Family Involvement and Dividend Policy in Closely-Held Firms

October 29, 2013

Maximiliano González[1], Alexander Guzmán[2], Carlos Pombo[1*], María–Andrea Trujillo[2]

Abstract

This paper examines how family involvement affects the amount and likelihood of dividend payment in ways that may influence agency problems between majority and minority shareholders, and between owners and managers. Drawing on a database of 458 closely-held Colombian companies, we find that family influence on dividend policy varies depending on type of involvement: Family involvement in management has little or no impact on dividend policy; family involvement through direct or indirect ownership impacts dividend policy negatively; and family involvement on the board affects dividend policy positively, even when the CEO is a member of the founding family.

Keywords

Family businesses, dividend policy, agency problems, privately held firms, Colombian business groups

JEL Classification: G3, G35

---

[1] School of Management, Universidad de los Andes, Bogotá, Colombia
[2] CESA School of Business, Bogotá, Colombia, and School of Management, Universidad de los Andes, Bogotá, Colombia

* Corresponding author. Carlos Pombo, School of Management, Universidad de los Andes, Calle 21 # 1-20, Off. 912, Bogotá, Colombia.
Email addresses: maxgonza@ uniandes.edu.co (M. González), alexander.guzman@cesa.edu.co (A. Guzmán), cpombo@uniandes.edu.co (C. Pombo), maria.trujillo@cesa.edu.co (M.-A. Trujillo).

Introduction

Current literature on corporate governance and agency theory highlights how ownership structures affect corporate finance decisions. Ownership concentration by an external shareholder might increase oversight on firm management and generate certain shared benefits of control for minority shareholders; on the other hand, it might also facilitate the acquisition of private benefits of control at the expense of minority shareholders (Barclay & Holderness, 1989; McConnell & Servaes, 1990; Villalonga & Amit, 2010). These agency problems, such as entrenchment effects and rent diversion (tunneling), are amplified in the context of pyramidal structures which are less transparent organizational forms, especially in countries with a weak legal environment (Morck, Wolfenzon & Yeung, 2005).

Family-managed and Family-controlled firms are not immune to agency conflicts, and in certain circumstances could exacerbate it (Schulze et al., 2001). Moreover, "…as the separation of ownership from control in widely held firms drives a wedge between the interests of principal and agent, the dispersion of ownership in family-held firms drives a wedge between the interest of those who lead a firm-and often own a controlling interest-and other family owners" (Schulze, et al. 2003; p. 181).

Dividends can be used as a mechanism to mitigate several types of agency problems. Theoretical arguments by Rozeff (1982), Easterbrook (1984), and Jensen (1986) suggest that dividends reduce the free cash flow controlled by insiders, thus reducing agency conflicts between management/owners, debt-holders/shareholders, and majority/minority shareholders. A vast amount of empirical literature has deal with these issues in the context of large listed firms (See Michaely & Roberts, 2012). However, little is known on how dividends could be used to alleviate agency problems in the context of closely-held family firms.

This article examines the relationship between family involvement and a firm's dividend policy. Rather than assess whether family firms are better governed than non-family firms, we provide empirical evidence to show whether family involvement affects dividend policy in ways that tend to reduce or increase agency problems between large and minority shareholders, and between managers and owners. Accordingly, we develop a database of 458 closely-held Colombian companies spanning the 1996-2006 period.

Our main finding suggests that family influence on dividend policy differs according to type of family involvement. When family involvement is through management, we found no relation between the presence of a founder or heir CEO and the firm's dividend policy; i.e., a family CEO makes no impact in explaining dividend policy as a mechanism to mitigate agency conflicts. When family involvement is through ownership (direct or indirect through pyramidal ownership structure) we found a significant negative effect on the firm's dividend policy. This could provide evidence, on the one hand, of a reduction in agency costs between owners and managers due to the oversight the family exerts as controlling shareholder (Fama & Jensen, 1983); hence less need for dividend payments to mitigate agency conflicts. On the other hand, this outcome is also consistent with the extraction of private benefits of control by large block-holders through pyramidal structures enhancing their voting power (indirect control), at the expense of minority shareholders (La Porta, et al. 2000; Claessens, et al., 2000, 2002; Steijvers & Voordeckers, 2009). Moreover, family involvement through the board of directors increases significantly the amount and likelihood of dividend payment even when the CEO is a member of the founding family. This finding suggests that family board members use dividends as a mechanism to mitigate agency problems between majority and minority shareholders belonging to the founding family represented on the board, but not in management. This result supports the position of Martín de Holan & Sanz (2006) and others (Schulze et al., 2003; Block, 2012), who argue that poor family

dynamics alongside low levels of legal protection for investors might result in high expropriation risk for minority shareholders, even if they are members of the founding family.

This paper contributes to the current empirical literature on corporate finance, governance, and family firms in several ways. First, this study is among the first reported on dividend policy in family firms for an emerging market based largely on private firm micro-data. Within the extensive literature on dividend policy, very few studies focus on family firms or closely held firms. Second, research on family firms usually views a family business as a single unit, ignoring the different ways families may influence corporate finance and governance decisions. This study follows the approach of Villalonga & Amit (2006) that considers family *involvement* in three dimensions: management, ownership (direct and indirect), and control. Third, even though the sample is restricted to Colombia, this study contributes to a better understanding of family-firms not only in Latin America but also in other emerging markets generally characterized by low investor protection, family involvement, high ownership concentration, and pyramidal structures through business groups aimed at enhancing firm's control. Family firms in emerging markets are an important yet highly understudied subject, as noted in recent surveys of the state of research on corporate governance in emerging markets (Claessens & Yurtoglu, 2013; Fan et al. 2011). Moreover, from a financial development perspective, Colombia is a representative capital market in Latin America – featuring the region's fourth largest economy and equity market in terms of corporate market value. The country shares the institutional tradition of French Civil Law and has been included in the CIVETS (Colombia, Indonesia, Vietnam, Egypt, Turkey, and South Africa) group of economies that, according to the Economist Intelligence Unit, will be among the most dynamic over this decade. And four, our results contribute to the growing literature on agency problems inside families (Schulze et al. 2003; Schulze et al. 2001; Martin de Holan & Sanz, 2006; Block, 2012).

The remainder of this article is structured as follows: The next section briefly presents the theoretical framework on family firms and dividends within the agency context, and states the proposed working hypotheses. We then discuss the empirical design concerning data and methodology. The next section presents the findings and discusses checks on estimation robustness. A discussion and conclusion section follows.

Theoretical Framework and Hypotheses

Agency cost and dividends: An overview

Dividend policy is one of the most thoroughly researched subjects in modern corporate finance. Miller & Modigliani (1961) show that in a world of perfect information and frictionless capital markets, dividend policy is irrelevant for the firm's market value. However, in the real world firms operate in an environment of asymmetric information and multiple agency conflicts, where dividends play a key role. Jensen (1986) among others study dividends as a mechanism to mitigate agency problems when managers pursue their own interest. In his "free-cash flow problem", insiders can increase their perks consumption only to the extent the firm has enough free cash flow. A number of empirical studies show that agency problems associated with free cash flow are significant in the United States and elsewhere (Denis & McConnell, 2003; Durnev et al. 2004). Higher dividend payments imply lower agency costs and improved corporate governance. Nonetheless, a country's level of investor protection affects the relationship between dividends and agency costs. La Porta et al. (2000) suggest that legal mechanisms supporting good governance lead to high dividends; investors demand more dividends when agency problems associated with free cash flow are higher.

These previous empirical findings are based on large listed firms, and very little is known about the role of dividends to alleviate agency tensions in the context of closely held family firms. Clarysse et al. (2007) examine the tensions that exist between the founding team and other stakeholders in the context of closely held Belgian firms. Uhlaner, et al. (2007) argue in a review of several papers based on closely held family firms that "it is too simplistic to presume that all family firms are necessarily less vulnerable to the agency principles" (p. 232). Moreover, Schulze et al. (2003) claim that controlling owners can extract resources from the firm to favor family members at the expense of other non-family shareholders or other faction of the family, but this is possible only if the controlling owner has enough free cash flow at his disposal.

Latin American companies generally and Colombian firms in particular provide a favorable context to study the influence of family involvement on dividend policy; low levels of investor protection, prevalence of family firms, affiliation with business groups, and common use of pyramidal structures make for a setting where voting rights exceed formal cash-flow rights, exacerbating the potential agency conflicts between the controlling shareholder (not necessarily the largest) and minority or non-controlling shareholders. Claessens et al. (2000), drawing on a sample of Asian countries, show the possibility of expropriation is especially high when a company is affiliated with a business group. Moreover, Faccio, Lang & Young (2001) find expropriation of outside shareholders by the controlling shareholder to be the leading agency problem in countries with highly concentrated family ownership and control, where families almost always provide the firm's CEO. Empirical data from Latin America show that dividends play a fundamental role in limiting expropriation by insiders; a positive relation between good corporate governance and a high level of dividends is reported by both Garay & González (2008) and Chong & López–de–Silanes (2007).

Family involvement in management

Family involvement tends to either reduce or increase agency problems. Fama & Jensen (1983) argue that family management reduces agency cost because the incentives of owners and managers are fully aligned. However, Hu & Kumar (2004) find the likelihood of dividend payments, and their amount, is significantly and positively related to factors that increase CEO entrenchment. Morck, Shleifer & Vishny (1988) hold that this entrenchment is not necessarily achieved by increasing a CEO's stake in the firm, since other factors, such as belonging to the founding family, may result in entrenchment even when the CEO's stake is low. Although a non-family CEO could also be entrenched, Palia, Ravid, & Wang (2008) consider that intangible non-monetary benefits from directing and perpetuating the CEO position in the hands of a family member could also lead to entrenchment.

Schulze et al. (2003) contend that altruism can create a sense of entitlement among founding family members by encouraging a family CEO to use a firm's resources to provide family members with employment, perquisites, and privileges they would not otherwise receive. Accordingly, the presence of noneconomic preferences creates potentially serious agency problems in family firms; even as both family and non-family shareholders could be expected to share common economic interests – e.g., profitability, growth, market share, among other financial metrics – there is no reason to believe they share common noneconomic preferences (Schulze et al. 2001).

Researchers, such as Lee & Rogoff (1996) and Bertrand & Schoar (2006), argue that non-financial goals (such as family independence and satisfaction, nepotism, the firm as a family legacy, among others) are also family-firm goals. According to Burkart, Panunzi & Shleifer (2003) family CEOs, as opposed to non-family CEOs, perceive intangible benefits from directing and perpetuating their positions of power in control of the firms.

