

Title: Corporate governance, ownership and firm value: Drivers of ownership as a good corporate governance mechanism.

ABSTRACT

This study analyses the role of ownership as a good corporate governance mechanism. We study cross-national differences between companies with different level of investor protection. In addition, we account for the type of owner (young family vs. non-young family businesses) and the owner's relationship with a second significant shareholder (monitoring vs. collusion). When the main owner has effective control over the firm (i.e., absolute control or less than absolute control but without the control of a second significant shareholder), the relation between ownership concentration and firm value is U-shaped. Our findings also suggest that the conflicts between majority and minority shareholders are weaker for companies with higher investor protection and young family-owned businesses.

Key words: Corporate Governance, Young Family-Owned Business, Main Owner, Expropriation, Firm Value.

1. Introduction

Practices of corporate governance have been studied as a solution for agency conflicts that appear when a separation exists between the owner and manager roles. According to agency theory, ownership concentration acts as an internal mechanism to alleviate owner–manager conflict. However, this theory was developed in a framework based on companies with diffuse ownership, in which firms are characterized by a large number of investors with a low level of participation in the business. La Porta, López de Silanes, and Shleifer’s (1999) seminal work changed the widespread idea of a diffuse ownership structure in countries with high levels of investor protection. In addition, Barontini and Caprio (2006) conclude that one-half of the companies within Continental Europe have a shareholder who holds more than 37% of their firm’s ultimate voting rights. In this highly concentrated environment, the conflict between owners and managers becomes less important. However, conflict arises between large and minority shareholders (Renders & Gaeremynck, 2012). In this type of environment, the study of the effect on firm value of the largest shareholder and his or her relation with other shareholders—principal–principal conflicts—has a greater importance (Huyghebaert & Wang, 2012; Pindado, Requejo & de la Torre, 2012). For this reason, the study of ownership as a corporate governance mechanism should be analysed given the characteristics of this type of environment.

Recent works show that a majority firms are family controlled in Western Europe (Faccio & Lang, 2002), Continental Europe (Barontini & Caprio, 2006), and around the world (Morck, Wolfenzon, & Yeung, 2005). The predominance of the family firm model around the world has motivated a large body of research; however, inconsistent results have left many questions unanswered. In fact, Litz, Pearson, and Litchfield (2012) survey and find that 48% of family business scholars have either no or limited understanding of the topic of

ownership and governance. Thus, we add to this stream of research to help clarify the effects of ownership on firm value.

Specifically, this study measures the effect of the main shareholder on firm value for different levels of ownership and analyses the negative effect of ownership on firm value for different levels of investor protection. We show that, as noted in recent literature, some types of owners have different behaviour toward the organization (Song, Wang & Cavusgil, 2015), which leads to different impacts on shareholder value (Du & Boateng, 2015). In particular, we consider the case of young family-owned businesses (YFBs) and the main owner's relationship with other shareholders. We define YFBs as companies where the largest shareholder is a family firm that is younger than 30 years old. Our theory is that the amenity potential and involvement in the company by majority shareholders in YFBs discourage their motivation to extract private benefits. Thus, YFBs are a good corporate governance mechanism that favours firm value.

We investigate whether being a YFB mitigates the conflict between majority and minority shareholders. To test this hypothesis we use a sample of 16 European countries for the period 2000–2009. We first measure the effect of the main shareholder's ownership on firm value. This effect is negative for lower levels of ownership and positive for higher levels. In addition, we analyse cross-national differences and find that the negative effect due to the expropriation of minority shareholders is weaker when the company belongs to a country with higher investor protection. Then, we show how this effect is driven by the type of owner and the relationship between different significant shareholders. Finally, we find that this negative effect occurs and is stronger when the main owner is a nonfamily-owned company or an old family-owned company, in which the significant shareholders are motivated to collude rather than to monitor.

This paper makes two main theoretical contributions. First, we extend the agency theory by identifying three factors that influence the role of ownership concentration as a good or bad corporate governance mechanism. In particular, we first study a governance environment with high ownership concentration, in which principal–principal conflicts are high, and find different relations between ownership concentration and firm value for different scenarios. Thus, we contribute by offering a different perspective of agency theory based on the framework that we study. We find the typical inverted U shape in the presence of a main owner who does not have absolute control of the company and is accompanied by a second significant shareholder, that is, when the main owner can be controlled by or who can collude with other shareholders. This finding is in line with prior research, including Anderson and Reeb (2003), who find an inverted U-shaped relation between family ownership and firm value when the companies have a diffusely held ownership structure. However, we find that if the main owner has effective control over the firm (that is, if the ownership of the largest shareholder is large enough to command full control of the company or if the largest shareholder does not hold absolute control but is not controlled by a second large owner), the relation between ownership concentration and firm value is U-shaped. Thus, we provide evidence that shows that generalizations of the effect of ownership on firm value from previous works based on diffusely held samples cannot be made in an environment with high ownership concentration.

