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Nonfinancial Goals, Governance and Dividend Payout in Private Family Firms

This article uses insights from behavioral economics to explain dividend policy in private family firms. Based on a sample of 501 Belgian firms, our results indicate that dividend payout is low when a family CEO leads the business and in the presence of a family dominated board. The tendency of a family CEO or family dominated board to retain earnings appears to be stronger in earlier generational stages compared to later generational stages. The findings are consistent with (i) socioemotional objectives being important drivers of funding decisions in private firms where families possess important decision and control power and (ii) these objectives being more predominant in early generational stages.

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Introduction

The purpose of this study is to examine dividend payout in private family firms and, thereby, enhance understanding of funding decisions in this type of firms. Specifically, we examine how dividend policy is affected by (i) the presence of a family CEO (versus external CEO) and (ii) the presence of a family dominated board. Furthermore, we study how the effect of these variables on dividend policy varies with the generational stage of the firm.

Most explanations of dividend payout policy in public firms are grounded in agency theory and consider dividend policy as a corporate governance device. In general, these agency models assert that the payout of dividends may mitigate managerial moral hazard (Jensen 1986; Easterbrook 1984). In public firms where the interests of the firm's managers are not aligned with those of the firm's owners, dividends can play a basic role in limiting expropriation because they remove corporate wealth from insider control. As suggested by Chen, Cheung, Stouraitis, and Wong (2005), Yoshikawa and Rasheed (2010) and Setia-Atmaja (2010), a similar argument applies to dividend policy in public family firms where controlling family shareholders have powerful incentives to expropriate wealth from minority shareholders. La Porta, Lopez-de-Silanes, Shleifer, and Vishny (2000), Faccio, Lang, and Young (2001), Farinha (2003) and Setia-Atmaja (2010) all find evidence for the "outcome model" of dividends, where dividends are the result of effective pressure by (minority) shareholders to force corporate insiders to disgorge cash.

Although dividend policy is a major research topic in finance, no paper has, apart from anecdotic statements, directed attention towards its antecedents in private family firms. In a private family firm context, we consider dividend policy to be, first and most importantly, a financing choice and, following Romano, Tanewski, and Smyrnios (2000) and Poutziouris (2001), we argue that the behavioral side of business venturing, which is

stronger in the case of private family firms, naturally plays a crucial role in shaping their financial structure conduct. As such, we argue that control and risk issues may be important considerations when dividend payout is set in private (family) firms; these issues are often less relevant – and therefore not considered - when explaining dividend policy of public firms which have already opened up their capital to the public.

In this article, we extend the motives for paying out dividends traditionally grounded in agency theory and use behavioral theory to explain dividend payout in private family firms. Behavioral theory argues that reported behavior in family firms may not be economically rational because nonfinancial objectives prevail. Following Romano, Tanewski, and Smyrniotis (2000), Mishra and McConaughy (1999) and Gómez-Mejía, Haynes, Núñez-Nickel, Jacobson, and Moyano-Fuentes (2007), amongst others, we argue that the preservation of family control is a unique aspect of private family firm behavior. In this paper, we consider a low dividend payout as a choice for internal financing which (i) enables the family to remain primarily focused on nonpecuniary objectives rather than on financial goals (the latter presumably being the primary focus of nonfamily shareholders and creditors), (ii) leaves the control and decision structure within the firm unchanged and, (iii) avoids the financial risk associated with debt (loss of control in case of financial distress/bankruptcy). Recently, Gómez-Mejía, Núñez-Nickel, Jacobson, and Moyano-Fuentes (2007) have introduced the notion of socioemotional wealth to describe the noneconomic goals that meet the family's affective needs. The socioemotional wealth concept is grounded in behavioral theory and refers to the nonfinancial aspects of the firm that meet the family's affective needs such as the ability to exercise family influence and the perpetuation of the family dynasty. Because internal financing (retention of earnings) keeps the control and decision structure of the firm unchanged, as opposed to the external equity, and because

internal financing does not add financial risk, as opposed to debt, we expect family firms with a strong focus on the preservation of socioemotional wealth to prefer to avoid external funding, and, therefore, to retain earnings and have a low dividend payout. The above reasoning is in line with results documenting family firms' aversion to outside capital infusion because of the desire to remain in control (for example, Gallo and Vilaseca 1996; Romano, Tanewski, and Smyrniotis 2000; Poutziouris 2001) and with those documenting family firms' aversion to debt (for example, Agrawal and Nagarajan 1990; Mishra and McConoughy 1999.)

When studying family firms, it is important to take into account the heterogeneity within the group of family firms. Family firms, for example, differ in the importance they attach to their socioemotional wealth (Gómez-Mejía, Núñez-Nickel, Jacobson, and Moyano-Fuentes 2007) and, therefore, are likely to have different dividend payouts. In this article, we examine how the salience of socioemotional wealth and the desire to keep control in family firms vary depending on the CEO position (main executive position held by a family member versus external manager), the power balance in the board of directors (family dominated or not) and the generational stage.

By using behavioral economics arguments to explain dividend choices in private family firms, our article contributes to both the family business literature and the literature on financing choices. First, although it is generally acknowledged in the family business literature that nonfinancial objectives play an important role in understanding decision making behavior in family firms (for example, Distelberg and Sorenson 2009; Gómez-Mejía, Núñez-Nickel, Jacobson, and Moyano-Fuentes 2007; Sharma 2004; Westhead and Howorth 2006; Gómez-Mejía, Makri, and Kintana 2010), little evidence exists on this issue in a financing context. In this article, we aim to provide such evidence by studying dividend

payout policy. Second, we extend the motives for paying dividends traditionally grounded in agency theory and use behavioral economics arguments to explain the observed variance in dividend policy across private family firms. As such, we contribute to the understanding of firm funding choices and to the family firm heterogeneity debate.

The organization of the paper is as follows. In the next section, the theoretical arguments are developed and hypotheses are derived. In the subsequent section, the data and the methodology are discussed. The empirical results are presented and discussed in the fourth section. Finally, in the fifth section, conclusions, implications and limitations of the study and suggestions for further research are presented.

Literature review and theoretical developments

Family control, behavioral economics issues and dividend payout

Understanding the noneconomic-motivated behavior in family firms is an important research topic in the family business literature (Family Business Review, 2008, vol. XXI, no. 2, Editors' note). In this literature, family businesses have been presented as combinations of two systems that overlap and interact: the emotion-oriented family system that focuses on noneconomic goals and the results-oriented business system that focuses on economic goals (Distelberg and Sorenson 2009; Stafford, Duncan, Danes, and Winter 1999).

Applying behavioral economics arguments, Gómez-Mejía, Núñez-Nickel, Jacobson, and Moyano-Fuentes (2007) propose that family firms are likely to frame relinquishing control, and more broadly, relinquishing the family's socioemotional wealth, as a crucial loss. Socioemotional wealth is defined as the stock of affect-related value a family derives from its ownership and control position in a particular firm. Gómez-Mejía, Núñez-Nickel, Jacobson, and Moyano-Fuentes (2007) argue that for family firms the primary reference point is the loss of socioemotional wealth, and, therefore, preserving the family's socioemotional

wealth, which is inextricably tied to the organization, represents a key goal in and of itself. In turn, achieving this goal requires continued family control of the firm (Gómez-Mejía, Makri, and Kintana 2010). In this light, internal financing is preferable over external financing. Carney and Gedajlovic (2002) argue that founders tend to rely highly on retained earnings for capital investment because of their reluctance to reduce control. Similarly, Poutziouris (2001) argues that introverted and closely held family ventures, which adhere strongly to family business control, tend to use a conservative approach to financing (opting for retained earnings). Poutziouris refers to this phenomenon as inherent behavioral barriers that restrain firms from considering external (equity) options. More generally, the behavioral aspects associated with financing choices are referred to as 'demand constraints' in the small business financing literature.