Zwiebel (1996) maintains that dividend policy may be viewed as the optimal response of partially entrenched managers trading off their empire–building ambitions in order to prevent control challenges. Although privately-held family firms can free themselves from the discipline imposed by the corporate control market, they increase the agency threat posed by "self-control" (Jensen, 1998); hence this "control challenge" could instead stem from other block-holders, including other family owners. Accordingly, we assume that, a partially-entrenched family CEO derives both monetary and non-monetary benefits, and following Zwiebel (1996), this situation encourages founders or heirs to pay dividends in order to avoid control challenges and preserve their private benefits. Based on these arguments we state the following hypothesis:

> *Hypothesis 1: Family involvement through management, either founders CEO or heirs CEO, will have a positive effect on the likelihood of dividend payments and their level.*

Family involvement in ownership and control

The next hypothesis concerns family presence as the controlling shareholder, whether by direct ownership or the use of pyramidal structures within a business group. Traditional agency models suggest that agency cost should be attenuated given the concentrated nature of family ownership, usually undiversified equity holdings, and control of management (Jensen & Meckling, 1976; Fama & Jensen, 1983). Accordingly the presence of a majority or controlling shareholder should increase the likelihood of supervision over the CEO and reduce the probability of opportunistic behavior. In this context, therefore, dividend policy should not play so crucial a role in controlling agency problems associated with the CEO.

Another possibility for expecting lower dividend payout when a family is the major shareholder or controls a firm by means of a business group's pyramidal structure, is the potential extraction of private benefits of control, such as withdrawing resources from the business

(Claessens et al., 2002). In the context of debt policy in family firms, Steijvers & Voordeckers (2009) maintain that once the family holds enough ownership for unchallenged control, it can begin to abuse its power by claiming funds from the business and "free ride" by using firm resources for personal use, generating family benefits (Schulze et al., 2003), or drawing excessive compensation (Anderson & Reeb, 2003). Altruism could alter the incentive structure where self-control and moral hazard becomes an issue (Schulze et al., 2001). Several studies, summarized by Morck, Wolfenzon & Yeung (2005), illustrate the importance of governance problems within pyramidal business groups, especially in countries with weak legal protection. In this kind of environment, among the most difficult problems to deal with is the presence of tunneling, a transaction that involves the transfer of shares and profits at prices other than market value to benefit the controlling block-holders (Johnson et al. 2000).

Both explanations lead to a negative relation between family control and dividends. Drawing on a sample of publicly and privately held firms in the UK, Michaely & Roberts (2012) report that public firms distribute, on average, 27% of profits as dividends, whereas closely-held and wholly-owned firms, respectively, distribute only 18% and 13% of their profits as dividends. In the same vein, Pindado, Requejo & De la Torre (2012) note that although listed family firms in the euro zone tend to pay high and stable dividends, their findings were mainly driven by firms where cash flow and voting rights were not separated, which is not the case in pyramidal ownership structures. Following this discussion we propose the following hypothesis:

Hypothesis 2: Family involvement through ownership as majority shareholder, or family control through pyramidal structures, will have a negative effect on the likelihood of dividend payments and their level.

Family involvement in the board of directors

A third hypothesis concerns the impact on dividend policy resulting from the level of involvement of family members on the board of directors. A large body of theoretical and empirical arguments that comes from the finance and economic literature (Hart & Moore, 1974; Jensen, 1986; Zwiebel, 1996; Myers, 2000; Gomes, 2000) posit that free-cash flow not paid to shareholders may be diverted by insiders to enjoy private benefits, therefore shareholders press through their influence in the board of directors for more dividends. We argue that this tension could also be present in the context of closely held family firms.

Large shareholders generate a potential conflict of interest between dominant and minority shareholders (Claessens et al., 2000; Johannisson & Huse, 2000) a tension that also holds for family firms (Gomez-Mejia et al. 2001; Morck & Yeung, 2003; Schulze et al., 2001, Schulze et al., 2003). Agency relationship theory in family firms highlights that managing conflicts among family blocks is important to business survival (Dyer, 1994; Sorenson, 1999). Problems like sibling rivalry, generational conflicts, marital problems and differences regarding objectives related to the firm's development (e.g., value vs. growth) hinder coordination problems, and could trigger decisions that are not optimal when there is a family CEO (Eddleston & Kellemanns, 2007). Martín de Holan & Sanz (2006) show that a negative family dynamic, along with low levels of legal protection for investors, can result in increased risk of expropriation for minority shareholders even when they are members of the founding family.

Voordeckers et al. (2007) provides empirical support to the argument that the added value of boards in family firms depends on family characteristics and objectives, and can fulfill several important roles, among them acting as arbitrators in family conflicts. This reasoning is consistent with the board's serving as an arbitration channel among different family blocks (Whisler, 1988) or as a mechanism through which a family block can discipline management (Johannisson & Huse, 2000). In line with the classical view played by dividends in mitigating agency problems

(Jensen, 1986), the level of family involvement on the board of directors are likely to apply pressure to increase dividends in an attempt to mitigate opportunistic behavior by the CEO. This situation may occur even when the CEO is a family member.

For a closely held firm, outside family owners favor dividends as a tangible and current income, while insiders will continue to favor investment to finance growth. Schulze et al., (2003) put it in these terms: "…outside family owners can benefit from growth in earnings (through the payout of dividends), but not from growth in valuation" (p. 185). Therefore, one important task for the board is to tackle the tradeoff between investing in growth and maintaining a high dividend payout to satisfy outsize (family) owners (Zwiebel, 1996). In this context, it could be argued that family owners on the board could pressure management, even when the CEO is a member of the family (Eddleston & Kellermanns, 2007; Schulze et al., 2001, Schulze et al., 2003), to pay dividends from the firm's free-cash flow. Based on the above arguments we expect family board members seeking to protect their interests from management or from the side of the family represented by the CEO, to use their involvement on the board to increase dividends. Hence, the higher the proportion of family directors on the board the greater the pressure exerted on management to pay dividends, as stated in the following hypothesis:

Hypothesis 3: Family involvement through the board of directors will have a positive effect on the likelihood of dividend payments and their levels.

Method

Description of the database

Our sample is based on an unique dataset that combines firm-level information for privately held companies with affiliation status to business groups, a feature not commonly found in current research on corporate finance, governance, or family firms. Financial, ownership, and board-

related information is drawn largely from two Colombian government agencies, the Financial Superintendence (*Superintendencia Financiera*, SFIN) and the Superintendence for Commercial Societies (*Superintendencia de Sociedades*, SSOC). SFIN is the financial regulator for all security issuers of stocks and bonds; SSOC supervises and monitors corporate restructuring and bankruptcy processes. Additionally, SSOC maintains financial records and notes for medium- and large-size privately owned firms. Notes to financial statements are subject to statistical confidentiality and include 16 appendices per company, listing in some cases major shareholders, appointments to the board, CEO, auditing firms, and parent-subsidiary commercial relations. We drew additional information relating to directorships and CEOs from Chambers of Commerce where companies are registered

Table 1 Panel A summarizes the construction of the sample. The original population of companies with financial records that are oversight by SSOC and SFIN are 8,640 firms on average for the 1996-2006 period. We first eliminate companies subject to special regulation: 23 depositary institutions −mostly commercial banks− and 8 electric utilities all of them former state own enterprises. All these firms were security issuers registered at SFIN. The next filter consisted in firms without information at the second ownership layer (excluding 7,325 firms). We imposed two additional filters to the 1,284 remaining companies in the sample: i) firms must report complete information of ownership and boards for at least 3 consecutive years (excluding 600 firms) and ii) affiliated firms per economic group must represent at least 50 percent of the group's total number of companies (excluding 161 firms). The later constrain means that if in a given business group is formed by 20 firms, we need at least 10 or more affiliated companies to that group to remain in the sample.

[Insert Table 1 here]

After allowing for all restrictions, data sources yielded 523 firms for the 1996-2006 period. We then excluded the listed firms from the sample and focused on those closely-held. The final size of the sample comprises on 458 closely held firms for the analyzed period, 414 of them are affiliated to 28 business groups (of which 25 remained family-controlled in 2006), and 44 are independent firms. The majority of the affiliated firms in the sample belong to one of the five largest conglomerates in Colombia. Total dataset length is 4,320 firm-year observations, with 33.7% firm observations from companies that pay dividends (Panel B). Sample firms represent, in terms of asset value, almost 40% of all firms that report financial information to the SSOC.

Dividend and family involvement variables

This study employs two dependent variables to analyze dividend policies. The first is a *dividend dummy*, which takes the value of 1 when firms decide to pay a dividend, and zero otherwise. This variable captures a firm's ex ante decision to distribute net earnings. The second variable is the *dividend ratio*, defined as the amount of dividend payout divided by total assets. We divide dividend payout by assets rather than sales, because holding companies included in the sample do not report sales but usually pay high dividends. Other papers employ dividend to assets as independent variables (e.g., Lipson et al., 1998; Lee, 2010).

To gauge family involvement we use several variables. *Family CEO* is a dummy variable that takes the value of 1 if a firm's founding–family member serves as CEO, and zero otherwise; it captures the impact of family involvement on firm management. This variable is then subdivided into two further dummy variables: 1) family CEO is the founder of the firm (*founder CEO*); or 2) an heir (*heir CEO*). Admittedly, this is a very limited assessment of family involvement in management; for example, we do not consider several cases where a non-family CEO works closely with a top management team comprised of family members. The closely held nature of

our sample and limited information regarding top executives makes it impossible to analyze other types of family involvement. *Family Ownership* is a dummy variable that takes the value of 1 when the founding family is the largest shareholder, and zero otherwise. *Indirect (pyramidal) Family Control* equals 1 when the family has pyramidal control over the firm through indirect ownership. And finally, *Family Board Participation* measures the percentage of board directors who are family members.

Control Variables

Econometric analysis takes into account 16 variables to control for firm characteristics. The first six are financial variables that are correlated with the firm's dividend policy, such as return on assets (ROA), leverage, and growth opportunities (three for the current values and three for the lagged values). The second set of controls is comprised of four idiosyncratic variables that may affect the dividend decision, and are also used extensively in empirical research on dividends and ownership: firm age, firm size, business group affiliation and diversification.[1] Five controls relate to corporate governance; we consider board size, the fraction of non-family external directors, and the turnover fraction among board members. Inclusion of these controls is consistent with empirical research on family firms (Anderson & Reeb, 2003; Villalonga & Amit, 2006; King & Santor, 2008; González et al., 2012, 2013). Similarly, participation of the CEO on the board and the presence of external auditing firms were also included. Lastly, we include *contestability* as a variable that captures the actual contest challenging the largest block-holder when unable to control the company directly (Maury & Pajuste 2006). Definitions and methodology for all indicators and variables included in the econometric analysis are presented in the appendix.

---

[1] For more details, see Truong & Heaney, (2007); Gugler (2003) and references therein.

Empirical model

The estimating equation models the partial effects of family involvement through management, ownership, and control over dividend ratios. Insofar as the sample includes several firms that paid no dividends during the span of years analyzed, estimations follow a Tobit model. Notably, the empirical model is left truncated at zero, meaning that the variable under analysis is not empirically observed at this value. The empirical regression is specified as an unobserved latent variable y*, one that is not always observed, as follows:

$$y_i^* = \boldsymbol{X}_i^{'}\beta + \varepsilon_i, \quad i = 1,\ldots, N$$

where $\varepsilon_i \sim N(0, \sigma^2)$ and **X** is a vector of independent repressors.

