ownership by employees [a]	-0.067 (0.064)		-0.524 (0.758)	
Change in PPE / 1000	-0.008 (0.004)	**	-0.207 (0.065)	***
Firm size [a]	-0.007 (0.003)	**	0.175 (0.051)	***
Firm age [a]	0.002 (0.007)		0.030 (0.073)	
Sales growth in last 5 years [a]	-0.035 (0.025)		-0.133 (0.189)	
Leverage [a]	-0.015 (0.031)		-0.018 (0.298)	
CEO's tenure [a]	-0.0008 (0.0002)	***	-0.0063 (0.0030)	**
CEO duality [a]	0.009 (0.009)		0.102 (0.089)	
Share of option-based payment [a]	-0.019 (0.014)		-0.186 (0.121)	
Share of stock-based payment [a]	-0.006 (0.023)		-0.304 (0.251)	
Market-to-book ratio [a]	-0.002 (0.003)		-0.074 (0.029)	**
ROA [a]	-0.072 (0.008)	***	-1.664 (0.621)	***
Change in sales [a]	0.023 (0.019)		-0.342 (0.125)	***
Personnel-intensity [a]			0.007 (0.002)	***
Industry dummies (54 categories)	p<0.001		p<0.001	
Time dummies (9 categories)	p=0.017		p<0.001	
N obs.	837		2,234	
Rho	0.119			
Wald test (Rho=0)	p=0.054			
Minus log pseudolikelihood	-398.47			
LR test	p<0.001			

[a] These variables are lagged by one year.
* p<0.1 ** p<0.05 *** p<0.01; Standard errors are robust and clustered; Two-sided tests are used.

Table A4: Results of random effects logit regression with various definitions of employment downsizing

	Employment downsizing is defined by a decrease in workforce of					
	>=0.1% (base model)	>2%	>4%	>6%	>8%	>10%
	ß (SE)	ß (SE)	ß (SE)	ß (SE)	ß (SE)	ß (SE)
Family management [a]	-0.45 (0.16) ***	-0.34 (0.16) ***	-0.34 (0.17) **	-0.28 (0.19)	-0.18 (0.19)	-0.07 (0.21)
Ownership by family [a]	-0.33 (0.62)	-0.66 (0.61)	-0.96 (0.66)	-1.70 (0.76) **	-1.98 (0.80) **	-2.49 (0.90) ***
Control variables as in Table 2						
Non-downsizing obs.	1,397	1,553	1,708	1,829	1,917	1,982
Downsizing obs.	837	681	526	405	317	252
of which are						
family-managed	212 (25%)	182 (27%)	143 (27%)	113 (28%)	93 (29%)	76 (30%)
non-family managed	625 (75%)	499 (73%)	383 (73%)	292 (72%)	224 (71%)	176 (70%)
of which are						
family-owned (>5%)	174 (21%)	143 (21%)	108 (21%)	83 (20%)	62 (20%)	48 (19%)
non-family owned (<5%)	663 (79%)	538 (79%)	418 (79%)	322 (80%)	255 (80%)	204 (81%)

[a] These variables are lagged by one year

* p<0.1 ** p<0.05 *** p<0.01; Standard errors are robust and clustered; Two-sided tests are used.

Tables to be inserted in the text:

Table 1: Univariate analysis

Variables	Workforce downsized		Workforce upsized		Workforce downsized vs. workforce upsized	
	Mean	Median	Mean	Median	Test for equality of means/ proportions	Wilcoxon rank-sum test
Family variables						
Family management (yes/no) [a]	0.25	0	0.41	0	p<0.001	p<0.001
Ownership by family (in %) [a]	4.70	0	6.03	0	p=0.018	p=0.006
Firm characteristics						
Ownership by financial investors (in %) [a]	13.71	12.06	13.20	11.6	p=0.318	p=0.196
Ownership by employees (in %) [a]	2.07	0	1.75	0	p=0.149	p=0.044
Personnel-intensity [a]	6.06	3.81	6.75	4.09	p=0.254	p=0.039
Change in property, plant, and equipment (in mn $)	174.93	50.89	564.32	166.15	p<0.001	p<0.001
Firm size (in bn $) [a]	19.02	6.39	12.39	3.72	p<0.001	p<0.001
Firm age (in yrs)	79.74	80	64.07	58	p<0.001	p<0.001
Sales growth in last 5 years (in %) [a]	12.62	6.99	21.36	12.45	p<0.001	p<0.001
Leverage (in %) [a]	26.25	27.11	22.24	20.72	p<0.001	p<0.001
CEO and payment characteristics						
CEO's tenure (in yrs) [a]	14.65	9	16.79	14	p<0.001	p<0.001
CEO duality (yes/no) [a]	0.82	1	0.77	1	p=0.002	p=0.002
Share of option-based payment (in %) [a]	42.99	43.19	43.89	43.80	p=0.503	p=0.479
Share of stock-based payment (in %) [a]	7.46	0	5.81	0	p=0.011	p=0.009
Firm performance						
Market-to-book ratio [a]	1.58	1.13	2.63	1.72	p<0.001	p<0.001
ROA [a]	2.43	4	7.09	6.7	p<0.001	p<0.001
Change in sales (in %) [a]	7.10	3.31	20.28	11.65	p<0.001	p<0.001
N obs. (firms)	837 (319)		1,397 (359)		2,234 (390)	

[a] These variables are lagged by one year.