External financing (debt or external stock) will likely involve a shift of the primary focus from nonpecuniary objectives towards financial goals. Moreover, external equity financing is likely to entail the appearance of new actors from outside the family circle with the capacity to exert some influence and control over the strategic direction of the firm, whereas debt financing comes with increased financial risk, i.e. the risk of loss of control in case of financial distress (Agrawal and Nagarajan 1990; Mishra and McConaughy 1999). As a result, external financing potentially erodes the family's ability to exercise unconstrained authority, influence and power, all of which are important elements of socioemotional wealth. Moreover, debt comes with an explicit financing cost which may be perceived (too) high by entrepreneurs who gain socioemotional benefits and do not have a strong demand for financial return. Internal financing (retaining earnings), on the contrary, does not add any financial risk, nor does it involve any new actors (with a primary focus on financial objectives), nor does it change the ownership structure of the firm. Internal financing will,

however, increase financial wealth concentration for family members (compared to retaining less and raising funds externally). Consistent with the arguments of Gómez-Mejía, Makri, and Kintana (2010) explaining low overall and international diversification in family firms, we expect family firms with a strong attachment to their socioemotional wealth to prefer high financial wealth concentration rather than having to deal with the drawbacks associated with external funding. This is in line with the argument of Gómez-Mejía, Núñez-Nickel, Jacobson, and Moyano-Fuentes (2007) that family firm owners are willing to incur the increased risks associated with an undiversified position in order to prevent a loss to their socioemotional wealth.

Based on the above arguments, we propose that the higher the importance attached to family control and socioemotional wealth, the more likely a family firm will be to retain earnings and, therefore, the lower the dividend payout will be. In the next paragraphs, we discuss how socioemotional wealth and the incentive to protect it are likely to vary with the CEO position (family versus external CEO) and the power balance in the board of directors (family dominated board or not). Taking into account family heterogeneity, we also examine how the effect of these variables varies with the generational stage.

CEO position, family board power and dividend payout

Arguably, the most powerful influence on the objectives of a smaller private firm is the CEO (Kelly, Athanassiou, and Crittenden 2000). To protect the store of family wealth, some owners may make it difficult for nonfamily members to gain key managerial positions, such as the CEO position, and restrict these positions to kinship members who are similarly concerned with “family agendas” (Westhead and Howorth 2006). According to Gómez-Mejía, Núñez-Nickel, Jacobson, and Moyano-Fuentes (2007), the stronger the role of the

family is (family CEO), the more likely the firm will be to protect family control and socioemotional wealth. As such, family firms with a family CEO will be more likely to avoid the involvement of new actors (creditors or external shareholders) with a primary focus on financial objectives. In addition, family CEOs are likely to be more averse to ownership/control dilution (coming with external equity) and to financial risk (coming with debt financing) than external CEOs.

Based on the above, we expect that family firms led by a family CEO, because of his strong desire to protect the family's socioemotional wealth, to reinvest more earnings and, consequently, to have a lower dividend payout compared to family firms led by an external CEO. Therefore, a first hypothesis is formulated as follows:

Hypothesis 1. Private family firms led by a family CEO have a lower dividend payout compared to private family firms led by an external CEO.

In most countries, boards of directors have a major influence in earnings distribution decisions¹. Therefore, we next consider the influence of the power balance in the board of directors on dividend payout policy. Consistent with the behavioral framework, van Ees, Gabrielson, and Huse (2009) conceive the main role of the board as one of mediating between various coalitions of actors and establishing controls to ensure that the organizational effort is directed toward achieving the goals that the dominant coalition has set. According to Schulze, Lubatkin, and Dino (2002), firms ruled by a dominant family coalition will be strongly influenced by this coalition's desires and preferences. Anderson and Reeb (2004) argue that family dominated boards potentially grant a disproportionate voice to the family in the firm decision making. As such, firms with family dominated boards

¹ Also in Belgium, earnings distribution decisions such as dividend payments are delegated to the board of directors.

would be more inclined to avoid strategic decisions that might threaten the family's socioemotional wealth. On the basis of the above arguments, we formulate a second hypothesis as follows:

Hypothesis 2. In the presence of a family dominated board dividend payout will be lower than in the absence thereof.

Next, we consider an indirect effect of a family dominated board, through the strengthening of the family CEO's power to set dividend payout in accordance with socioemotional objectives. According to Finkelstein and Hambrick (1996), a powerful CEO may be heavily involved in the selection of directors and managers, especially in family firms. Following this reasoning, a family CEO who strongly adheres to family objectives will likely restrict board position to kinship members similarly concerned with family agendas. Recent research of Voordeckers, Van Gils, and Van den Heuvel (2007) provides evidence that board composition in family firms is a reflection of the family characteristics and objectives. Based on this observation, we formulate a third hypothesis as follows:

Hypothesis 3. The tendency/power of a family CEO to set a low dividend payout will be stronger in the presence of a family dominated board.

Generational effects

Next, we examine potential generational differences in the effects of the CEO position and family board power on dividend payout. Research examining goal variation in family firms suggests that the importance of nonfinancial objectives evolves with the generation in charge, with a stronger desire to preserve control and socioemotional wealth in early stages (Gómez-Mejía, Núñez-Nickel, Jacobson, and Moyano-Fuentes 2007).

A number of authors (for example, Gómez-Mejía, Núñez-Nickel, Jacobson, and Moyano-Fuentes 2007 and Schulze, Lubatkin, and Dino 2003) suggest that the emotional attachment to the firm, the self-identification with the firm and the utility generated by the ability to exercise authority are strongest in the stage when the founding family controls and manages the firm. Gedajlovic (2004) argues that founder CEOs are generally unwilling, or at least highly reluctant, to reduce their control in the firm, and, therefore, are likely to rely on retained earnings for capital investment (Carney and Gedajlovic 2002). In a similar vein, Mishra and McConaughy (1999) argue that founding family CEOs, because their unique status provides them returns to their human capital, such as quasi-rents and scope for actions not generally available to non-founding family CEOs, have more to lose in case of forced control change following financial distress. The authors document that founding family controlled firms are more likely to borrow less compared to nonfounding family controlled firms. Based on the above arguments, we formulate hypotheses 4 and 5 as follows:

Hypothesis 4. Dividend payout will be lower in founder-led family firms compared to descendant-led family firms or family firms led by an external CEO.

Hypothesis 5. The tendency of a family CEO/a family dominated board to pay out dividends will be lower in early generational stages compared to later generational stages.