The observed variable y_i follows an observation rule, in this case

$$y = \begin{cases} y^* & \text{if } y^* > 0 \\ 0 & \text{if } y^* \leq 0 \end{cases}$$

Thus, the estimating equation of the dividend payout ratio when data is censored can be written as:

$$Y_i = \max\left\{0; \beta_0 + \beta_k^{'}\mathbf{FI}_i + \delta_k^{'}\mathbf{CG}_i + \varphi_k^{'}\mathbf{X}_i + \theta_k^{'}\mathbf{YEAR} +_k^{'} \mathbf{IND}_i + \varepsilon_i\right\} \tag{1}$$

where: Y_i is the dividend ratio variable, **FI** is the family involvement vector; **CG** is the corporate governance vector; and **X** is the financial and firm characteristics vector.

The model also controls for dummies by year, *YEAR*, and industrial sector, *IND*. Hence, estimating Eq.1 follows a classical Tobit cross section-regression.[2]

---

[2] Panel Tobit and Tobit regressions generate similar regression coefficients, and no problem emerges under homoscedastic residuals. When heterocedastic residuals are present, there is no self-evident way to obtain robust White-Hubert standard errors on the regression coefficients variance-covariance matrix. Moreover, "panel Tobit algorithm relies heavily on normally distributed errors for estimates consistency" Cameron & Triverdi, (2010: 619).

From a corporate governance view, dividend policy in a weak institutional environment becomes a market mechanism for investor protection (La Porta et al., 2000). Therefore, we also consider the probability of dividends by using a Probit-panel regression model:

$$\Pr\left(y_{it} = 1 / x_{it}, \beta, \alpha_i \right) = F\left(\alpha + \beta_k^{'} \mathbf{FI}_{it} + \delta_k^{'} \mathbf{CG}_{it} + \phi_k^{'} \mathbf{X}_{it} + \lambda_k^{'} \mathbf{IND}_{it} + \theta_k^{'} \mathbf{YEAR}_{it} + \mu_i + \varepsilon_{it} \right) (2)$$

where: Y_{it} is the dividend dummy which indicates whether a given firm paid dividends for a particular year and all repressors are the same as those used in the estimating Eq. 1.

As we mention before, the majority of the firms in the sample are affiliated to the five largest conglomerates in Colombia. With the purpose to explore if the dividend policy is driven by the affiliation to a specific conglomerate, we decided to calculate the intra-class correlations (IC) as the proportion of the group-level variance to total variance for our two dependent variables (dividend ratio and dividend dummy). We take into account the business-group affiliation as the highest-level dimension; that is, considering that firms are nested within business groups. We used seven groups: the 5 largest conglomerates in Colombia, the non-affiliated firms' group, and a group made up by the reminder 23 conglomerates. In our case, a high IC (close to 1) implies that one additional firm in a business group provides little valuable information. Hence, with high ICs is better to perform multilevel analysis regressions. We found very low ICs (results available upon request) leading us to disregard multilevel regressions associated with business group affiliation.

These low ICs are puzzling because it could be expected that dividend policy is decided at the business group level. However, the low ICs could be explain by the different levels of family involvement across firms within the same business group. The same family behind a business group has a differentiated level of involvement in the firms belonging to that group. In some of them, the family is involved in management, direct ownership, and controls the board of

directors, but in others, the same family may be involved only through indirect ownership. Therefore, the family effect on dividend policy is different even within the same business group.

Results

Descriptive statistics

Table 2 summarizes the dataset structure for selected years during 1996-2006. Panel A displays the fraction of firms that paid dividends by business group affiliation. Panel B displays our sample divided by industry using the ISIC two-digit code. Four main observations are worth highlighting. First, the sample draws strongly on firms affiliated with the five largest non-financial conglomerates in Colombia. They represent 54% of the firm-year observations included in the sample. Four of the groups were family-controlled with pyramidal holding relations up to 2006, and the largest one (*Grupo Empresarial Antioqueño* (GEA)) is a cross-shares holding.

Second, 34% of the sample represents firm-year observations of firms that pay dividends. During the 1996-2006 period, the overall number of firms that paid dividends shows a downward trend. These statistics concur with findings from other studies in developed economies (Fama & French, 2001; Hu & Kumar, 2004), which show a downward trend in dividend payments in recent years. Third, the sample is representative of the population, insofar as sample firms represent, in terms of assets, almost 40% of all real sector firms that report to the SSOC and SFIN. And fourth, in terms of industries (Panel B), holding firms display a higher proportion of dividend-paying firms (41.3%), followed by Manufacturing (39.3%), and Mining (34.5%). In general, the sample is an unbalanced panel, with a maximum of 413 firms in 2000 and a minimum of 353 firms in 2006 – many belonging to the manufacturing sector (39.7%), followed by holding firms (23.1%) and retailing (11.9%).

[Insert Table 2]

Table 3 reports the dividend ratio and corporate ownership by largest shareholder (panel A) and shareholder type (panel B). In panel A, we report the total number of observations for each shareholder's participation percentile (column 1), the percentage (column 2), the number of observations that feature dividends (column 3), and the mean and standard deviation of the dividend ratio among dividend observations (column 4). A higher equity fraction for the largest shareholders, as shown, seems to imply a lower likelihood of dividend payout (column 2); dividend ratio tends to increase with equity fraction for the largest shareholders, and stabilizes once participation rises above 50% (column 4). This pattern is consistent with the notion that the largest shareholders who hold control of the firm prefer earnings retentions instead of dividend payouts. Several reasons might explain this outcome. One is the ability to self-finance new growth opportunities (pecking order theory); another, from an internal capital markets perspective, is that cross-financing, within affiliated firms, offers an alternative source of funding that shields controlling shareholders from external financing and maintains their voting rights. However, dividend decisions could also depend on who is the controlling shareholder.

Panel B shows the largest shareholder type, with dividend ratio and its frequency. This univariate analysis suggests that direct ownership by the state or by families implies a higher likelihood of dividend payout (column 6); however, without a robust econometric model it is not possible to argue any kind of causality among these variables. Although there are no clear differences among the remaining types of shareholders, families are usually behind trust funds and holding firms (used as legal vehicles to control firms with pyramidal ownership structures). Accordingly, dividend payments might respond to entrenchment motives of controlling shareholders trying to exercise cash flow rights beyond their equity rights. The same arguments apply when domestic corporations are the largest block-holder.

[Insert Table 3]

Table 4 presents a statistical summary of all variables. The last two columns display the test of differences of means and medians by two-tailed t-tests and the non-parametric rank sum test for all control variables classed by dividend and non-dividend firms. Panel A shows financial, idiosyncratic, board structure, and block-holder contestability controls. Panel B considers all family involvement variables. These data show that dividend-paying firms are older, larger, less leveraged and more profitable than non-dividend firms. Furthermore, dividend firms have larger boards on average, a higher participation of outside directors, and higher contestability across block-holders. Last, the mean (median) for group diversification shows that dividend firms belong, on average, to less diversified groups, and exhibit slightly lower affiliation rates to business groups. Hence, a firm is more likely to pay dividends when it is either not affiliated or belongs to less diversified business groups.

As respects family involvement, panel B shows that about 25% of firms in the overall sample feature a family CEO, but this percentage is higher for companies that pay dividends. The same pattern is observed whether management involvement is through the founder or through heirs. The largest block-holder is related to the founding family in 19% of the companies, but this involvement is higher for the sub-sample of dividend firms. This is also the case when involvement is through boards (38% versus 27%). In terms of indirect (pyramidal) control, dividend firms show less involvement, which seems to indicate that pyramidal family control results in lower dividend payments. All the above differences are statistically significant at the 1 percent level. We now analyze how different types of family involvement affect firms' dividend policy.

[Insert Table 4]

Family involvement and level of dividend

The core results of the Tobit regressions are reported in **Table 5**, which specifies the *dividend ratio* as the dependent variable. Note that there is no statistical evidence to support Hypothesis 1, which predicted that a family CEO – whether founder or heir – would lead to increased dividend payments. According to regressions in columns 1 and 2 (current values of control variables) and columns 3 and 4 (lagged values of control variables), family involvement in management has no statistical effect on the firm's level of dividend payment.

Regression results support Hypothesis 2, which predicts that family involvement through ownership, as the largest shareholder, would lead to lower dividend levels. A one percent increase in family ownership equity share will reduce the level of dividend payment by 1.76 basic-points, on average, depending on the regression model used. Similarly, when the family controls the firm through pyramidal structures, their impact on dividend payout is also negative. A one percent increase in voting rights by indirect (pyramidal) family control will reduce, on average, the level of dividend payment by 1.86 basic-points. Family board participation increases dividend ratios, as predicted by Hypothesis 3. An increase of one standard deviation (0.17) in the fraction of family members represented on the board raises the dividend payout ratio by 65.3 basic-points. Regression coefficients are significant at the 1 percent level.

Certain important determinants of the payout ratio besides family involvement are worth highlighting. First, financial indicators affect dividend ratios, as expected. Total leverage and growth opportunities are negatively related to dividend ratio, while return on assets is positively related. These effects hold (except for growing opportunities) even taking one lag period in these control variables (Column 3 and 4). Second, the regression coefficients of idiosyncratic variables, such as firm size and age, are positive and significant. These are expected results, consistent with previous dividend studies (Fama & French, 2001; Hu & Kumar, 2004).

Third, corporate governance variables impact dividend ratios. When a firm's CEO is also a board member, this implies a negative premium of 1.26 percent, on average (Columns 1 to 4), on dividend ratios. Moreover, the presence of an auditing firm also reduces dividend ratios, on average, by 1.12 percent. Board turnover positively affects dividend payment. One standard deviation change (0.25) in directorate composition during a given year raises payout ratio by 54 basic-points. In contrast, the presence of outside directors has no effect, since this variable is statistically not significant. Block-holder contestability also has no effect on dividend payout. Fourth, the level of business group diversification exerts a significant and negative impact on the level of dividend payments. The separation between ownership and control that occurs within business groups, along with their high levels of diversification, could accentuate agency problems between majority and minority shareholders, leading to lower dividend payments and increased private benefits of control. Chen et al. (2005) report similar findings.

Lastly, diagnosis tests of Tobit regressions show that the overall model is significant according to chi-square tests, and reported standard errors of regression coefficients are robust. The variance covariance matrix follows a cluster robust weighted estimate under the assumption that observations are independent across clusters.[3]

[Insert table 5]

Family involvement and the likelihood of dividend payments

Table 6 presents the results of the random effects *Probit* panel regressions model following the empirical specification in Eq. 2. Again, there is no statistical support for the claim in Hypothesis 1 that a family CEO (founder or heir) has a positive influence on the probability of dividend

---

[3] Normality tests on the regression residuals failed in all cases according to the conditional test moment on normality (Drukker, 2002) and the Shapiro-Wilk test. Non-normal residuals are explained by distribution Kurtosis (peakness) rather distribution skewness (symmetry), which is the less severe problem. Hence, Tobit regression coefficients in this case are unbiased, but not necessarily the most efficient ones.

payments. On the other hand, there is statistical support for Hypothesis 2, showing that family involvement in ownership as the largest shareholder has a negative impact on the likelihood of dividend payout. Regarding indirect pyramidal control, regression coefficients are not statistically significant in this estimation. Hypothesis 3 is also supported. The presence of family members on the board increases, on average, the likelihood of dividends by 2.6% for every 10% increase in the fraction of family members on the board. Hence, the econometric results of the *Probit* random effects model are in the same direction as those presented for the levels of payout ratio.