The second factor that contributes to explaining the role of ownership as a corporate governance mechanism is the identity of the main owner. In particular, we examine the effect of YFBs. We do not attempt to find the direct effect of family ownership on firm value (such as Anderson & Reeb, 2003; Andres, 2008; Kowalewski, Talavera, & Stetsyuk, 2010; Sciascia & Mazzola, 2008) but rather to determine how this specific type of owner influences the ownership effect. This goal allows us to avoid mixing different effects, such as the impact of

family management on firm value (Morck et al., 2005), and focus solely on how young family ownership influences the relation between the family and minority shareholders and, as a result, firm performance. Note that other works, such as Anderson, Duru, and Reeb (2009) and García-Ramos and García-Olalla (2011), use a family definition that includes both ownership and management in its concept, which makes its effect on firm value ambiguous because family ownership and family management have different effects on firm value (Block, Jaskiewicz, & Miller, 2011). By focusing only on family ownership, we show how the motivation for extracting private benefits disappears when the firm is a YFB. The third factor that also influences the effectiveness of ownership as a good corporate governance mechanism, and therefore, complements the agency theory, is the relationship of the second shareholder with the main owner. Depending on the stakes of the main owner, the second shareholder may be motivated to collude with or monitor the main shareholder. Thus, we take into account the trade-off that shareholders face between colluding and monitoring. The presence of a second shareholder alone is not enough to study the impact on firm value; an investigation of how they relate to each other is one contribution of this study.

The second main theoretical contribution is related to the family business literature. We contribute to this stream of research by explaining the positive and/or negative effects of young family firms on firm value from an agency perspective, since we analyse the pros and cons of the young family ownership as a corporate governance mechanism. In fact, we differentiate between young and old family-owned businesses. Thus, we contribute by considering the firm's life cycle as an explanation for previous works that find a non-significant relation between family ownership and performance (Sacristán-Navarro, Gómez-Ansón, & Cabeza-García, 2011a, 2011b; Sciascia & Mazzola, 2008; Tsao, Chen, Lin, & Hyde, 2009). These results may be due to the aggregation of young and old family-owned companies. The distinction between young and old family-owned companies allows us to

consider the effect of family firm maturity on firm performance. Young and old family-owned businesses have opposite effects on firm value, which makes the relation nonsignificant. When this result occurs, the moderating effects can help determine whether the nonsignificant relation holds or whether it may be due to other reasons (Tsao et al., 2009). We use the age of the family firm to build our YFB variable. This different approach does not rely on the presence of the founder (Achleitner, Kaserer, & Kauf, 2012; Miller, Le Breton-Miller, & Lester, 2011), which may lead to the consideration of other factors that influence firm value (e.g., the entrepreneurial role of the founder to lead the business). These factors do not explain our main purpose, which is the study of the expropriation effect and its impact on firm value. Instead, the use of the firm's age is used as an indirect approximation to the conflicts inside the family, which is a factor that influences the level of expropriation. With our approach, we are able to consider the conflicts inside the family that appear along the firm's life cycle.

Finally, we also make a methodological contribution with the use of panel data methodology which allows us to overcome two common problems in the ownership structure field. First, the study of the relation between ownership structure and firm value suffers from large problems of endogeneity that can be solved with the use of instrumental variables. Second, some unobservable factors or individual effects are correlated with the independent variables and affect the dependent variable. For instance, family culture, which affects firm value, may influence some firm decisions such as the level of debt and ownership, the length of stay of family members in the company, and other firm characteristics. We use the system generalized method of moments, which allows us to mitigate these two problems and find consistent results that cannot be reached by other methodologies such as ordinary least squares.

The remainder of the paper is structured as follows. We first describe the previous literature on corporate governance, ownership concentration, and firm value. We also analyse the main factors that shape the role of ownership as a good corporate governance mechanism and pose our main hypotheses. We then describe the data, variables, and the models and method used to test empirically the hypotheses. Following this section, we explain and discuss the results. The final section concludes the paper.