Methodology

Data

For our research purposes we use a combination of quantitative financial statement data and qualitative data resulting from a large-scale survey held mid-2001. The quantitative financial statement data originate from a huge dataset of 21640 Flemish companies

randomly selected (approximately 18 percent of all incorporated Flemish companies)². The qualitative data were gathered through an extensive survey. We selected companies in the manufacturing, trade and services sectors with an employment of at least five full-time equivalent employees. This implies that start-ups and very small firms are excluded from our study. 8367 companies of the original dataset met these requirements and were sent a survey. The mailing was addressed to the president of the firm, the CEO, or the financial director. A total of 896 filled-out questionnaires were received, of which 57 were anonymous. 839 usable responses (10.03 percent) were received. Although this response rate is not ideal, we consider it acceptable as it is comparable to other studies that target CEOs or top executives (for example, Bammens, Voordeckers, and Van Gils 2008; Cruz, Gómez-Mejía, and Becerra 2010; Voordeckers, Van Gils, and Van den Heuvel 2007)³. Private family firms were defined by the following criteria (i) they were not quoted on the stock exchange, (ii) they were perceived as family firms by the president, CEO or financial director, (iii) where one family owns 50 percent or more of all shares. This classification is commonly used in family business literature (for example, Westhead and Howorth 2006). 576 of the 839 nonanonymous questionnaires are from family firms; 263 from nonfamily firms. All financial statement variables are from book year ending 2001, except for firm risk which uses three years data (1999-2001) and dividend payout, which is also based on three years data (2001-2003). After eliminating missing values, a sample of 501 private family firms remains. Most of the firms (479) are small or medium-sized according to Belgian accounting

² We made use of BEL-FIRST, a publicly available financial database supplied by Bureau Van Dijk.

³ As discussed in Laveren, Helleboogh, Molly, and Limère (2010), representativeness and nonresponse bias of the sample have been checked. Except for firm size (overrepresentation of larger companies compared to nonrespondants), no significant differences between respondents and nonrespondents are found. Based on statistical tests, we conclude nonresponse bias is absent.

law, comprising less than 100 employees; 22 firms are considered large firms, with more than 100 employees.

Variables

Dependent variable. Firm dividend payout is measured by the nominal value of regular cash dividends paid to common stock. The average of dividends paid over three successive years (2001-2003) is taken so as to reduce the effects of transitory and noisy components in payout.

Independent and control variables. The presence of a family CEO versus an external CEO is measured by a binary variable (family CEO) which equals unity when the CEO is a family CEO; and zero otherwise. The presence of a founder CEO versus nonfounder CEO is measured by a binary variable (founder CEO) which equals unity when the CEO is a family CEO and the first or first and second generation is active in the firm; and zero otherwise⁴. The presence of a family dominated board (family board majority), is measured by a binary variable which is set equal to one if the majority of board seats is occupied by members of the family; zero otherwise.⁵ To estimate generational differences in the effects of the explanatory variables (family CEO, family board majority) on payout conduct, we follow the partition specification of Yip and Tsang (2008). We construct three binary dummy variables: first generation (GEN1=1 if first generation, 0 otherwise), second generation (GEN2=1 if second generation, 0 otherwise), third and later generations (GEN3=1 if third or later generation, 0 otherwise). We thus estimate three different coefficients for the family decision/control variables, one for each of the three subsamples based on generation (first,

⁴ Relevant survey questions are included in appendix.

⁵ The survey includes a question whether the majority of board members belong to the family. It does not, however, include the number of family directors (nor the number of nonfamily/external directors). Relevant survey questions are added in appendix.

second and third+). For example, the coefficient on GEN3*family board majority measures the effect of family board dominance on payout conduct for third or later generation firms.

In line with research on the antecedents of dividend payout, (for example, Faccio, Lang, and Young 2001; Setia-Atmaja, Tanewski, and Skully 2009; Setia-Atmaja 2010; Yoshikawa and Rasheed 2010), we include size (log of total assets), growth (percentage growth in total assets), leverage (financial debt over equity), cash flow (cash flow over total assets), risk (standard deviation of return on assets) and industry dummies as control variables. To estimate generational differences in dividend payouts, we construct an ordered variable that equals 1 for a first generation firm, 2 for a second generation firm, 3 for a third generation firm.⁶

*** INSERT TABLE 1 HERE ***

Table 1 reports distribution parameters of the payout ratio (dividends paid/net income) and dividends paid (nominal amount). The mean (median) payout ratio (three year average) is 13.80 percent (0.00 percent). 119 out of 501 sample firms have a strictly positive payout; their mean (median) payout ratio is 58.11 percent (43.44 percent). Based on the subsamples analyses, the mean payout ratio is lower for firms with a family CEO (family CEO=1) compared to firms with an external CEO (family CEO=0): 12.90 percent versus 23.38 percent (difference not significant); and for firms having a family dominated board (family board majority=1) versus firms where the board is not family dominated (family board majority=0):

⁶ In the models where the interaction of the main variables with generation is measured using the partition approach, we may also allow for the intercept to differ across generations. It is noted that similar conclusions on the results of the subsequent regressions can be made when allowing for a single intercept (quasi-moderator effect).

11.59 percent versus 25.97 percent (significant at 0.01). According to table 1, there appears to be no trend in payout ratio over generations.

*** INSERT TABLE 2 HERE ***

Table 2 presents univariate statistics of the variables of interest and correlation coefficients between the variables. The correlation statistics indicate that payout ratio is significantly negatively related to the presence of a family CEO, family board majority and leverage, and significantly positively related to the number of board directors, total assets, and cash flow. The presence of a family CEO is significantly and positively related to family board majority. The presence of a family CEO and family board majority are significantly negatively related to the number of board directors and firm size. The number of board directors is significantly positively related to generation and firm size. Firm size is significantly negatively related to firm risk and firm growth is significantly positively related to cash flow. Amongst variables that are considered in the multivariate analyses, the highest VIF value is 1.2120. We thus conclude that multicollinearity does not pose a problem in our analyses (Kennedy 2008).

Estimation Method

An important characteristic of our data is the large group of firms paying no (zero) dividends. Prior empirical studies on dividend policy relate to public firms, where paying out dividends is common. Corporate governance benefits (for example, La Porta, Lopez-de-Silanes, Shleifer, and Vishny 2000; Faccio, Lang, and Young 2001) and signaling benefits (Jensen 1986; La Porta, Lopez-de-Silanes, Shleifer, and Vishny 2000) of dividends are commonly advanced as motivations for paying out dividends in public firms. These

considerations are less relevant in the context of private (family) firms. The model that we consider accounts for the unusually high number of zeros (77 percent) and the non-normal distribution of the data, as appears from the distribution parameters of dividend payout in table 1 (the variable dividends paid has a skewness statistic of 21.2 and a kurtosis statistic of 465)⁷. Instead of using a Tobit model for censored data, which is a common method adopted for cross-sectional estimation of determinants of dividend payout in public firms (see, for example, Fenn and Liang 2001; Deshmukh 2005), we opt for a count model (Cameron and Trivedi 2005; Böhning, Ekkehart, Schlattmann, Mendonça, and Kircher 1999; Lambert 1992) to study determinants of dividend payout in private family firms.

More specifically, we consider a model that forms the basis for testing over- and under-dispersion of the data, "non-poissonness" (Greene 1994), which may be reflected in an over- (or under-) abundance of zero outcomes. A negative binomial model, a zero-inflated negative binomial, a Poisson model and a zero-inflated Poisson model are all candidates for count models with these characteristics (Greene 1994).⁸ A negative binomial model accounts for over-(under-)dispersion. Otherwise, the model reduces to a standard Poisson distribution. A nice feature of the negative binomial model is that the Poisson model is nested in it. Equality of the conditional mean and the variance can be tested using a simple test on the significance of an estimated parameter (alpha test).