[Insert Table 6]

Robustness tests

This section presents an instrumental variable analysis to control for endogeneity and double causality among the independent variables. Empirical literature in corporate governance stresses the potential endogeneity between corporate governance fundamentals and firm managerial choices, such as those regarding capital structure, investment or dividend policies. We tackle endogeneity issues in the empirical model by including robustness checks based on instrumental variables estimations. Two variables –firm leverage and family ownership – are considered to have a circular relationship with either dividend payout ratio or the likelihood of dividend payments. Discussion focuses on how we tackle our endogeneity concerns between dividends and family ownership, offering the interested reader a detailed analysis (not reported in the paper) on how we deal with potential endogeneity between dividends and debt.

The relationship between dividend policy and family ownership might be endogenous. Clearly, families as majority shareholders can influence decisions on dividend policy; on the other hand, families can decide to maintain ownership in firms expected to make low dividend payments in order to control higher free cash flow levels. Following the arguments of Demsetz &

Lehn (1985), extended by Himmelberg, Hubbard & Palia (1999), our regressions use a firm's asset tangibility and volatility as key instruments for family ownership.

The argument behind the first instrument is that the larger the firm's the greater the value of a given fraction of ownership. Therefore, "…the higher price of a given fraction of the firm should, in itself, reduce the degree to which ownership is concentrated. Moreover, a given degree of control generally requires smaller share of the firm the larger is the firm" (Demsetz & Lehn, 1985: 1158). This argument implies the larger the firm (measured as the firm's assets tangibility), the greater diffuseness of ownership. These authors also provide another argument to expect an inverse relation between ownership and size: "An attempt to preserve effective and concentrated ownership in the face of larger capital needs requires a small group of owners to commit more wealth to a single enterprise" (Ibid., 1985: 1158), thus suggesting risk averse owners will demand higher risk-adjusted cost of capital, discouraging owners of larger firms from attempting to maintain highly concentrated ownership. Firm volatility (measured as the standard deviation of the operating margin for the previous three years) is one of the main factors associated with the type of instability for which control is most useful. Following the arguments of Demsetz & Lehn (1985): "…the noisier a firm's environment the greater the payoff to owners in maintaining tighter control" (Ibid., 1985: 1159). Therefore, high volatility environments should give rise to more concentrated family ownership structures.

Michaely & Roberts (2012), in a comparative study between public and privately held firms, show that private firms smooth dividends significantly less than their public counterparts; but no empirical evidence is reported that links asset tangibility and profit volatility with dividends for private firms. Brav *et al.* (2005) draw on a survey as evidence that private firms are more likely to pay dividends in response to temporary changes in earnings, suggesting that private firm's dividend policies are more erratic; but again, there is no relation that links our instruments with

family firm dividend policy. Formally, a variable is endogenous if the assumption of conditional independence with the error term is violated, but it could be argued that this violation does not refer to the endogenous variable and the non-contemporary error term. Therefore, following Hermalin & Weisbach (1991), lagged family ownership is included as an instrument, given that this lagged variable is correlated with the original variable but not with the error term.[4]

Table 7 presents the estimated results of random effects and panel-Probit regressions when family ownership uses asset tangibility, firm volatility, and lagged ownership as the main instruments. *F*-test of the validity of the instruments show a value above 100, which is higher than the recommended in Staiger & Stock (1997) for valid instruments; Hausman tests are 0.4 and 0.19 suggesting that original models results are preferable on the grounds of efficiency; and finally, Sargan tests of 4.1 and 1.13 shows that it cannot be rejected that the instrumental variables are uncorrelated to some set of residuals, and therefore they are acceptable instruments.

Columns 2 and 4 include the instrumented equations. In most cases, regression coefficients keep the sign, magnitude and significance of the original regressions (columns 1 and 3), showing similar marginal effects of family ownership on dividend policy.

[Insert Table 7]

Fourth additional consistency tests were performed on the above econometric results. First, we look at the decision power of family blocks within boards. This is a dummy variable that takes the value of 1 when family members hold more than 50 percent of the seats on the board and zero otherwise (*Majority Family on Board)*. This variable captures the ability of family blocks to impose their will. Results show that family members influence decisions on dividends only when the founding family dominates the board.

---

[4] For completeness, the model specification took into account a statistical test among the explanatory variables (Larcker and Rusticus, 2010). In particular, we ran the over-identifying restriction test (Sargan test) obtaining results that statistically support the chosen instruments.

A second analysis examined the difference between the *largest family shareholder* (*family ownership variable*), and the *controlling family shareholder*, allowing for the possibility that the largest family shareholder is not necessarily the controlling one due to the separation between equity and voting rights. Accordingly, the family ownership variable was broken in two categories: "*Family Ownership with equity share greater than 50 percent*", i.e., a dummy variable that takes the value of 1 if the largest shareholder is a family with 50 percent or more of the firm's shares, and 0 otherwise, and *"Family Ownership with equity share less than 50 percent*". Regressions show similar results in terms of signs, statistical significance and magnitude.

Third, we analyzed the influence of holding firms and trust funds on our results. As we stated before, families are usually behind these kinds of companies used as legal vehicles to control firms, and this fact can bias the results. We decided to test the findings leaving out these legal vehicles that are not working companies and our main results remained. Finally, other econometric specifications were analyzed to check consistency. In particular, random effect estimates of the dividend ratio yielded similar, although weaker results. We calculate the variance inflation factor showing a low level of multicolineality among our regressors. The results of the above consistency checks are available upon request.

Discussion and Conclusions

This article analyzes how family involvement (management, ownership, and control) influences the level and likelihood of firms' dividend payment as a mechanism that tends to reduce or increase agency problems between majority and minority shareholders, and between managers and owners. Research draws on Colombian data that share several characteristics with other

countries in the region, e.g., high ownership concentration, family business groups, and low investor protection. The sample is particularly useful for corporate finance and governance literature because it is composed of closely-held firms. Findings show that family influence, both in relation to the level and likelihood of dividend payouts, differs according to the type of family involvement in the firm.

Family involvement in management does not have significant effects on dividend policy. In contrast to the hypothesized relations, founder or heir CEOs have no impact on the amount or likelihood of dividend payments. One plausible interpretation is that family presence in management, in itself, helps to reduce agency problems. Although agency tensions can differ given the different stages the family firms go through (Gersick et al., 1997), Jensen & Meckling (1976) and Fama & Jensen (1983) argue that agency tensions seem less important in closely held family firms because property right holder is the same person as the agent making the decisions.

As hypothesized, a family that acts as majority voting block or can exert corporate control through pyramidal structures (indirect ownership) reduces the amount and likelihood of dividend payout. These findings might have two implications, which are not mutually exclusive. Families affect dividend policy by reducing the level and probability of dividends due to the supervision they exert as controlling shareholders, which reduces management agency problems, and the need to use dividends for this purpose (Jensen & Meckling, 1976; Fama & Jensen, 1983). Or it may be that families reduce the amount and likelihood of dividends because they are extracting private benefits of control (Claessens, et al., 2002) or abuse their power by taking resources out of the business for personal use (Steijvers & Voordeckers, 2009), affecting minority shareholders. Thus, private benefits of control can increase under pyramidal structures, especially in countries with weak legal protection against expropriation by corporate insiders. For example, the practice of transferring firms' assets and profits at non-market prices might increase benefits

that accrue to controlling shareholders, and erode those of minority shareholders (La Porta, et al., 2000). This might explain why companies controlled through pyramidal structures or by majority shareholders pay lower dividends.

The presence of founding family members on the board of directors has a positive and significant effect on both the level and likelihood of dividends. This result is consistent with the classical role played by dividends in an agency context. The finding results suggest that families use dividends as a mechanism to mitigate management agency problems, even when the current CEO is a family member. This may happen because the family CEO might not represent the interests of all family members, and may instead seek to protect the interests of a particular group (Schulze et al. 2003; Martin de Holan & Sanz, 2006; Block, 2012), suggesting empirical evidence on how dividends could be used to attenuate agency problems within families behind the businesses.

The results of this study contribute to dividend policy and family firms' literature in several ways. First, very few studies focus directly on dividend policy in family firms in emerging markets, based on private unlisted (closely-held) firms' micro-data that includes information on management, ownership and control, board structure, and financial characteristics. This paper highlights that the type of controlling shareholder matters for dividend policy in family firms. Management teams in widely-held firms could use dividends as a signal of expected cash flows and as a mechanism to mitigate information asymmetries between insiders and outsiders (Bhattacharya, 1979; Asquith & Mullins, 1983). Granted that the signaling content of dividends in closely-held firms is less important; but dividends still play a crucial role in aligning shareholder preferences and family firm dividend policy emerging from contests among family and non-family shareholders.

Second, this research follows the approach of Villalonga & Amit (2006) regarding type of family involvement (management, ownership, and control), and shows that a given type of involvement has different impacts on dividend policy. As shown, families as majority or controlling shareholders reduce the distribution of firm net earnings; yet family-members on the board of directors press for higher dividend payouts. Involvement in management has no effect. Accordingly, our results contribute to the growing literature on agency problems inside families (Schulze et al. 2003; Schulze et al. 2001; Martin de Holan & Sanz, 2006; Block, 2012).

Third, this article is the first comprehensive country-case study for a large Latin American economy focused on dividends and corporate governance mechanisms within family firms. Hence, the study contributes to the scant stock of empirical literature on corporate governance and finance in an understudied region that has gained relevance for its capital markets dynamics and importance in the world economy.

Limitations in the study's scope are chiefly caused by the difficulty of collecting information on privately held firms, but nonetheless provide interesting challenges for future research. For example, one of our main finding is that family ownership (direct or indirect) reduces on average the level and likelihood of dividends. But as we argue above, this is consistent with two conflicting explanations: on the one hand, this low dividend could explain lower agency cost through direct management supervision; but on the other hand, this lower dividend could also be consistent with higher agency cost through expropriation of minority shareholders. Further research is needed to explain this negative relation in a more comprehensive way.

An open question, not addressed in this study, is the role of a family CEO with a majority of non-family managers, or a non-family CEO leading a team of family managers. Accordingly, more research is needed on the structure of top management teams within family firms and its implication on dividend policy in particular, and firm performance in general. Similarly,

empirical studies are required regarding changes in dividend policy across family generations.

Lastly, the role of minority family owners on dividend policy and the contestability issues they

must deal with merit further analysis.

References

Anderson, R., & Reeb, D. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500, *Journal of Finance*, 58(3): 1301–28.

Asquith, P., & Mullins, D. (1983) The Impact of Initiating Dividends Payments on Shareholder Wealth, *Journal of Business,* 56(1):77–96.

Barclay, M., & Holderness, C. (1989). Private benefits from control of public corporations, *Journal of Financial Economics*, 25(2): 371–95.

Bhattacharya, S. (1979). Imperfect Information, Dividend Policy, and 'The Bird in the Hand' Fallacy, *The Bell Journal of Economics*, 10(1): 259–270.