Table 2: Random effects logit regression
(Dependent variable: workforce decreased)

Variables	**ß (SE)**
Family management [a]	-0.451 (0.165) ***
Ownership by family [a]	-0.333 (0.622)
Ownership by financial investors [a]	-0.456 (0.576)
Ownership by employees [a]	-1.077 (1.354)
Personnel-intensity [a]	0.013 (0.005) ***
Change in PPE / 1000	-0.506 (0.074) ***
Firm size [a]	0.382 (0.077) ***
Firm age [a]	0.032 (0.117)
Sales growth in last 5 years [a]	-0.171 (0.336)
Leverage [a]	-0.058 (0.496)
CEO's tenure [a]	-0.010 (0.005) **
CEO duality [a]	0.098 (0.152)
Share of option-based payment [a]	-0.339 (0.212)
Share of stock-based payment [a]	-0.510 (0.413)
Market-to-book ratio [a]	-0.143 (0.053) ***
ROA [a]	-2.917 (0.937) ***
Change in sales [a]	-0.594 (0.218) ***
Industry dummies (54 categories)	p<0.001
Time dummies (9 categories)	p<0.001
N obs. (groups)	2,234 (390)
Obs. per group: min./avg./max.	1/5.7/9
Minus log likelihood	1205.89
p-value Chi²-test	p<0.001
Rho	0.109
LR-test of Rho=0	p<0.001

[a] Variables are lagged by one year; Two sided tests are used.
* p<0.1 ** p<0.05 *** p<0.01

Table 3: Pooled OLS and random effects GLS regressions

	All obs. [a] (dep. variable: change in workforce [in %])		**Only "upsizing" obs.** [b] (dep. variable: increase in workforce [in %])		**Only "downsizing" obs.** [c] (dep. variable decrease in workforce [in%])	
Variables	**ß (SE)**		**ß (SE)**		**ß (SE)**	
Family management [d]	0.028 (0.015)	*	0.025 (0.020)		0.018 (0.011)	*
Ownership by family [d]	0.142 (0.068)	**	0.117 (0.091)		-0.090 (0.034)	***
Ownership by financial investors [d]	0.196 (0.083)	**	0.234 (0.121)	*	-0.047 (0.035)	
Ownership by employees [d]	0.221 (0.126)	*	0.104 (0.225)		-0.075 (0.065)	
Personnel-intensity [d]	-0.0016 (0.0006)	**	-0.0013 (0.0004)	***	0.0002 (0.003)	
Change in PPE / 1000	0.045 (0.008)	***	0.044 (0.010)	***	-0.009 (0.004)	**
Firm size [d]	-0.047 (0.009)	***	-0.051 (0.011)	***	-0.005 (0.004)	
Firm age [d]	-0.030 (0.012)	**	-0.041 (0.022)	*	0.001 (0.007)	
Sales growth in last 5 years [d]	0.023 (0.060)		0.024 (0.069)		0.034 (0.024)	
Leverage [d]	0.007 (0.067)		-0.044 (0.086)		-0.012 (0.031)	
CEO's tenure [d]	0.0011 (0.0006)	*	0.0011 (0.0009)		-0.0008 (0.0002)	***
CEO duality [d]	0.019 (0.015)		0.041 (0.020)	**	0.009 (0.009)	
Share of option-based payment [d]	0.041 (0.026)		0.051 (0.048)		-0.020 (0.015)	
Share of stock-based payment [d]	0.090 (0.051)	*	0.106 (0.087)		-0.012 (0.025)	
Market-to-book ratio [d]	0.010 (0.005)	**	0.004 (0.005)		-0.003 (0.004)	
ROA [d]	0.160 (0.032)	***	0.026 (0.124)		-0.074 (0.010)	***
Change in sales [d]	0.123 (0.051)	**	0.171 (0.100)	*	0.021 (0.019)	
Industry dummies (54 categories)	p<0.001		p<0.001		p<0.001	
Time dummies (9 categories)	p<0.001		p<0.001		p=0.023	
N obs. (groups)	2,234 (390)		1,397 (359)		837 (319)	
Obs. per group: min./avg./max.	1/5.7/9					
p-value Chi²-test	p<0.001					
p-value F-test			p<0.001		p<0.001	
Rho (fraction of variance due to u_i)	0.043					
Breusch-pagan test	p=0.008		p=0.885		p=0.949	
R^2			0.25		0.18	
R² within, R² between, R² overall	0.16 0.41 0.23					

[a] Due to the result of the Breusch-pagan test, a random effects GLS regression is used.
[b, c] Due to the result of the Breusch-pagan test, a pooled OLS regression is used.
[d] Variables are lagged by one year.
* p<0.1 ** p<0.05 *** p<0.01; Standard errors are robust and clustered; Two-sided tests are used.

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