Cameron and Trivedi (1998) note that, in essence, there are two sources that can lead to over-dispersion: (i) the presence of the extra zeros (controlled by an inflation model) and (ii)

⁷ The count model takes into account the problem of excess zeroes, the right skewness and heteroscedasticity.

⁸ Considering the nature of the firms in the data that we employ, some firms may have no intention for paying out dividends in any of the years where other firms may pay dividends – that however may be zero in some particular year. So, different distributions may apply to the zero dividend firms and the non-zero dividend firms. The rationale for considering zero-inflation is that types of extra zeros can occur: one arising from the zero state and the other from the ordinary count model such as the Poisson or negative binomial with one that is degenerated at zero (Lambert 1992).

the over-dispersion induced by individual (between-firm) heterogeneity (Poisson or negative binomial). In this connection, we are interested in a procedure which enables us to test these individual sources by testing the zero inflated model against a Poisson or a negative binomial.

In order to obtain some useful selection on the appropriate model, we proceeded as follows. First, to test whether over-dispersion as a result of the excess variability (resulting from the individual heterogeneity) is present, we performed a t-test on the dispersion parameter (see Cameron and Trivedi 2005, p.670-671). Applied to our analysis, the outcome of the test indicates the presence of significant over-dispersion. More specifically, we found that the null hypothesis that $\alpha=0$ was rejected at the 0.01 significance level in each of the subsequent estimations.⁹ As a result, we opt for the negative binomial as a means to correct for this type of over-dispersion. Second, we also tested for a second source of over-dispersion, i.e. over-dispersion as a result of a zero-inflation. Under the zero-inflation model, a different probability distribution is assumed for the zero and non-zero counts. Vuong's (1989) test statistic can be used for testing the restriction of zero-inflation. The primary advantage of the Vuong test is that it takes into account two types of distribution, not just the zero outcomes. The test statistic indicates that the zero-inflation of the negative binomial model does not provide any significant improvement over the basic negative binomial model¹⁰. In all cases we find a test statistic which is close to 1 (between 1.30 and 1.45) with a one side p-value around 0.10.¹¹ On the basis of these diagnostics, we conclude that zero-inflation is not an important source of over-dispersion. Moreover, we find that the

⁹ Recall that the "over-dispersion" implies that there is more variability around the model's fitted values than is consistent with a Poisson formulation; the extra parameter that accounts for this dispersion resulted consistently with large improvements in the fit of the model.

¹⁰ The test is implemented in STATA which supplies this test as a built-in procedure.

¹¹ According to Greene (1994), a Vuong statistic greater than 2 is an indication for applying a zero-inflation specification.

fit to the distribution improves under the negative binomial.¹² Therefore, in subsequent paragraphs, results presented are estimated on the basis of the basic negative binomial model.

Results and Discussion

Multivariate analysis of hypotheses

*** INSERT TABLE 3 HERE ***

Maximum likelihood regression results using a negative binomial count model are presented in table 3. The table reports the coefficients where the main variables included are family CEO (model 1), family board majority (model 2), and family CEO plus the interaction term of family CEO with family board majority (model 3). In model 1, the coefficient on the variable family CEO is negative and significant ($p < 0.01$) in support of hypothesis 1. According to model 2, the coefficient on the variable family board majority is negative and significant ($p < 0.001$), consistent with hypothesis 2 which predicts a negative relation between family dominance in the board and dividends paid. In model 3, the effect of family CEO on dividend payout is modeled to depend on the family dominance in the board (interaction effect). Considering the results of this model, the effect of family CEO on dividend payout is insignificant if the family does not have a majority position in the board, but is significant negative ($p < 0.01$) if the family CEO is backed by a family dominated board. This finding is in line with the prediction in hypothesis 3.

The control variables firm size, leverage and cash flow have the expected sign and are highly significant ($p < 0.01$). Because the dependent variable is the nominal amount of

¹² We also considered a Tobit model as a possible benchmark. The estimated results were very similar to the ones for the negative binomial model. We report the results using the latter model, since they are less sensitive to instability problems.

dividends paid, the size variable controls for the fact that bigger firms will pay larger nominal amounts of dividends. As in previous papers studying dividend payout (for example, Faccio, Lang, and Young 2001; Fenn and Liang 2001) leverage is negatively related to dividend payout and cash flow is positively related to dividend payout. The negative coefficient on debt is consistent with debt-related payouts reducing firm liquidity and constraining (discretionary) payouts to shareholders. The positive coefficient on cash flow is consistent with dividends being discretionary payouts and depending on there being sufficient liquidity. Contrary to expectations, the coefficient on firm risk is positive (significant in all three models with $p < 0.05$). This is in contrast to the findings of Setia-Atmaja, Tanewski, and Skully (2009) and Setia-Atmaja (2010) who document a negative relation between dividend payout and firm risk.¹³

*** INSERT TABLE 4 HERE ***

Table 4 presents the negative binomial count model estimates including generational effects for the explanatory variables. According to model 1, the coefficient on the variable founder CEO is negative and significant ($p < 0.001$) and in line with hypothesis 4, which predicts a negative relation between the presence of a founder CEO (with high emotional attachment to the firm) and dividends paid. According to models 2 and 3, the coefficients on family CEO and family board majority are significant negative for the first and second generation subsample ($p < 0.01$), and insignificant for the third+ generation subsample. The negative coefficients confirm the reasoning underlying hypothesis 5 that in firms where the family holds important decision and control power (through CEO position and/or board

¹³ As a robustness check, we re-estimated the models without the control variable firm risk. The significance of the other explanatory variables is unaffected.

power), socioemotional objectives are stronger in earlier generational stages compared to later generational stages. Model 4 in table 4 estimates generational effects for the variable family CEO and for the interaction variable (family CEO*family board majority). Interestingly, for first generation firms, the effect of family CEO is negative significant whether or not the family CEO is backed by a dominant family position in the board (though the effect is significantly stronger if the family has a majority position in the board). For second generation firms, the effect of family CEO is negative significant only when the CEO is backed by a family majority position in the board. These results suggest that a family CEO/founding CEO has important decision making power in first generation firms and is able to take decisions in accordance with socioemotional objectives. As the firm transits to the second generation, the board becomes a more powerful decision making institution at the expense of the family CEO's power; decisions in line with socioemotional objectives are only possible if the family CEO is backed by a dominant family position in the board. For third generation firms, the effect of the family CEO on dividend payout is insignificant, consistent with the idea that socio-emotional objectives are less important in later generation firms (compared to first and second generation firms).

Overall, table 3 and 4 present evidence of (i) socioemotional objectives being important drivers of payout decisions in firms where families possess important decision and control power and (ii) these objectives being more predominant in early generational stages compared to later generational stages.