Bertrand, M., & Schoar, A. (2006). The role of family in family firms, *Journal of Economic Perspectives*, 20(2): 73–96.

Block, J. (2012). R&D investments in family and founder firms: An agency perspective, *Journal of Business Venturing*, 27(2): 248–65.

Brav, A., J. Graham, C., Harvey, & Michaely, R. (2005). Payout policy in the 21st Century. *Journal of Financial Economics,* 77(3): 483–527.

Burkart, M., Panunzi, F., & Shleifer, A. (2003), Family firms, *Journal of Finance* 58 (5), 2167–2202.

Cameron, C.A., Trivedi, P. (2010). *Microeconometrics Using Stata*, STATA Press, College Station.

Claessens, S., Djankov. S., & Lang, L. (2000). The separation of ownership and control in East Asian Corporations, *Journal of Financial Economics*, 58(1–2): 81–112.

Claessens, S., Djankov, S., Fan, J. & Lang, L. (2002), Disentangling the incentive and entrenchment effects of large shareholdings, *Journal of Finance,* 57(6): 2741–2771.

Claessens, S., & Yurtoglu, B. (2013). Corporate governance in emerging markets: A survey, *Emerging Markets Review*, 15: 1–33.

Clarysse, B., Knockaert & Lockett, A. (2007). Outside board members in high tech start-ups, *Small Business Economics*, 29(3): 243–259.

Chen, Z., Cheung, Y. L., Stouraitis, A., & Wong, A. (2005), Ownership concentration, firm performance, and dividend policy in Hong Kong, *Pacific-Basin Finance Journal*, 13(4): 431–49.

Chong, A., & López–de–Silanes, F. (2007). Corporate governance and firm value in Mexico. In A. Chong & F. López–de–Silanes (Eds.), *Investor Protection in Latin America*. Stanford University Press – The World Bank.

Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences, *Journal of Political Economy*, 93(6): 1155–77.

Denis, D., & McConnell, J. (2003). International corporate governance, *Journal of Finance and Quantitative Analysis*, 38(1): 1–36.

Dyer, G. (1994). Potential contributions of organizational behavior to the study of family-owned businesses, *Family Business Review*, 7(2): 109–131.

Durnev, A., Morck, R., & Yeung, B. (2004). Value-enhancing capital budgeting and firm–specific stock returns variation, *Journal of Finance*, 59(1): 65–106.

Easterbrook, F. (1984). Two agency-cost explanations of dividends, *American Economic Review*, 74(4): 680–689.

Eddleston, K. & Kellemanns, F. (2007), Destructive and productive family relationships: a stewardship theory perspective, *Journal of Business Venturing,* 22(4): 545–565.

Faccio, M., Lang, L., & Young, L. (2001). Dividends and expropriation, *American Economic Review*, 91(1): 54–78.

Fama, E., & French, K. (2001). Disappearing dividends: Changing firm characteristics or lower propensity to pay?, *Journal of Financial Economics*, 60(1): 3–43.

Fama, E. & Jensen, M. (1983), Agency problems and residual claims, *Journal of Law and Economics,* 26(2): 327–349.

Fan, J., Wei, K., & Xu, X. (2011). Corporate finance and governance in emerging markets: A selective review and an agenda for future research, *Journal of Corporate Finance*, 17(2): 207–17.

Garay, U. & González, M. (2008). Corporate Governance and Firm Value: The Case of Venezuela, *Corporate Governance: An International Review,* 16(3): 194–209.

Gersick, K., Davis, E., Hampton, M. & Lansberg, I. (1997). Generation to generation: Life cycles of the family business. Boston: Harvard Business School Press.

Gomez-Mejia, L., Nuñez-Nickel, M. & Gutierrez, I. (2001), The role of family ties in agency contracts. *Academic of Management Journal,* 44(1): 417–428.

Gomes, A. (2000). Going Public without Governance: Managerial Reputation Effects, 55(2): 615–646.

González, M., Guzmán A., Pombo C., & Trujillo M.A., (2012). Family firms and financial performance: The cost of growing, *Emerging Markets Review,* 13(4): 626–649.

González, M., Guzmán A., Pombo C., & Trujillo M.A. (2013). Family firms and debt: Risk aversion versus risk of losing control, *Journal of Business Research*, 66(11): 2308–2320.

Gutierrez, L.H., & Pombo C. (2009). Corporate ownership and control contestability in emerging markets: the case of Colombia. *Journal of Economics and Business*, 61 (2): 112–139.

Gugler, K. (2003). Corporate governance, dividend payout policy, and the interrelation between dividends, R&D, and capital investment, *Journal of Banking and Finance,* 27(7): 1297–1321.

Hermalin, B. & Weisbach, M. (1991). The effect of board compensation and direct incentives on firm performance. *Financial Management,* 20(4): 101–112.

Himmelberg, C., R. G. Hubbard & D. Palia, (1999). Understanding the determinants of managerial ownership, *Journal of Financial Economics,* 53(3): 353–384.

Hart, O., & Moore, J. (1974). Property Rights and the Nature of the Firm, *The Journal of Political Economy*, 98(6):1119–1158.

Hu, A., & Kumar, P. (2004). Managerial entrenchment and payout policy, *Journal of Financial and Quantitative Analysis*, 39(4): 759–90.

Jensen, M. (1986). Agency cost of free cash flow, corporate finance and takeovers, *American Economic Review*, 76(2): 323–29.

Jensen, M. (1998). *Self-interest, altruism, incentives, and agency. Foundations of Organizational Strategy*. Harvard University Press, Cambridge, MA.

Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure, *Journal of Financial Economics,* 3(4): 305–360.

Johnson, S., La Porta, R., López–de–Silanes, F. & Shleifer, A. (2000). Tunneling, *American Economic Review,* 90(2): 22–7.

Johannisson, B., & M. Huse (2000). Recruiting Outside Board Members in the Small Family Business: An Ideological Challenge, *Entrepreneurship and Regional Development,* 12(4): 353–378.

King, M., & Santor, E. (2008). Family values: Ownership structure, performance and capital structure of Canadian firms, *Journal of Banking & Finance,* 32(11): 2423–32.

La Porta, R., López de Silanes, F., Shleifer, A., & Vishny, R. (2000). Agency problems and dividend policies around the world, *Journal of Finance,* 55(1): 1–33.

Larcker, D. & Rusticus, T. (2010), On the use of instrumental variables in accounting research, *Journal of Accounting and Economics,* 49(3): 186–205.

Lee, K. (2010). Retail Minority Shareholders and Corporate Reputation as Determinant of Dividend Policy in Australia. *Pacific-Basin Finance Journal*, 18(4): 351–368.

Lee, M., & Rogoff, E. (1996). Research note: comparison of small businesses with family participation versus small businesses without family participation: an investigation of differences in goals, attitudes, and family/business conflict. *Family Business Review* 9(4), 423–437.

Lipson, M., Maquieira, C., & Megginson, W. (1998). Dividend initiations and earnings surprises. *Financial Management*, 27(3): 27–45.

Martín de Holan, P., & Sanz, L. (2006). Protected by the family? How closely held family firms protect minority shareholders, *Journal of Business Research,* 59(3): 356–59.

Maury, B., Pajuste, A. (2005). Multiple large shareholders and firm value. *Journal of Banking & Finance* 29 (7), 1813–1834.

McConnell, J., & Servaes, H. (1990). Additional evidence on equity ownership and corporate value, *Journal of Financial Economics,* 27(2): 595–612.

Michaely, R., & Roberts, M. R. (2012). Corporate dividend policies: Lessons from private firms, *Review of Financial Studies*, 25(3): 711–746.

Miller, M. & Modigliani, F. (1961). Dividend policy, growth and the valuation of shares, *Journal of Business*, 34(4): 411–433.

Morck, R. & Yeung, B (2003). Agency problems in large family business groups, *Entrepreneurship Theory and Practice,* 27(4): 367–382.

Morck, R., Shleifer, A., & Vishny, R. (1988). Management ownership and market valuation: An empirical analysis, *Journal of Financial Economics*, 20(1–2): 293–315.

Morck, R., Wolfenzon, D., & Yeung, B. (2005). Corporate governance, economic entrenchment, and growth, *Journal of Economic Literature*, 43(3): 655–720.

Myers, S.C. (2000). Outside Equity, *The Journal of Finance*, 55(3): 1005–1037.

Palia, D., Raviv A., & Wang, C. (2008). Founders versus non-founders in large companies: Financial incentives and the call for regulation, *Journal of Regulatory Economics*, 33(1): 55–86.

Pindado, J., Requejo, I., & De la Torre, C. (2012). Do family firms use dividends policy as a governance mechanism? Evidence from the Euro zone, *Corporate Governance: An International Review*, 20(5): 413–431.

Rommens, A., Cuyvers L., & Deloof, M. (2012). Dividend policies of privately held companies: Stand-alone and group companies in Belgium, *European Financial Management*, 18(5): 816–35.

Rozeff, M. (1982), Growth, Beta and agency cost as determinants of dividend payout ratios, The *Journal of Financial Research* 5(3): 249–259

Schulze, W., Lubatkin, M., Dino, R., & Buchholtz, A. K. (2001). Agency relationships in family firms: Theory and evidence. *Organization Science,* 12(2): 99–116.

Schulze, W., Lubatkin, M., & Dino, R. (2003). Exploring the agency consequences of ownership dispersion among the directors of private family firms, *Academy of Management Journal*, 46(2): 179–194.

Sorenson, R. (1999). Conflict management strategies used by successful family businesses, *Family Business Review*, 12(4): 325–339.

Staiger, D. & Stock, J. H. (1997). Instrumental Variables Regression with Weak Instruments. *Econometrica*, 65(3): 557–586.

Steijvers, T. & Voordeckers, W. (2009). Private family ownership and agency cost of debt, *Family Business Review*, 22(4): 333–346.

Truong, T. & Heaney, R. (2007). Largest shareholder and dividend policy around the world, Quarterly *Review of Economics and Finance,* 47(5): 667–687.

Uhlaner, L., M. Wright & Huse, M. (2007). Private firms and corporate governance: An integrated economic and management perspective, *Small Business Economics*, 29(3): 225–241.

Villalonga, B., & Amit R. (2006). How do family ownership, control and management affect firm value?, *Journal of Financial Economics,* 80(2): 385–417.

Villalonga, B. & Amit R. (2010). Family control of firms and industries, *Financial Management,* 39(3): 863–904.

Voordeckers, W., Van Gils, A. & Van den Heuvel, J. (2007). Board composition in small and medium-sized family firms. *Journal of Small Business Management,* 45(1): 137–156.

Whisler, T. L. (1988). The Role of the Board in the Threshold Firm, *Family Business Review,* 1(3): 309–312.

Zwiebel, J. (1996). Dynamic capital structure under managerial entrenchment, *American Economic Review*, 86(5):1197–1215.