2. Literature and hypotheses

2.1. Corporate governance, firm value and ownership

Current large corporations are characterized by the separation of ownership and management (Berle & Means, 1932), which leads to conflicts between two main groups of stakeholders. When the manager must perform some services on the owner's behalf, the lack of convergence interests between both leads to the owner-manager conflict as highlighted by Jensen and Meckling (1976). We say that there is no convergence of interest when managers pursue objectives different from value maximization, such as status, growth, permanence in the company, greater salaries, perquisites, etc. The shareholder must control this type of behaviour that is detrimental to the shareholders' wealth, and therefore, to the firm's wealth. As in the work by Shleifer and Vishny (1997), we present corporate governance from a straightforward agency perspective. In this seminal paper, ownership concentration is presented as one of the possible internal mechanisms of corporate governance to solve the agency conflict between owners and managers because it solves the "free-rider problem" (Shleifer & Vishny, 1986) since large investors are better able to control manager's actions than small owners and recover their money (Shleifer & Vishny, 1997). However, ownership concentration can lead to agency problems between dominant and minority shareholders as

highlighted by Shleifer and Vishny (1986), when large shareholders reach nearly full control of the company and pursue private benefits that are not shared by small investors.

Positive effects of ownership concentration on firm value, attributed to the monitoring role played by large investors, contrast with the negative effect due to the expropriation of minority shareholders by shareholders with large stakes in the business. We focus on ownership as an internal mechanism of corporate governance and analyse how it affects the problem between majority and minority shareholders, which is the most important agency relationship in cases in which ownership is highly concentrated.

Thus, higher corporate governance, in the form of a particular ownership structure, leads to higher performance, which also positively affects minority shareholders' interests. Following previous research (e.g., Anderson & Reeb, 2003; Barontini & Caprio, 2006; Maury, 2006; Jara-Bertín, López-Iturriaga, & López-de-Foronda, 2008), we study the relation between firm value and a firm's ownership structure and analyse whether the firm's ownership structure is a good corporate governance mechanism. In the next subsection we consider three factors that can make ownership structure a good corporate governance mechanism: the framework, type of owner, and relationship among owners.

2.2. Drivers of ownership as a good corporate governance mechanism

2.2.1. Framework

Significant differences exist between the ownership structure of European companies, where ownership is highly concentrated, and U.S. companies, where ownership is dispersed. Most prior studies that analyse ownership as a mechanism to solve the agency problem are based on a U.S. sample. In this framework, where ownership is more equally distributed, ownership and firm value are usually linked by the traditional inverse-U shape. In this environment, ownership concentration mitigates owner–manager conflicts because it solves the free-rider problem (Shleifer & Vishny, 1986). However, it exacerbates the conflict between dominant

and minority shareholders because dominant shareholders have incentives to expropriate benefits from minority shareholders (Shleifer & Vishny, 1997). As a result, firm value increases with ownership concentration at low levels and decreases with ownership concentration at high levels because the ability of the main owner to expropriate increases as his or her control increases. This makes sense in a framework where ownership is not too high, and thus it allows shareholders to influence a company's decisions on their behalf but without involving a great loss because their participation in the firm is not very high. That is, the benefits of expropriation are larger than the costs.

However, if this dispersed ownership framework changes to a highly concentrated environment, the logic also changes. In this environment, the main owner already has enough stakes in the business to influence the company's decisions (i.e., the free-rider problem does not exist), and therefore he or she is interested in the company, acts as the manager or serves on the board, and has ability to expropriate. Thus, the main shareholder is also an insider who may work to extract private benefits, and his or her motivation to do so depends on the size of his or her stake in the business. In a highly concentrated framework, lower levels of ownership are similar to the upper levels of ownership in a dispersed framework where the relation between ownership and firm value is negative. But when the ownership of the main shareholder is too high, his or her motivation to expropriate disappears because the loss of firm value due to that expropriation is larger than the private benefits that he or she can gain.

In the European framework, characterized by high levels of concentration, where the main owner has effective control over the company because he or she has absolute control or is not controlled by a second significant shareholder, we expect a negative effect of the main shareholder on firm value for lower levels of ownership and a positive effect for higher levels of ownership. Therefore, we propose the following hypothesis.

Hypothesis 1a. The relation between ownership concentration in the hands of the main shareholder and firm value is negative for the lower levels of ownership concentration and positive for higher levels of concentration among European firms.