Sensitivity analysis

We next consider an alternative measure of family decision/control power. Table 2 shows that the variables family CEO and family board majority are significantly and negatively

related to the number of board directors ($p < 0.001$). This suggests that a larger board means relatively less decision/control power in the hands of the family. This is in line with the findings of Dalton and Kesner (1987) and with the arguments of Pearce and Zahra (1992) that larger boards are associated with greater proportions of outside (or, alternatively, nonfamily) directors. Similarly, Fiegenger, Brown, Dreux, and Dennis (2000) show a negative relation between CEO family stakes (a measure of family power) and board size. The main explanation of these authors is based on the CEO's desire to "protect discretion from potential board interference" (p.9). We construct an alternative measure of family decision and control power as follows. We estimate a linear regression model relating board size to the presence of a family CEO and the indicator variable measuring family dominance in the board. Both regression coefficients are negative and significant: -0.5727 for the indicator variable family CEO ($p < 0.01$) and -0.7696 for the variable indicating whether the majority of board directors are family members ($p < 0.001$). On the basis of the regression coefficients we obtain an estimate of the number of board members for each firm. We use this estimate as an alternative for family decision and control power, where a higher number of board members estimated means less family power.

*** INSERT TABLE 5 HERE ***

The results of this analysis are presented in table 5. Model 1 presents the results with the number of board members estimated (a measure of family decision/control power) included as main explanatory variable. For comparison purposes, model 2 of table 5 presents the results with the number of board members (not estimated) included as main explanatory variable. Models 3 and 4 are the corresponding models with generational effects included. The results are in line with those in tables 3 and 4: less family decision and control power (a

higher estimated number of board members) is associated with a higher payout. Based on model 3, the effect of family decision and control power is significant in first and second generation firms insignificant in third and later generation firms. Again, we believe these findings are consistent with (i) socioemotional objectives being important drivers of payout in firms where families possess important control/decision power and (ii) these objectives being more important in early generation firms (compared to later generation firms).

Conclusion

No paper has, up to now, addressed the question concerning the antecedents of dividend payout in private family firms. Because the dividend payout may have consequences for the distribution of decision and control structure in family firms – a higher payout means more external funding (*ceteris paribus*) potentially involving new actors (creditors or external shareholders) from outside the family circle with the capacity to set financial objectives or exert some influence and control over the strategic direction of the firm - and, in the case of debt, for the firm's risk profile, it is, though, a relevant research topic.

In this article, we use arguments from behavioral economics theory to develop and test a number of propositions concerning dividend payout in private family firms. We infer, consistent with Gómez-Mejía, Núñez-Nickel, Jacobson, and Moyano-Fuentes (2007), that the preservation of the family's socioemotional wealth is a key goal in itself for private family firms. These firms perceive a decline in their socioemotional wealth as a major loss and, therefore, prefer high financial wealth concentration (through the retention of earnings) rather than having to deal with the drawbacks associated with external funding. In line with these ideas, we find that dividend payout is low (i) when a family/founding CEO leads the business and (ii) in the presence of a family dominated board. When the effect of family CEO is modeled to depend on family board dominance, results suggest that the family CEO is able

to set dividend payout in accordance with socioemotional objectives only in the presence of a board where the family has a majority position. Our results add to the scant evidence on the salience of socioemotional wealth and nonfinancial objectives as drivers of decision-making behavior in family firms.

Our article contributes to the literature on the antecedents of firm dividend payout rates. Most explanations of dividend payout in public companies are grounded in agency theory and consider dividend policy as a corporate governance device: dividends play a basic role in limiting expropriation of shareholders by removing corporate wealth from insiders. In this article, we extend the motives for paying out dividends traditionally grounded in agency theory and use behavioral economics arguments to explain dividend policy in private family firms. We consider dividend policy in the context of private family firms to be, first and most importantly, a behavioral-driven financing choice. We believe this viewpoint is especially relevant for private family firms which, by their nature, have not yet opened up their capital to the public and may be reluctant to relinquish any control to nonfamily stakeholders. Seeing dividend policy as a funding choice may be a relevant view for the broader population of small and medium sized enterprises (SMEs). Although the concept of socioemotional wealth is typical for family firms, nonfinancial objectives can also be an important factor in understanding decision making, and more specifically funding choices, in nonfamily SMEs.

Our study also contributes to the debate of family firm heterogeneity. Although recent studies have acknowledged that family firms are a heterogeneous group (Corbetta and Salvato 2004; Dyer 2006; Sharma 2004; Westhead and Howorth 2007), up until now, few studies on funding decisions in family firms have incorporated the heterogeneity aspect. Our results suggest that socioemotional objectives are predominant in early generation firms and become less important as generations progress. Moreover, and related to the

heterogeneity issue, our results point towards a shift of decision power from the family CEO in first generation firms towards the board of directors in second generation firms. Further research may enhance our understanding of whether and how governance systems in family firms, and more specifically the board of directors, play the role of keeping the firm's actions in line with goals and expectations of the firm's critical stakeholders.

Understanding how the CEO position and the power balance in the board influences the payout decision of private family firms can be a small step towards understanding the performance of these firms. The relationship between governance mechanisms and performance has been increasingly researched over recent years (for example, Ang, Cole, and Whu Lin 2000; Anderson and Reeb 2004; Villalonga and Amit 2006). Theoretical arguments for the governance structure-performance debate are principally grounded in agency theory where individual wealth maximization is assumed. Our results suggest that the prevalence of nonfinancial objectives (in the presence of a family/founding CEO or a family dominated board) may affect important strategic decisions (such as earnings distribution decisions) and may, therefore, affect financial performance measures (for example, firm growth).

Our study also has some limitations that provide challenges for future research. Although our database contains important family firm characteristics such as the CEO position, the number of board directors, the generational stage and a number of board composition variables, it does not contain detailed information on ownership structure nor does it have detailed information on board composition (for example, number of family/nonfamily/external directors). Availability of measures of ownership structure and more detailed information on the composition of the board of directors would allow us to

more thoroughly test relations between ownership structure, power balances in the board and dividend payout rates.

References

- Agrawal, A., and N. Nagarajan (1990). 'Corporate capital structure, agency costs and ownership control: the case of all-equity firms', *Journal of Finance*, 45(4), 1325-1331.
- Anderson, R.C., and M. R. Reeb (2004). 'Board composition: Balancing family influence in S&P 500 Firms,' *Administrative Science Quarterly*, 49, 209-237.
- Ang S.A., R.A. Cole, and J. Whu Lin (2000). 'Agency costs and ownership dtructure,' *Journal of Finance*, 55(1), 81-106.
- Bammens, Y., W. Voordeckers, and A. Van Gils (2008). 'Boards of directors in family firms: a generational perspective,' *Small Business Economics*, 31, 163-180.
- Böhning, D., D. Ekkehart, P. Schlattmann, L. Mendonça, and U. Kircher (1999). 'The Zero-Inflated Poisson Model and the Decayed, Missing and Filled Teeth Index in Dental Epidemiology', *Journal of the Royal Statistical Society*, A 162, 195-209.
- Cameron, C., and P. Trivedi (1998). 'Econometric Models Based on Count Data: Comparisons of Some Estimators and Tests', *Journal of Applied Econometrics*, 1, pp. 29-54.
- Cameron, C., and P. Trivedi (2005). *Microeconomics: Methods and Applications*. Cambridge University Press, New York.
- Carney, M., and E. Gedajlovic (2002). 'The coupling of ownership and control and the allocation of financial resources: evidence from Hong Kong,' *Journal of Management Studies*, 39(1), 123-146.
- Chen, Z., Y.L. Cheung, A. Stouraitis, and A.W.S. Wong (2005). 'Ownership concentration, firm performance, and dividend policy in Hong Kong,' *Pacific-Basin Finance Journal*, 13, 431-449.