Table 1 - Construction of the Sample

Panel A: Firms in the Sample (averages for 1996-2006 period)	
Source	Number
Superintendence for Commercial Societies	8,500
Financial Superintence	140
Sub-Total	8,640
Minus: Depositary institutions*	23
Minus: utilities and power sector grid company**	8
Minus: Firms without information at second ownership layer	7,325
Sub-Total	1,284
Minus: Firms without ownership + board members information with at least 3 consecutive years	600
Minus: Firms not representing at least the 50% of the groups total number of companies	161
Total Listed and Closely held firms	523
Minus: Listed firms	65
Total number closely held firms	**458**
Total closely held firms-year observations	4,320

Panel B: Number of dividend and non dividend closely held firms by year

Year	Dividend	Non-dividend
1996	141	254
1997	153	250
1998	139	262
1999	125	281
2000	126	287
2001	122	284
2002	129	271
2003	124	269
2004	126	253
2005	135	236
2006	136	217
Sum	1,456	2,864
Percentage	33.7%	66.3%
Total firm year observations		**4,320**

Sources: National Equity Registry Forms (*Registro Nacional de Valores e Intermediarios*, RNVIs) filed by Colombia's Financial Superintendence (SFIN), Colombian Confederation of Chambers of Commerce (*Confecámaras*), Unique Business Register (RUE), BPR Benchmark and Colombia's Superintendence for Commercial Societies (SSOC).

Table 2 - Database Structure

Panel A

Number of firms and proportion of dividend firms by business group affiliation

Business group name		1996	1998	2000	2002	2004	2006	Total
GEA	All firms	61	64	70	65	60	54	**691**
	Dividend firms	0,26	0,23	0,26	0,25	0,28	0,22	0,25
Santodomingo	All firms	43	44	43	43	39	35	**458**
	Dividend firms	0,42	0,41	0,28	0,33	0,26	0,40	0,33
Ardila Lulle	All firms	60	63	63	61	56	52	**658**
	Dividend firms	0,57	0,37	0,10	0,11	0,23	0,15	0,24
Carvajal	All firms	30	31	35	36	34	32	**364**
	Dividend firms	0,33	0,23	0,31	0,33	0,29	0,41	0,33
Mayaguez - Diaco	All firms	16	16	15	14	15	12	**164**
	Dividend firms	0,13	0,25	0,27	0,21	0,33	0,50	0,28
Rest of business groups in the sample (23)	All firms	144	145	145	137	133	126	**1530**
	Dividend firms	0,42	0,36	0,39	0,37	0,38	0,49	0,39
Non affiliated	All firms	41	38	42	44	42	42	**455**
	Dividend firms	0,02	0,53	0,45	0,59	0,50	0,50	0,45
Total	**All firms**	**395**	**401**	**413**	**400**	**379**	**353**	**4320**
	Dividend firms	**0,36**	**0,35**	**0,31**	**0,32**	**0,33**	**0,39**	**0,34**

Panel B

The level and likelihood of dividend payments by industry

Industrial Sector		1996	1998	2000	2002	2004	2006	Total
Agriculture	Firms	30	29	29	23	21	19	**280**
	Dividend firms	0,233	0,138	0,310	0,304	0,333	0,579	**0,293**
	Dividend Ratio (avg.)	0,005	0,006	0,009	0,008	0,007	0,026	**0,009**
	Dividend Ratio (st.d.)	(0,010)	(0,019)	(0,023)	(0,015)	(0,012)	(0,053)	**(0,027)**
Mining	Firms	6	6	6	4	4	4	**55**
	Dividend firms	0,333	0,500	0,167	0,500	0,500	0,500	**0,345**
	Dividend Ratio (avg.)	0,074	0,024	0,019	0,021	0,018	0,017	**0,058**
	Dividend Ratio (st.d.)	(0,120)	(0,032)	(0,047)	(0,029)	(0,021)	(0,020)	**(0,277)**
Manufacturing industries	Firms	153	157	162	162	153	141	**1.716**
	Dividend firms	0,425	0,427	0,346	0,426	0,366	0,418	**0,393**
	Dividend Ratio (avg.)	0,014	0,019	0,013	0,018	0,014	0,016	**0,015**
	Dividend Ratio (st.d.)	(0,044)	(0,048)	(0,027)	(0,032)	(0,033)	(0,029)	**(0,034)**
Electric, gas and sanitary services	Firms	1	1	1	1	1	0	**10**
	Dividend firms	0,000	0,000	0,000	0,000	0,000	.	**0,000**
	Dividend Ratio (avg.)	0,000	0,000	0,000	0,000	0,000	.	**0,000**
	Dividend Ratio (st.d.)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	.	**(0,000)**
Construction	Firms	18	18	17	14	12	11	**166**
	Dividend firms	0,222	0,167	0,059	0,143	0,250	0,273	**0,175**
	Dividend Ratio (avg.)	0,004	0,001	0,001	0,002	0,016	0,001	**0,004**
	Dividend Ratio (st.d.)	(0,010)	(0,004)	(0,004)	(0,004)	(0,051)	(0,003)	**(0,021)**
Commerce	Firms	47	48	49	49	44	43	**516**
	Dividend firms	0,277	0,292	0,265	0,245	0,273	0,326	**0,279**
	Dividend Ratio (avg.)	0,010	0,008	0,007	0,006	0,007	0,018	**0,008**
	Dividend Ratio (st.d.)	(0,020)	(0,016)	(0,016)	(0,016)	(0,015)	(0,039)	**(0,019)**

Table 2 - Database Structure (Cont.)

Panel B - Cont.

The level and likelihood of dividend payments by industry

Industrial Sector		1996	1998	2000	2002	2004	2006	Total
Hotels and restaurants	Firms	1	1	2	2	2	2	**19**
	Dividend firms	1,000	1,000	0,000	0,000	0,000	0,500	**0,211**
	Dividend Ratio (avg.)	0,042	0,017	0,000	0,000	0,000	0,000	**0,004**
	Dividend Ratio (st.d.)	.	.	(0,000)	(0,000)	(0,000)	(0,000)	**(0,010)**
Transportation and communications	Firms	11	10	9	9	9	9	**103**
	Dividend firms	0,182	0,100	0,000	0,000	0,111	0,000	**0,039**
	Dividend Ratio (avg.)	0,008	0,000	0,000	0,000	0,000	0,000	**0,001**
	Dividend Ratio (st.d.)	(0,020)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	**(0,007)**
Holding Firms	Firms	86	89	92	93	95	88	**999**
	Dividend firms	0,372	0,427	0,402	0,344	0,421	0,477	**0,413**
	Dividend Ratio (avg.)	0,009	0,011	0,013	0,008	0,008	0,011	**0,010**
	Dividend Ratio (st.d.)	(0,024)	(0,032)	(0,029)	(0,015)	(0,015)	(0,019)	**(0,026)**
Real estate	Firms	38	39	42	39	34	33	**415**
	Dividend firms	0,395	0,205	0,214	0,103	0,118	0,091	**0,200**
	Dividend Ratio (avg.)	0,012	0,004	0,006	0,005	0,002	0,002	**0,010**
	Dividend Ratio (st.d.)	(0,021)	(0,010)	(0,028)	(0,019)	(0,009)	(0,009)	**(0,043)**
Social and health services	Firms	4	3	4	4	4	3	**41**
	Dividend firms	0,000	0,000	0,000	0,250	0,250	0,333	**0,098**
	Dividend Ratio (avg.)	0,000	0,000	0,000	0,078	0,009	0,010	**0,010**
	Dividend Ratio (st.d.)	(0,000)	(0,000)	(0,000)	(0,156)	(0,017)	0,017	**(0,049)**
Total	Firms	**395**	**401**	**413**	**400**	**379**	**353**	**4.320**
	Dividend firms	**0,357**	**0,347**	**0,305**	**0,323**	**0,332**	**0,385**	**0,337**
	Dividend Ratio (avg.)	**0,012**	**0,012**	**0,010**	**0,012**	**0,010**	**0,013**	**0,012**
	Dividend Ratio (st.d.)	**(0,035)**	**(0,035)**	**(0,026)**	**(0,029)**	**(0,025)**	**(0,028)**	**(0,044)**

Notes: Panel A displays the fraction of firms that paid dividends by business group affiliation. The data sorted by business groups indicate a total of 28 groups in the working sample plus the set of independent firms. Panel B displays our sample divided by industry using the ISIC two-digit code.

Sources: National Equity Registry Forms (*Registro Nacional de Valores e Intermediarios*, RNVIs) filed by Colombia's Financial Superintendence (SFIN), Colombian Confederation of Chambers of Commerce (*Confecámaras*), Unique Business Register (RUE), BPR Benchmark and Colombia's Superintendence for Commercial Societies (SSOC).

Table 3. Dividend Policy and Corporate Ownership

Panel A					*Panel B*				
Shareholder's participation	**Obs.**	**Percentage of Obs. with dividend**	**Obs.**	**dividends/ assets**	**Largest shareholder type**	**Obs.**	**Percentage of Obs. with dividend**	**Obs.**	**dividends/ assets**
	Col. (1)	**Col. (2)**	**Col. (3)**	**Col. (4)**		**Col. (5)**	**Col. (6)**	**Col. (7)**	**Col. (8)**
Share ≤ 0.10	70	0.429	30	0.022	Founding-Family member	813	0.444	361	0.031
		(0.50)		(0.02)			(0.50)		(0.05)
0.10 < Share ≤ 0.20	284	0.482	137	0.037	Limited liability	130	0.438	57	0.039
		(0.50)		(0.05)			(0.50)		(0.06)
0.20 < Share ≤ 0.30	573	0.473	271	0.032	Trust funds	81	0.210	17	0.009
		(0.50)		(0.05)			(0.41)		(0.01)
0.30 < Share ≤ 0.40	420	0.357	150	0.034	Holding firms	911	0.378	344	0.031
		(0.48)		(0.04)			(0.49)		(0.04)
0.40 < Share ≤ 0.50	1,025	0.325	333	0.032	Financial institutions	33	0.333	11	0.041
		(0.47)		(0.12)			(0.48)		(0.05)
0.50 < Share ≤ 0.60	375	0.248	93	0.038	Domestic corporations	1,858	0.271	503	0.044
		(0.43)		(0.03)			(0.44)		(0.10)
0.60 < Share ≤ 0.70	253	0.261	66	0.039	Foreign firms	467	0.321	150	0.034
		(0.44)		(0.05)			(0.47)		(0.04)
0.70 < Share ≤ 0.80	143	0.322	46	0.042	State-owned	27	0.481	13	0.034
		(0.47)		(0.04)			(0.51)		(0.02)
0.80 < Share ≤ 0.90	273	0.297	81	0.038	**Total**	4,320	**0.337**	1,456	**0.036**
		(0.46)		(0.06)			**(0.473)**		**(0.069)**
0.90 < Share ≤ 1	904	0.275	249	0.044					
		(0.45)		(0.05)					

Note. Panel A relates shareholders' equity distribution and the proportion of observations where dividends were paid, with standard deviation in parentheses. The last two columns show the observations in which dividend payments were made and the average of the dividend ratio among the observations. Panel B shows the same information but takes into consideration the different kinds of largest shareholder the firms in the sample have.

Sources. National Equity Registry Forms (*Registro Nacional de Valores e Intermediarios*, RNVIs) filed by Colombia's Financial Superintendence (SFIN), Colombian Confederation of Chambers of Commerce (*Confecámaras*), Unique Business Register (RUE), BPR Benchmark, Colombia's Superintendence for Commercial Societies (SSOC), and Gutierrez and Pombo (2009).