In addition, in the European framework, we can find cross-national differences in the level of expropriation of minority shareholders. Not all countries have the same level of investor protection (La Porta et al., 1999). When minority shareholders are well protected, the chance of being expropriated is lower, and therefore minority shareholders do not need to accumulate shares to increase their control of the company. Minority shareholders in countries where shareholders are less protected will be more prone to accumulate ownership to increase control on their own behalf but not on the company's behalf.

Given that in the European framework the level of protection of minority shareholders differs from one country to another, it provides a good scenario to test how minority investor protection affects firm value relative to the negative effect of the ownership concentration of the main shareholder. The idea is that the expropriation to minority shareholders decreases as the protection of minority investors increases. Consequently, we pose the following hypothesis.

Hypothesis 1b. The negative effect of ownership concentration in the hands of the main shareholder on firm value is weaker for countries with a higher level of investor protection.

2.2.2. Type of owner: Young family business

Some works explain the relation between family ownership and firm value (Bonilla, Sepulveda, & Carvajal, 2010; Jara-Bertín et al., 2008). To delve further into this line of inquiry, we focus on the moderating effect of YFBs on the relation between ownership concentration and firm value. We study whether ownership in family hands fosters or inhibits corporate governance. We expect the negative effect of the main shareholder on firm value,

due to the expropriation of minority shareholders, to disappear when a YFB is present for several reasons.

First, family shareholders are usually emotionally connected to the firm and consider the business as a family legacy to be continued, which is a goal that goes beyond the typical profit maximization objective of other type of owners (Chang, Kao, & Kuo, 2014). One signal of this emotional connection is the amount of personal wealth that families invest in the business, which is positively related to future accounting profitability (Elsilä, Kallunki, Nilsson, & Sahlström, 2013). Family members have a longer horizon compared to other shareholders (e.g., institutional investors) because family shares represent “engaged ownership” (in terms of Tilba & McNulty, 2013). Stewardship theory considers this long-term perspective, known as *continuity*, as one of its main characteristics. Some characteristics of stewardship (i.e., continuity, community, and connection) are more common among family-owned than among nonfamily owned businesses (Miller, Le-Breton-Miller, & Scholnick, 2008). Thus, because family firms are characterized by their stewardship (i.e., they are less self-serving and think more about the firm’s survival; Segaro, Larimo, & Jones, 2014), they have fewer incentives to expropriate than other large shareholders.

Second, amenity potential, the term suggested by Demsetz and Lehn (1985), is another explanation for why family firms may be less interested in expropriating. Amenity potential of a firm’s output refers to the non-pecuniary consequences of being able to influence the type of goods produced by the firm. Villalonga and Amit (2010) consider amenity potential to be one of the determinants of family ownership: the greater the amenity potential, the greater the ownership concentration. One specific form of amenity potential may be the reputational benefits associated with a traditional family name (Villalonga & Amit, 2010) which is beneficial not only for family owners, but also for their non-family counterparts.

Third, some works differentiate between family firms of first and later generations (Fiss & Zajac, 2004). Some characteristics of family businesses appear more intensively in old family-owned businesses. For instance, some of the determinants of family control that hurt firm performance are the existence of dual-class stock and pyramidal ownership structures (Levy, 2009; Villalonga & Amit, 2010), and both appear more commonly in older family-owned firms where the incentives and the opportunity to expropriate affect negatively firm value (Hoy & Robin, 2010). By allowing cash flow rights and voting rights to diverge, control pyramids permit the same divergence of interest problems as dispersed ownership, even if the firms are concentrated (Morck et al., 2005).

Fourth, some special ties, not only among family members (James, Jennings, & Breitkreuz, 2012) but also with the company, may induce majority owners to expropriate minority shareholders. Usually firms that count on their founder's participation are young firms that have had not still faced some important decisions. For example, the succession decision can create new conflicts in the company. This decision presents an important challenge to companies. Some guides to success are available at succession, such as the horse race planning succession or the evaluation of company's health to determine which candidate to select (Citrin & Ogden, 2010). Advisors also play an important role in successions to help guide a firm toward the best candidate and assist in the succession process (Strike, 2012). However, prior works on consequences of founder succession on firm value (Bennedsen, Nielsen, Perez-Gonzales, & Wolfenzon, 2007; Hillier & McColgan, 2009; Pérez-Gonzales, 2006) find that, despite the availability of guidelines and external advice, family successions are negatively related with firm performance. Following succession decisions, conflicts between family members are more likely to occur. This topic is one of the main streams of research in family succession (Björnberg & Nicholson, 2012). Blumentritt, Mathews, and Marchisio (2013) propose some scenarios that create conflicts among family members such