- Corbetta, G., and C. Salvato (2004). 'Self-serving or self-actualizing? Models of man and agency costs in different types of family firms: a commentary on "Comparing the agency costs of family and nonfamily firms: conceptual issues and exploratory evidence",' *Entrepreneurship: Theory and Practice*, 28(4), 355-362.
- Cruz, C. C, L.R. Gómez-Meijia, and M. Becerra (2010). 'Perceptions of benevolence and the design of agency contracts: CEO-TMT relationships in family firms', *Academy of Management Journal*, 53, 69-89.
- Dalton, D.R., and I.F. Kesner (1987). 'Composition and CEO duality in boards of directors: An international perspective', *Journal of International Business Studies*, 18(3), 33-42.
- Deshmukh S. (2005). 'The effect of asymmetric information on dividend policy', *Quarterly Journal of Business & Economics*, 44 (1&2), 107-127.
- Distelberg, B., and R.L. Sorenson (2009). 'Updating system concepts in family businesses: a focus on values, resource flows, and adaptability,' *Family Business Review*, 22, 65-81.
- Dyer, W. G. Jr. (2006). 'Examining the "family effect" on firm performance,' *Family Business Review*, 19(4), 253-273.
- Easterbrook, F. (1984). 'Two Agency-Cost Explanations of Dividends,' *American Economic Review*, 74(4), 650-659.
- Faccio, M., L.H.P. Lang, and L. Young (2001). 'Dividends and expropriation,' *The American Economic Review*, 91(1), 54-78.
- Farinha, J. (2003). 'Dividend policy, Corporate governance and the managerial entrenchment hypothesis,' *Journal of Business Finance and Accounting*, 30(9) and (10), 1173-1208.
- Fenn, G.W., and N. Liang (2001). 'Corporate payout policy and managerial stock incentives', *Journal of Financial Economics*, 60, 45-72.

- Fiegeneger, M., B. Brown, D. Dreux, and W. Dennis (2000). 'CEO stakes and board composition in small private firms,' *Entrepreneurship Theory and Practice*, 24, 5-24.
- Finkelstein, S., and D.C. Hambrick (1996). *Strategic Leadership: Top Executives and Their Effects on Organizations*. Minneapolis, MN: West Publishing Company.
- Gallo, M.A., and A.Vilaseca (1996). 'Finance in family business,' *Family Business Review*, 9(4), 387-402.
- Gómez-Mejía, L.R., K. Haynes, M. Núñez-Nickel, K. Jacobson, and J. Moyano-Fuentes, (2007). 'Socioemotional wealth and business risks in family-controlled firms: evidence from Spanish olive oil mills,' *Administrative Science Quarterly*, 52(1), 106-137.
- Gómez-Mejía, L.R., M. Makri, and M.L. Kintana (2010). 'Diversification decisions in family-controlled firms,' *Journal of Management Studies*, 47(2), 223-252.
- Greene, W. H. (1994). *Accounting for Excess Zeros and Sample Selection in Poisson and Negative Binomial Regression Models*, Technical report.
- Jaffe, D., and S. Lane (2004). 'Sustaining a family dynasty: key issues facing complex multigenerational business- and investment-owning families,' *Family Business Review*, 17(1), 81-98.
- Jensen, M. (1986). 'Agency costs of free cash flow, corporate finance, and takeovers,' *American Economic Review*, 76(2), 323-329.
- Kelly, L. M., N. Athanassiou, and W.F. Crittenden (2000). 'Founder centrality and strategic behaviour in the family-owned firm,' *Entrepreneurship Theory and Practice*, 25(2), 27-42.
- Kennedy, P. (2008). *A guide to econometrics*. Blackwell Publishing, Malden, MA, USA.
- Lambert, D. (1992). 'Zero-inflated Poisson regression, with an application to defects in manufacturing', *Technometrics* , 34, 1-14.

- Laveren E., D. Helleboogh, V. Molly, and A. Limère (2010). 'Family business succession and the impact of CEO experience on the growth of small family firms', *International Journal Entrepreneurship and Small Business*, 11 (3), 242-261.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny (2000). 'Agency problems and dividend policies around the World,' *Journal of Finance*, 55(1), 1-33.
- Miller, D. (1991). 'Stale in the saddle: CEO tenure and the match between organization and environment,' *Management Science*, 29, 770-791.
- Mishra, C.S., and D.L. McConaughy (1999). 'Founding family control and capital structure: The risk of loss of control and the aversion to debt,' *Entrepreneurship Theory and Practice*, 23(4), 53-64.
- Mustakallio, M., E. Autio, and S.A. Zahra (2002). 'Relational and contractual governance in family firms: effects on strategic decision making,' *Family Business Review*, 15(3), 205-222.
- Neubauer, F., and A. Lank (1998). *The family business: Its governance for sustainability*. London: McMillan Press.
- Pearce, J.A., and S.A. Zahra (1992). 'Board composition from a strategic contingency perspective', *Journal of Management Studies*, 29(4), 411-438.
- Poutziouris, P. (2001). 'The views of family companies on venture capital: Empirical evidence from the UK small to medium-size enterprising economy,' *Family Business Review*, 14(3), 277-291.
- Reid, R., B. Dunn, S. Cromie, and J. Adams (1999). 'Family Orientation in family firms: A model and some empirical evidence,' *Journal of Small Business and Enterprise Development*, 6(1), 55-66.

- Romano, C.A., G.A. Tanewski, and K.X. Smyrniotis (2000). Capital structure decision making: a model for family business, *Journal of Business Venturing*, 16, 285-310.
- Schulze, W.S., M.H. Lubatkin, R.N. Dino, and A.K. Buchholtz (2001). 'Agency relationships in family firms: theory and evidence,' *Organization Science*, 12(2), 99-116.
- Schulze, W.S., M.H. Lubatkin, and R.N. Dino (2002). 'Altruism, agency and the competitiveness of family firms,' *Managerial and Decision Economics*, 23, 247-259.
- Schulze, W., M. Lubatkin, and R. Dino (2003). 'Exploring the agency consequences of ownership dispersion among the directors of private family firms,' *Academy of Management Journal*, 48, 179-194.
- Setia-Atmaja L. (2010). 'Dividend and debt policies of family controlled firms: The impact of board independence,' *International Journal of Managerial Finance*, 6(2), 128-142.
- Setia-Atmaja L., G.A. Tanewski, and M. Skully (2009). 'The role of dividends, debt and board structure in the governance of family controlled firms,' *Journal of Business Finance and Accounting*, 36(7)&(8), 863-898.
- Sharma, P. (2004). 'An overview of the field of family business studies: current status and directions for future research,' *Family Business Review*, 17(1), 1-36.
- Stafford, K., K.A. Duncan, S.M. Danes, and M. Winter (1999). 'A research model of sustainable family business', *Family Business Review*, 12(3), 197-208.
- Van den Berghe, L., and S. Carchon (2002). 'Corporate governance practices in Flemish family businesses', *Corporate Governance: An International Review*, 10, 225-245.
- Van Ees, H., J. Gabriellson, and M. Huse (2009). 'Toward a behavioral theory of boards and corporate governance', *Corporate Governance: An International Review*, 17, 307-319.