Table 4 - Control variables - Descriptive Statistics and differences in means and medians

Panel A. Financial, Board and Ownership variables

Variables	Obs.	Mean	Median	Std	t-test		Wilconxon	
Total leverage								
All firms	4,320	0.33	0.29	0.28				
Dividend firms	1,456	0.25	0.22	0.22	13.6	***	75.5	***
Non-dividend firms	2,864	0.37	0.33	0.29				
Return on assets								
All firms	4,320	0.01	0.02	0.10				
Dividend firms	1,456	0.04	0.03	0.05	-13.7	***	327.2	***
Non-dividend firms	2,864	0.00	0.01	0.12				
Growth opportunities								
All firms	3,872	0.01	0.01	0.87				
Dividend firms	1,313	0.01	0.02	0.73	-0.4		4.1	**
Non-dividend firms	2,559	0.00	0.00	0.94				
Firm age								
All firms	4,320	27.31	24.00	20.85				
Dividend firms	1,456	33.67	29.00	23.02	-14.7	***	115.1	***
Non-dividend firms	2,864	24.07	21.00	18.86				
Firm size (log. Sales)								
All firms	4,320	14.94	16.00	4.66				
Dividend firms	1,456	16.07	16.77	3.63	-11.5	***	80.1	***
Non-dividend firms	2,864	14.37	15.68	5.01				
Board size								
All firms	4,320	6.80	6.00	1.87				
Dividend firms	1,456	6.97	6.00	1.94	-4.3	***	13.8	***
Non-dividend firms	2,864	6.71	6.00	1.83				
Outside director								
All firms	4,320	0.28	0.17	0.28				
Dividend firms	1,456	0.29	0.17	0.29	-2.8	***	4.4	**
Non-dividend firms	2,864	0.27	0.17	0.28				
Board Turnover								
All firms	3,872	0.16	0.00	0.24				
Dividend firms	1,313	0.15	0.00	0.22	2.5	***	0.0	
Non-dividend firms	2,559	0.17	0.00	0.25				
Auditing firm								
All firms	4,320	0.45	0.00	0.50				
Dividend firms	1,456	0.42	0.00	0.49	3.3	***	10.5	***
Non-dividend firms	2,864	0.47	0.00	0.50				
CEO board dummy								
All firms	4,320	0.35	0.00	0.48				
Dividend firms	1,456	0.36	0.00	0.50	-0.7		0.2	
Non-dividend firms	2,864	0.35	0.00	0.48				

Panel A - continued

Variables	Obs.	Mean	Median	Std	t-test		Wilconxon	
Contestability Index								
All firms	4,320	1.01	0.99	0.61				
Dividend firms	1,456	1.06	1.07	0.62	-4.1	***	23.9	***
Non-dividend firms	2,864	0.98	0.93	0.60				
Group diversification								
All firms	4,320	13.78	11.00	10.14				
Dividend firms	1,456	11.67	8.50	9.84	9.9	***	79.0	***
Non-dividend firms	2,864	14.86	12.00	10.12				
Group affiliation								
All firms	4,320	0.89	1.00	0.31				
Dividend firms	1,456	0.86	1.00	0.35	5.5	***		
Non-dividend firms	2,864	0.91	1.00	0.28				
Panel B. Family Involvement								
Family CEO								
All firms	4,320	0.25	0.00	0.43				
Dividend firms	1,456	0.32	0.00	0.47	-8.1	***	64.2	***
Non-dividend firms	2,864	0.21	0.00	0.41				
Founder CEO								
All firms	4,320	0.04	0.00	0.19				
Dividend firms	1,456	0.05	0.00	0.22	-3.77	***	14.15	***
Non-dividend firms	2,864	0.03	0.00	0.17				
Heir CEO								
All firms	4,320	0.21	0.00	0.41				
Dividend firms	1,456	0.27	0.00	0.44	-6.77	***	45.42	***
Non-dividend firms	2,864	0.18	0.00	0.38				
Family Ownership								
All firms	4,320	0.19	0.00	0.39				
Dividend firms	1,456	0.25	0.00	0.43	-7.20	***	51.31	***
Non-dividend firms	2,864	0.16	0.00	0.36				
Indirect (Pyramidal) Family Control								
All firms	4,320	0.44	0.00	0.50				
Dividend firms	1,456	0.40	0.00	0.49	3.68	***	13.52	***
Non-dividend firms	2,864	0.46	0.00	0.50				
Family Board [%]								
All firms	4,320	0.31	0.17	0.33				
Dividend firms	1,456	0.38	0.29	0.35	-10.13	***	89.82	***
Non-dividend firms	2,864	0.27	0.17	0.32				

Notes: Panels A and B display the mean, median and standard deviation for variables related to financial aspects, firm idiosyncrasies, blockholder contestability and family involvement. The sample splits the group of firms by dividend and non-dividend status. It also reports the parametric and non-parametric statistics for the differences in means and medians. The null hypothesis is the non-existence of differences between the two groups of firms along with their statistical significance. Sources: Our own estimates.

Table 5 - Family Involvement and Level of Dividend Payments – Tobit Regressions

Dependent variable: Dividend ratio					Dependent variable: Dividend ratio				
Variables	**Col. (1)**	**Col. (2)**	**Col. (3)**	**Col. (4)**	**Variables**	**Col. (1)**	**Col. (2)**	**Col. (3)**	**Col. (4)**
Family CEO	0.0083	...	0.0024	...	Board Turnover [%]	0.0216*	0.0216*	0.0082	0.0082
	(0.008)	...	(0.005)	...		(0.012)	(0.012)	(0.006)	(0.006)
Founder CEO	...	0.0091	...	0.0041	Auditing firm	-0.0145**	-0.0145**	-0.0079*	-0.0079*
	...	(0.011)	...	(0.008)		(0.007)	(0.007)	(0.004)	(0.004)
Heir CEO	...	0.0081	...	0.0021	CEO board dummy	-0.0158**	-0.0158**	-0.0094**	-0.0094**
	...	(0.008)	...	(0.006)		(0.007)	(0.007)	(0.004)	(0.004)
Family Ownership	-0.0215**	-0.0216**	-0.0139*	-0.0140**	Contestability Index	-0.0027	-0.0027	-0.0033	-0.0033
	(0.011)	(0.011)	(0.007)	(0.007)		(0.005)	(0.005)	(0.004)	(0.004)
Indirect (Pyramidal) Family Control	-0.0222***	-0.0223***	-0.0150***	-0.0150***	Group diversification	-0.0014***	-0.0014***	-0.0014***	-0.0014***
	(0.008)	(0.008)	(0.005)	(0.005)		(0.000)	(0.000)	(0.000)	(0.000)
Family Board [%]	0.0437***	0.0437***	0.0330***	0.0331***	Group affiliation dummy	0.0034	0.0036	0.0077	0.0080
	(0.015)	(0.015)	(0.009)	(0.009)		(0.010)	(0.011)	(0.008)	(0.008)
Total Leverage	-0.0860***	-0.0860***	...	...	Constant	-0.1333**	-0.1334**	-0.0791**	-0.0793**
	(0.022)	(0.022)	...	...		(0.062)	(0.062)	(0.034)	(0.034)
Return on Assets - ROA	0.2431***	0.2433***	...	...	**Regression Statistics**				
	(0.055)	(0.055)	...	...	Year dummies	Yes	Yes	Yes	Yes
Growth opportunities	-0.0078***	-0.0078***	...	...	Industrial sector dummies	Yes	Yes	Yes	Yes
	(0.003)	(0.003)	...	...	Observations	3872	3872	3412	3412
Lagged Total Leverage	...	...	-0.0760***	-0.0760***	Left-censored observation	2559	2559	2267	2267
	...	...	(0.013)	(0.013)	Uncensored observations	1313	1313	1145	1145
Lagged Return on Assets - ROA	...	...	0.2972***	0.2976***	*Pseudo-R2*	...	...	...	...
	...	...	(0.044)	(0.044)	Chi-squared	711.05	711.06	924.77	924.86
Lagged Growth opportunities	...	...	-0.0010	-0.0011		[0.000]	[0.000]	[0.000]	[0.000]
	...	...	(0.001)	(0.001)	Number of firms	458	458	457	457
Firm age	0.0005***	0.0005***	0.0003***	0.0003***					
	(0.000)	(0.000)	(0.000)	(0.000)	**Specification tests (normal residuals)**				
Firm size	0.0037***	0.0037***	0.0026***	0.0026***	Conditional moment	540.31	541.74	106.54	107.04
	(0.001)	(0.001)	(0.001)	(0.001)	test on normality	[0.000]	[0.000]	[0.000]	[0.000]
Board size	0.0035**	0.0035**	0.0023*	0.0023*	Shapiro-Wilk W test	8.95	8.93	9.05	9.04
	(0.002)	(0.002)	(0.001)	(0.001)		[0.000]	[0.000]	[0.000]	[0.000]
Outside director [%]	0.0118	0.0119	0.0095	0.0097	Skewness	0.401	0.397	0.297	0.294
	(0.012)	(0.012)	(0.009)	(0.009)	Kurtosis	3.310	3.302	3.522	3.519

Notes: The table presents the results of the Tobit regressions. Col.1 and 3 present the results of the model without specifying the kind of family CEO, while Col. 2 and 4 distinguish between founders and heirs. Regression coefficients represent the marginal effects on the latent variable y*; Robust standard errors in parenthesis are adjusted by 458 clusters, p values are in brackets; *** p<0.01, ** p<0.05, * p<0.1. The specification tests for normal errors are the bootstrap conditional moment test for left censoring data at point 0 (Drukker, 2002); and the Shapiro Wilk Test. Pseudo-R2 statistic is reported if it lies between 0 and 1, otherwise the statistic is not reported.