as the inability or disinterest of a child to replace the founder or a fight among several children to reach the top position in the company. Family members may be reluctant to sell the firm to a non-related outside party and thus give up private benefits (Gonenc, Hermes, & Sinderen, 2013), and members who fight for positions of power in the business after the departure of the founder are more likely to pursue objectives that differ from value maximization and that are closer to their own goals. In other words, the fight over the resources of large families (Bertrand, Johnson, Samphantharak, & Schoar, 2008) increases the motivation for extracting private benefits, a problem that is more characteristic of older family-owned firms.

YFBs are a particular type of family firm with unique characteristics that promote good corporate governance and thus enhance firm value. These companies lack some of the negative characteristics of old family-owned firms that create agency conflicts, which, in turn, have a negative impact on firm value. Consequently, we investigate whether the differences in performance observed in the literature for family businesses compared to nonfamily businesses can be explained by YFBs because old family-owned businesses suffer from other problems that weaken the performance of the company. As a result, we expect the negative impact of the main owner on firm value, due to the expropriation of minority shareholders, to disappear and thus posit the following hypothesis.

Hypothesis 2. The negative relation between ownership concentration in the hands of the main shareholder and firm value does not stand when the firm is a YFB.

2.2.3. Relation among significant shareholders

Another aspect to consider when measuring the effect of ownership concentration on firm value is the relationship of the main shareholder with other shareholders. Agency theory (Jensen & Meckling, 1976) offers a solution to the owner–manager conflict, whereby ownership concentration helps to mitigate this problem given the monitoring role that

majority owners exert on the management team. Later theoretical research shows that the size and distribution of ownership also matters. For instance, Burkart, Gromb, and Panunzi (1997) explain that ownership in the hands of the main owner may be beneficial given the owner's monitoring function, but high levels of ownership can lead to opportunistic behaviour. Thus, if we simply measure ownership concentration as the sum of the stakes of different shareholders, our results will likely be quite messy. We explain our idea with an example in which we measure ownership concentration as the sum of the two main shareholders' stakes. If, for two different companies, A and B, the ownership concentration equals 75%, the effect on firm value would be equal. However, the distribution of these stakes can make the effect on firm value different. Let's say that, for Company A, 75% of ownership concentration is in the hands of Shareholder 1 and that no other significant shareholder exists. In contrast, for Company B, the distribution is 45% and 30% for Shareholder 1 and Shareholder 2, respectively. In the first case, the main owner's stake in the company is so large that he or she will not take actions to expropriate minority shareholders because doing so would be the same as expropriating him- or herself. Thus, the effect on firm value is positive due to the alignment of interest effect.

However, Company B has a significant second shareholder who can influence the actions of the first shareholder. Whether the effect of this ownership is positive or negative depends on the motivation of the second shareholder to monitor or to collude. This reasoning is in line with previous theoretical and empirical studies that take into account the interaction between the blocks of multiple shareholders and their impact on firm performance (Bennedsen & Wolfenzon, 2000; Jara-Bertín, López-Iturriaga, & López-de-Foronda, 2008). Maury and Pajuste (2005) show that majority owners are not necessarily motivated to control managers' actions but, instead, may be motivated to collude with other shareholders. When collusion occurs, several shareholders make an alliance and together expropriate minority

shareholders. Maury and Pajuste (2005) find that this motivation appears when the main owner does not reach a majority by him- or herself but reaches a majority with a second shareholder.

Therefore, our analysis takes two aspects into account: (a) whether a second shareholder plays a role in the firm, and, if so, (b) whether the motivation of the second shareholder is monitoring or colluding. To determine whether a second shareholder is present who able to influence the main owner's actions, we assume that this second shareholder should have a significant shareholding in the firm and the main owner does not have absolute control by him- or herself. To study whether the second shareholder's motivation is monitoring or colluding, we look at the quadratic relation between ownership and firm value: a positive effect implies monitoring incentives, and a negative effect implies collusion. When shareholders have an interest in the company, a trade-off exists between the motivation that they have to collude and the motivation that they have to monitor (Maury & Pajuste, 2005). Let's say that for Company C, Shareholder 1 (Shareholder 2) has a 25% (10%) stake and that for Company D, Shareholder 1 (Shareholder 2) has a 40% (20%) stake. In both cases, a second significant shareholder is present who is able to influence decisions made by the main owner; however, their motivations are different. Shareholders 1 and 2 in Company C do not achieve full control of the company. Thus, Shareholder 2 has no motivation to collude, and the monitoring effect dominates, thus enhancing firm value. In Company D, both shareholders have motivation to collude because they are able to achieve absolute control and share the costs of expropriation.