- Vilaseca, A. (2002). 'The shareholder role in the family business: conflict of interests and objectives between nonemployed shareholders and top management team,' *Family Business Review*, 15, 299-320.
- Villalonga, B., and R. Amit (2006). 'How do family ownership, control and management affect firm value,' *Journal of Financial Economics*, 80, 385-417.
- Voordeckers, W., A. Van Gils, and J. van den Heuvel (2007). 'Board composition in small and medium-sized family firms,' *Journal of Small Business Management*, 45, 137-156.
- Vuong, Q.H. (1989). 'Likelihood ratio tests for model selection and nonnested hypotheses', *Econometrica*, 57(2), 307-333.
- Ward, J.L. (1997). *Keeping the family business healthy: How to plan for continuing growth, profitability, and family leadership*. San Francisco: Jossey-Bass.
- Westhead, P., and C. Howorth (2006). 'Ownership and management issues associated with family firm performance and company objectives,' *Family Business Review*, 19, 301-316.
- Westhead, P., and C. Howorth (2007). "'Types' of private family firms: an exploratory conceptual and empirical analysis,' *Entrepreneurship and Regional Development*, 19, 405-431.
- Yoshikawa, T., and A.A. Rasheed (2010). 'Family Control and Ownership Monitoring in Family-Controlled Firms in Japan,' *Journal of Management Studies*, 47(2), 274-295.
- Yip, P.S.L., and E.W.K. Tsang (2008). 'Interpreting dummy variables and their interaction effects in strategy research,' *Strategic Organization*, 5(1), 13-30.

Table 1

Distribution parameters of payout ratio and of dividends paid. Payout ratio and dividends paid are three-year averages (2001-2003).

	Mean	Standard deviation	Min	10 percent	Q1	Median	Q3	90 percent	Max
Total sample (N=501)									
Payout ratio	0.1380	0.3588	0.0000	0.0000	0.0000	0.0000	0.0000	0.5261	2.0000
Dividends paid	65520	767955	0.0000	0.0000	0.0000	0.0000	0.0000	194333	16920333
Payout ratio if payout>0 (N=119)	0.5811	0.5347	0.0124	0.0667	0.1796	0.4344	0.8333	1.4952	2.0000
Dividends paid if dividends>0 (N=119)	275843	1562194	1000	5667	18333	49333	182000	330333	16920333
Subsamples based on CEO									
Payout ratio if family CEO=1 (N=458)	0.1290	0.3474	0.0000	0.0000	0.0000	0.0000	0.0000	0.5134	2.0000
Dividends if family CEO=1 (N=458)	65316	802090	0.0000	0.0000	0.0000	0.0000	0.0000	58333	16920333
Payout ratio if family CEO=0 (N=53)	0.2338	0.4573	0.0000	0.0000	0.0000	0.0000	0.2964	0.8169	2.0000
Dividends if family CEO=0 (N=53)	67690	143633	0.0000	0.0000	0.0000	0.0000	83333	200000	787333
Subsamples based on family board majority									
Payout ratio if family board majority=1 (N=424)	0.1159	0.3304	0.0000	0.0000	0.0000	0.0000	0.0000	0.4604	2.0000
Dividends if family board majority=1 (N=424)	59129	823957	0.0000	0.0000	0.0000	0.0000	0.0000	33333	16920333
Payout ratio if family board majority=0 (N=77)	0.2597	0.4708	0.0000	0.0000	0.0000	0.0000	0.3873	0.9731	2.0000
Dividends if family board majority=0 (N=77)	100753	315967	0.0000	0.0000	0.0000	0.0000	83000	230000	2563000
Subsamples based on generation									
Payout ratio of first-generation firms (N=167)	0.1207	0.3009	0.0000	0.0000	0.0000	0.0000	0.0180	0.4914	1.8908
Dividends of first-generation firms (N=167)	28124	80279	0.0000	0.0000	0.0000	0.0000	2000	83000	495667
Payout ratio of second-generation firms (N=206)	0.1395	0.3895	0.0000	0.0000	0.0000	0.0000	0.0000	0.4722	2.0000
Dividends of second-generation firms (N=206)	35278	194338	0.0000	0.0000	0.0000	0.0000	0.0000	85333	2563000
Payout ratio of third+-generation firms (N=128)	0.1583	0.3778	0.0000	0.0000	0.0000	0.0000	0.0000	0.6120	2.0000
Dividends of third+-generation firms (N=128)	162979	1496524	0.0000	0.0000	0.0000	0.0000	0.0000	100000	16920333

Table 2
Correlation Coefficients

	Mean	Standard deviation	Dividends paid	Family CEO	Family Board Majority	Number of Board Directors	Generation	Total Assets	Asset Growth	Firm Leverage	Cash Flow to Assets	Firm Risk
Payout ratio	0.1380	0.3588	0.2578*** <.0001	-0.0819* .0672	-0.1447*** .0012	0.1048** .0189	0.0401 .3708	0.0875* .0503	-0.0024 .9566	-0.1580*** .0004	0.1089** .0147	0.0240 .5924
Dividends paid	65520	767955		-0.0009 .9846	-0.0196 .6621	0.1065** .0171	0.0638 .1539	0.1946*** <.0001	-0.0688 .1197	-0.0146 .7408	0.0390 .3787	-0.0440 .3205
Family CEO	0.9142	0.2804			0.4622*** <.0001	-0.2516*** <.0001	-0.0032 .9423	-0.3496*** <.0001	-0.0498 .2657	-0.0142 .7521	0.0466 .2983	-0.0287 .5215
Family Board Majority	0.8463	0.3610				-0.3066*** <.0001	0.0290 .5166	-0.2037*** <.0001	-0.0710 .1125	-0.0059 .8954	0.0655 .1430	0.0550 .2195
Number of Board Directors	3.0579	1.1483				0.1100** .0138	0.4730*** <.0001	-0.0271 .5445	-0.0777* .0822	-0.0609 .1734	-0.0298 .5058	
Generation	1.9222	0.7642					0.1591*** .0004	-0.0371 .4074	-0.1077** .0159	-0.0503 .2603	0.0261 .5602	
Total Assets (000)	2478.56	2710.94						0.0183 .6824	-0.0086 .8474	-0.0617 .1681	-0.1202*** .0071	
Asset Growth	0.0832	0.2028							-0.0143 .7501	0.1690*** .0001	0.0567 .2048	
Firm Leverage	1.1313	1.7622									0.0133 .7664	-0.0580 .1949
Cash Flow to Assets	0.1104	0.0832										-0.0127 .7765
Firm Risk	3.9074	5.2122										

N=501. Second entry reports p-value. * p<0.10; ** p<0.05; *** p<0.01.

Table 3
Maximum Likelihood Regression Estimates of a Negative Binomial Count Model
Determinants of Dividend Payout

	Model 1	Model 2	Model 3
Main variables			
Family CEO	-1.479 ^{***}		-0.451
	0.003		0.395
Family board majority		-1.5194 ^{***}	
		0.000	
Family CEO*Family board majority			-1.473 ^{***}
			0.001
Control variables			
Firm Size	2.394 ^{***}	2.217 ^{***}	2.214 ^{***}
	0.000	0.000	0.000
Asset Growth	0.435	0.089	0.055
	0.347	0.907	0.943
Leverage	-1.215 ^{***}	-1.065 ^{***}	-1.161 ^{***}
	0.000	0.000	0.000
Cash Flow	4.593 ^{***}	7.278 ^{***}	6.589 ^{***}
	0.009	0.001	0.001
Firm Risk	5.921 ^{**}	6.783 ^{**}	6.882 ^{***}
	0.033	0.011	0.008
Generation	0.1853	0.207	0.365 [*]
	0.308	0.291	0.053
Log likelihood	-949.564	-948.403	-947.290

N=501. Intercepts not reported. Industry dummy coefficients not reported. Second entry reports p-value.