Table 6 - Family Involvement and the Likelihood of Dividend Payment – Probit Regressions

Dependent variable: Dividend dummy					Dependent variable: Dividend dummy				
Variables	Col. (1)	Col. (2)	Col. (3)	Col. (4)	Variables	Col. (1)	Col. (2)	Col. (3)	Col. (4)
Family CEO	0.0294	...	0.0207	...	Board size	0.0219*	0.0220*	0.0226*	0.0227*
	(0.043)	...	(0.043)	...		(0.011)	(0.011)	(0.013)	(0.013)
Founder CEO	...	0.1142	...	0.1505	Outside director [%]	0.0422	0.0432	0.0544	0.0564
	...	(0.114)	...	(0.131)		(0.059)	(0.059)	(0.062)	(0.063)
Heir CEO	...	0.0188	...	0.0047	Board Turnover [%]	-0.0070	-0.0072	-0.0407	-0.0407
	...	(0.043)	...	(0.042)		(0.037)	(0.037)	(0.042)	(0.042)
Family Ownership	-0.1330**	-0.1340**	-0.1097	-0.1112	Auditing firm	-0.0300	-0.0294	-0.0150	-0.0137
	(0.067)	(0.068)	(0.068)	(0.069)		(0.031)	(0.031)	(0.031)	(0.030)
Indirect (Pyramidal) Family Control	-0.0568	-0.0577	-0.0461	-0.0473	CEO board dummy	-0.0426	-0.0435	-0.0449	-0.0461
	(0.046)	(0.046)	(0.046)	(0.046)		(0.030)	(0.030)	(0.033)	(0.033)
Family Board [%]	0.2766**	0.2760**	0.2421*	0.2416*	Contestability Index	0.0419	0.0413	0.0298	0.0289
	(0.114)	(0.114)	(0.125)	(0.125)		(0.029)	(0.029)	(0.029)	(0.028)
Total Leverage	-0.3315**	-0.3307**	...	...	Group diversification	-0.0067**	-0.0070**	-0.0080*	-0.0084*
	(0.131)	(0.130)	...	...		(0.003)	(0.003)	(0.004)	(0.004)
Return on Assets - ROA	0.4552**	0.4608**	...	...	Group affiliation dummy	-0.0688	-0.0564	-0.0394	-0.0221
	(0.201)	(0.203)	...	...		(0.092)	(0.090)	(0.085)	(0.081)
Growth opportunities	-0.0203*	-0.0204*	...	...	**Regression Statistics**				
	(0.012)	(0.012)	...	...	Year dummies	Yes	Yes	Yes	Yes
Lagged Total Leverage	...	...	-0.5010**	-0.5001**	Industrial sector dummies	Yes	Yes	Yes	Yes
	...	...	(0.232)	(0.233)	Observations	3872	3872	3412	3412
Lagged Return on Assets - ROA	...	...	1.0486**	1.0602**	Wald Test	231.87	232.17	268.91	268.76
	...	...	(0.484)	(0.491)		[0.000]	[0.000]	[0.000]	[0.000]
Lagged Growth opportunities	...	...	-0.0022	-0.0025	Pseudo R^2	0.198	0.198	0.329	0.330
	...	...	(0.010)	(0.010)	Number of firms	458	458	457	457
Firm age	0.0054**	0.0054**	0.0047**	0.0047**	**Specification tests**				
	(0.002)	(0.002)	(0.002)	(0.002)	Lagrange Multiplier test for	2,324	2,323	1,985	1,985
Firm size	0.0174**	0.0173**	0.0164**	0.0163**	Random Effects - RE	[0.000]	[0.000]	[0.000]	[0.000]
	(0.007)	(0.007)	(0.008)	(0.008)					

Notes: This table presents the results of the panel-random effects Probit regressions, taking the *dividend dummy* as dependent variable. Col.1 and 3 present the results of the model without specifying the kind of family CEO, while Col. 2 and 4 differentiate between founders and heirs. Col.1 and 2 take the un-lagged variables of performance, leverage and growth opportunities, while regression Col. 3 and 4 take the lagged values of these variables. The reported coefficients are the marginal effects evaluated at mean values. They represent the change in probability for an infinitesimal change in the dividend dummy due changes in model's exogenous variables. Robust standard errors are in parentheses, p values are in brackets; *** p<0.01, ** p<0.05, * p<0.1; Pseudo-R2 statistic is reported if it lies between 0 and 1, otherwise the statistic is not reported.

Table 7 - Endogeneity between Dividend Policy and Family Ownership

Dependent variable:	Dividend ratio - Tobit		Dividend dummy- Probit			Dependent variable:	Dividend ratio - Tobit		Dividend dummy- Probit	
Variables	Initial Specification	IV - Family Ownership[a]	Initial Specification	IV - Family Ownership[a]		Variables	Initial Specification	IV - Family Ownership[a]	Initial Specification	IV - Family Ownership[a]
	Col. (1)	Col. (2)	Col. (3)	Col. (4)			Col. (1)	Col. (2)	Col. (3)	Col. (4)
Founder CEO	0.0041	0.0049	0.1505	0.1531		Auditing firm	-0.0079*	-0.0084*	-0.0137	-0.0137
	(0.008)	(0.008)	(0.131)	(0.132)			(0.004)	(0.004)	(0.030)	(0.031)
Heir CEO	0.0021	0.0024	0.0047	0.0045		CEO board dummy	-0.0094**	-0.0096**	-0.0461	-0.0462
	(0.006)	(0.006)	(0.042)	(0.042)			(0.004)	(0.004)	(0.033)	(0.033)
Family Ownership	-0.0140**	...	-0.1112	...		Contestability Index	-0.0033	-0.0027	0.0289	0.0295
	(0.007)	...	(0.069)	...			(0.004)	(0.004)	(0.028)	(0.029)
Family Ownership - IV	...	-0.0187**	...	-0.1305		Group diversification	-0.0014***	-0.0014***	-0.0084*	-0.0084*
	...	(0.009)	...	(0.093)			(0.000)	(0.000)	(0.004)	(0.004)
Indirect (Pyramidal) Family Control	-0.0150***	-0.0170***	-0.0473	-0.0384		Group affiliation dummy	0.0080	0.0079	-0.0221	-0.0263
	(0.005)	(0.006)	(0.046)	(0.045)			(0.008)	(0.008)	(0.081)	(0.082)
Family Board [%]	0.0331***	0.0346***	0.2416*	0.2410*		**Regresion Statistics**				
	(0.009)	(0.010)	(0.125)	(0.125)		Year dummies	Yes	Yes	Yes	Yes
Lagged Total Leverage	-0.0760***	-0.0762***	-0.5001**	-0.4996**		Industrial sector dummies	Yes	Yes	Yes	Yes
	(0.013)	(0.013)	(0.233)	(0.233)		Observations	3412	3412	3412	3412
Lagged Return on Assets - ROA	0.2976***	0.2982***	1.0602**	1.0639**		Left-censored observations	2267	2267	...	...
	(0.044)	(0.044)	(0.491)	(0.494)		Uncensored observations	1145	1145	...	...
Lagged Growth opportunities	-0.0011	-0.0011	-0.0025	-0.0024		Wald Test	...	...	268.76	266.36
	(0.001)	(0.001)	(0.010)	(0.010)			...	...	[0.000]	[0.000]
Firm age	0.0003***	0.0003***	0.0047**	0.0047**		Chi-squared	924.86	924.52	...	...
	(0.000)	(0.000)	(0.002)	(0.002)			[0.000]	[0.000]	...	...
Firm size	0.0026***	0.0026***	0.0163**	0.0163**		Pseudo R^2	...	...	0.3296	0.3291
	(0.001)	(0.001)	(0.008)	(0.008)		Number of firms	457	457	457	457
Board size	0.0023*	0.0023*	0.0227*	0.0225*		**Specification tests**				
	(0.001)	(0.001)	(0.013)	(0.013)		Lagrange Multiplier test for RE	...	...	1,985.4	1,982.7
Outside director	0.0097	0.0093	0.0564	0.0555			...	...	[0.000]	[0.000]
	(0.009)	(0.009)	(0.063)	(0.063)		Conditional moment test on normality	107.04	106.27	...	...
Board Turnover	0.0082	0.0081	-0.0407	-0.0409			[0.000]	[0.000]	...	...
	(0.006)	(0.006)	(0.042)	(0.042)		Shapiro-Wilk W test	9.04	5.40	...	...
							[0.000]	[0.000]	...	...
						Skewness	0.294	-0.279	...	...
						Kurtosis	3.519	1.918	...	...

Notes: This table presents the results of the Tobit and Probit random effects-regressions taking as dependent variables the dividend ratio (columns 1–2) and dividend dummy (columns 3-4), respectively. For purposes of comparison, columns 1 and 3 reports the results of the original model on dividend dummy and dividend ratio respectively. Columns 2 and 4 present the results of the IV-2SLS regression using as main instruments for firm ownership: *firm volatility, assets tangibility and the lagged family ownership* plus the other exogenous variables included in the instrumented equation (vector Z). The reported coefficients are the marginal effects evaluated at mean values. Robust standard errors are in parentheses, p values are in brackets; *** p<0.01, ** p<0.05, * p<0.1; Pseudo-R2 statistic is reported if it lies between 0 and 1, otherwise the statistic is not reported.

Appendix. Description of Variables

This table displays the description and methodology of all variables used in this study.

Dividend payout policy variables	
Dividend payout	Amount of dividend payout in colombian pesos for each firm i and for each year t.
Dividend dummy	Dummy variable equal to 1 when there is a dividend payout, and 0 otherwise.
Dividend ratio	Amount of dividend payout divided by total assets
Family Involvement Variables	
Family CEO	Dummy variable equal to 1 if the CEO has the founding family last name, and 0 otherwise.
Founder CEO	Dummy variable equal to 1 if the CEO is the founder of the firm, and 0 otherwise.
Heir CEO	Dummy variable equal to 1 if the CEO is a founder' heir, and 0 otherwise.
Family Ownership	Dummy variable equal to 1 if the firm has the founding family as the largest shareholder, and 0 otherwise.
Indirect (Pyramidal) Family Control	Dummy variable equal to 1 if the family has the control of largest blockholder´s firm through direct or indirect ownership, and 0 otherwise.
Family Board [%]	Percentage of directors who have the same CEO last name or the same founding family last name.
Majority Family Board	Dummy variable equal to 1 if the participation of family board members is more than 50%, and 0 otherwise.
Non-Majority Family Board	Dummy variable equal to 1 if the participation of family board members is less than 50%, and 0 otherwise.
Financial and Firm Characteristics Variables	
Return on Assets - ROA	Return on assets after interest, tax, depreciation and amortization (or net income) divided by total assets.
Total Leverage	Total leverage as the ratio of total liabilities divided by total assets.
Growth opportunities	Firm's growth opportunities as the percentage growth in real sales.
Firm age	Firm age as the number of years since the firm's inception.
Firm size	Firm size as the natural log of the firm's total sales.
Assets tangibility	As the sum of inventories and fixed tangible assets divided by total assets.
Firm volatility	Firm risk (Volatility) as the standard deviation of the operating margin for the previous three years.
Public/private status dummy	Dummy variable equal to 1 if the firm is listed, and o otherwise.
Group diversification	Is defined as the number of sub-sectors represented in the group with which the firm is affiliated. The sample encompasses 61 sub-sectors as classified by the SSOC.
Group affiliation dummy	Dummy variable equal to 1 if the firm is affiliated with a business group, and 0 otherwise.

Appendix 1 cont.

Corporate Governance Variables	
Board size	Total number of directors. Includes principals and substitutes.
Outside director [%]	Percentage of board members who have not been managers of the firm, who were never managers in any related firm, who do not sit on any of the boards of related firms and do not have family ties with founding family or the CEO as far as the scope of the sample allows us to tell besides than being on the board of directors for all interval of time.
Board Turnover [%]	Percentage of directors of year t that are no longer on the board at year t+1.
CEO board dummy	Dummy variable equal to 1 if a firm's CEO sits on its board, and 0 otherwise.
Auditing firm	Dummy variable equal to 1 if the audit of financial statements is done by a firm, and 0 otherwise.
Ownership, Control and Contestability Variables	
Equity 1-4	The fraction of cash flow rights held by the first, second, third, and fourth largest blockholder, respectively
Contestability Index	As the ownership of the second and third blockholder relative to the largest equity block. CI = (equity 2 + equity 3)/equity 1.

………………………………..