* p<0.10; ** p<0.05; *** p<0.01.

Notes: Dividend payout is the dependent variable and is defined as cash dividends (nominal value) paid to common stock; an average amount of cash dividends is taken over three years (2001-2003). Family CEO is an indicator variable equaling unity if a family CEO leads the firm and zero otherwise. Family board majority equals unity if the family has a majority position in the board, zero otherwise. Firm size is the natural logarithm of total assets. Asset growth is the increase in total assets, standardized. Leverage is the book value of financial debt over book value of equity. Cash flow is net earnings adjusted for noncash costs and noncash revenues, standardized. Firm risk is the standard deviation of return on assets. Generation equals 1, 2 or 3 depending on whether the firm is a first, second or third+ generation firm. All independent variables are based on data from book year ending 2001; except firm risk which uses three years data (1999-2001).

Table 4
Maximum Likelihood Regression Estimates of a Negative Binomial Count Model
Determinants of Dividend Payout: Generational Effects

	Model 1	Model 2	Model 3	Model 4
Main variables				
Founder CEO	-1.563***			
	0.000			
GEN1*Family CEO		-2.443***		-1.482**
		0.001		0.048
GEN2*Family CEO		-1.375***		0.500
		0.009		0.575
GEN3*Family CEO		0.732		-0.029
		0.356		0.978
GEN1*Family board majority			-1.892***	
			0.001	
GEN2*Family board majority			-1.713***	
			0.000	
GEN3*Family board majority			-0.176	
			0.798	
GEN1*Family CEO*Family board majority				-1.672***
				0.007
GEN2*Family CEO*Family board majority				-2.373***
				0.004
GEN3*Family CEO*Family board majority				0.642
				0.448
Control variables				
Firm Size	2.382***	2.390***	2.219***	2.183***
	0.000	0.000	0.000	0.000
Asset Growth	0.796	0.754	0.553	0.434
	0.310	0.330	0.485	0.584
Leverage	-1.279***	-1.317***	-1.117***	-1.290***
	0.000	0.000	0.000	0.000
Cash Flow	4.873***	4.715***	7.670***	7.076***
	0.006	0.006	0.000	0.000
Firm Risk	4.488	5.058*	5.351*	5.668*
	0.134	0.090	0.072	0.050
Generation	-0.471*	-1.169**	-0.434	-1.109**
	0.054	0.017	0.250	0.028
Log likelihood	-948.650	-948.056	-947.290	-944.711

N=501. Intercepts not reported. Industry dummy coefficients not reported. Second entry reports p-value.

* p<0.10; ** p<0.05; *** p<0.01.

Notes: (a) Dividend payout is the dependent variable and is defined as cash dividends (nominal value) paid to common stock; an average amount of cash dividends is taken over three years (2001-2003). Family CEO is an indicator variable equaling unity if a family CEO leads the firm and zero otherwise. Founder CEO is an indicator variable equaling unity if a founder CEO leads the firm and zero otherwise. Family board majority equals unity if the family has a majority position in the board, zero otherwise. Firm size is the natural logarithm of total assets. Asset growth is the increase in total assets, standardized. Leverage is the book value of financial debt over book value of equity. Cash flow is net earnings adjusted for noncash costs and noncash revenues, standardized. Firm risk is the standard deviation of return on assets. Generation equals 1, 2 or 3 depending on whether the firm is a first, second or third+ generation firm. All independent variables are based on data from book year ending 2001; except firm risk which uses three years data (1999-2001).

(b) GEN1 is a dummy variable indicating whether a firm is a first generation firm (GEN1=1), or not (GEN1=0). GEN2 and GEN3 are defined similarly for second and third generation firms, respectively.

Table 5
Maximum Likelihood Regression Results of a Negative Binomial Count Model
Number of Directors Estimated as an Alternative Measure of Family Decision Power

	Model 1	Model 2	Model 4	Model 3
Main variables				
# Board Members Estimated	1.650 ^{***}			
	0.000			
GEN1*# Board Members Estimated			2.908 ^{***}	
			0.000	
GEN2*# Board Members Estimated			1.410 ^{***}	
			0.000	
GEN3*# Board Members Estimated			0.146	
			0.803	
# Board Members		0.294 ^{**}		
		0.040		
GEN1*# Board Members				0.148
				0.343
GEN2*# Board Members				0.171
				0.264
GEN3*# Board Members				0.443 ^{**}
				0.040
Control variables				
Firm Size	2.184 ^{***}	2.230 ^{***}	2.092 ^{***}	2.265 ^{***}
	0.000	0.000	0.000	0.000
Asset Growth	0.145	0.151	0.495	0.203
	0.851	0.837	0.531	0.782
Leverage	-1.129 ^{***}	-1.082 ^{***}	-1.205 ^{***}	-1.107 ^{***}
	0.000	0.000	0.000	0.000
Cash Flow	6.802 ^{***}	5.569 ^{***}	7.412 [*]	5.333 ^{***}
	0.001	0.004	0.000	0.005
Firm Risk	7.020 ^{***}	5.653 ^{**}	5.669 ^{**}	5.247 [*]
	0.008	0.046	0.043	0.076
Generation	0.317	-0.082	4.687	-0.532
	0.110	0.686	0.003	0.337
Log likelihood	-947.634	-950.793	-946.214	-950.119

N=501. Intercepts not reported. Industry dummy coefficients not reported. Second entry reports p-value.

* p<0.10; ** p<0.05; *** p<0.01.

Notes: (a) Dividend payout is the dependent variable and is defined as cash dividends (nominal value) paid to common stock; an average amount of cash dividends is taken over three years (2001-2003). # of board members estimated is the number of board directors estimated through a linear regression relating board size to family CEO and the dummy measuring family dominance in the board. Firm size is the natural logarithm of total assets. Asset growth is the increase in total assets, standardized. Leverage is the book value of financial debt over book value of equity. Cash flow is net earnings adjusted for noncash costs and noncash revenues, standardized. Firm risk is the standard deviation of return on assets. Generation equals 1, 2 or 3 depending on whether the firm is a first, second or third+ generation firm. All independent variables are based on data from book year ending 2001; except firm risk which uses three years data (1999-2001).

(b) GEN1 is a dummy variable indicating whether a firm is a first generation firm (GEN1=1), or not (GEN1=0). GEN2 is a dummy variable indicating whether a firm is a second generation firm (GEN2=1), or not (GEN2=0). GEN3 is a dummy variable indicating whether a firm is a third or later generation firm (GEN3=1), or not (GEN3=0).

Appendix - Relevant Survey Questions

- Do you perceive the firm as a family business?

[1] yes [2] no [3] not sure [0] not answered

- Does one family own 50 percent or more of the shares?

[1] yes [2] no [0] not answered

- Does the majority of board directors belong to the family?

[1] yes [2] no [0] not answered

- Which generation is currently active in the firm?

[1] first [2] second [3] third [4] fourth [5] fifth or more [6] first and second [7] second and third [8] third and fourth [0] not answered

- Are external managers present in/part of the management team?

[1] yes [2] no [0] not answered

- If yes, which position do they occupy?

[1] CEO position [2] other management position [3] both [9] not applicable [0] not answered