Hence, we expect that when a second significant shareholder is present and able to influence the main owner's decisions, the effect of the main shareholder on firm value is positive for lower levels of ownership due to the monitoring effect and negative for higher

levels of ownership due to the expropriation effect. Therefore, we propose the following hypothesis.

Hypothesis 3. When a second significant shareholder has influence on the main owner's decisions, the relation between ownership concentration in the hands of the main shareholder and firm value is positive for lower levels of ownership due to monitoring effect and negative for higher levels of ownership due to collusion.

3. Data, variables, models, and method

3.1. Data

To test our hypotheses we use several data sources. First, we use the Worldscope database to collect the financial and stock data. Second, ownership information is extracted from Amadeus, which is a database produced by Bureau van Dijk. Third, for the construction of some variables, macroeconomic information, such as the rate of interest of the long-term and short-term debt and the growth of capital good prices, are needed. We extract this information from the Organisation for Economic Co-operation and Development and EUROSTAT. Finally, we look at company websites to collect the year of foundation of each firm.

We use a sample of publicly traded companies from 16 European countries, similar to other samples used in previous studies of Western Europe (Barontini & Caprio, 2006; Faccio & Lang, 2002). We exclude from the sample financial companies (SIC codes 6000-6999) and regulated public utilities (SIC codes 4812, 4813, 4900-4999, 2830-2833) because government regulation potentially affects firm equity ownership structure.

The time period for our analysis is from 2000 to 2009. In addition, we consider only those companies with at least six consecutive years of available information because this information is needed for building the m_2 statistic for testing the absence of second order serial correlation in the first differences residuals to use the generalized method of moments.

As a result, we have an unbalanced panel of 1,064 companies (8,467 observations). The use of an unbalanced panel for a long time period is the best way to solve the attrition bias caused by the fact that some companies may be delisted (e.g., companies that file for bankruptcy) and, consequently, removed from the database.

3.2. Variables measurement

3.2.1. Dependent variable

The dependent variable is firm value, which is the market value of equity divided by the replacement value of total assets. The market value of equity is equal to market capitalization (number of recorded shareholders multiplied by the year-end price) divided by the replacement value of total assets. The replacement value of total assets is obtained as in Pindado et al. (2011).

3.2.2. Independent variables

The main explanatory variable is ownership concentration, which is the percentage of shares held by the largest shareholder of the company. This variable is interacted with several dummies to test our hypotheses. With respect to the investor protection dummy, IPD_{it} , we use the World Bank's index of investor protection obtained from the "Doing Business" report. This index measures the level of investor protection in a country; thus, the higher the index is, the lower the motivation to expropriate is. The index is converted into a dummy variable, which equals 1 if the company operates in countries with an investor protection index above the sample median, and zero otherwise. In addition, we use the classification by La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) to create four dummy variables: $COML_{i,t}$, $FREN_{i,t}$, $GERM_{i,t}$, and $SCAN_{i,t}$ equal 1 if the company is from a common law, French, German, and Scandinavian origin country, respectively, and zero otherwise.

No consensus exists for the definition of the family firm. Although the involvement approach is not the only important component in understanding the degree of "familiness"

within firms (Zellweger et al., 2010), we nonetheless base our definition solely on the ownership structure because the target of our research is the moderating role of YFBs in the ownership–firm value relationship. We build our definition of a family firm using ownership data from AMADEUS according to the following steps. First, following prior studies we consider as family shareholdings the shares of a family and the sum of the shares of different families or group of individuals (Cronqvist & Nilsson, 2003; Franks et al., 2012). Second, we determine whether these shareholdings are larger than 15%. Finally, we determine whether the family is the maximum shareholder of the company or whether another type of owner has a larger stake. Thus, we define a company as a family business when a family (or families or group of individuals), holding more than 15% of voting rights, is the largest shareholder of the company.

We also distinguish between young and old companies. The age of the company can be a proxy of the involvement of the founder in the firm and, if the firm is a family business, can be a proxy of less potential family conflicts. We use an approach similar to the approach of Fiss and Zajac (2004) who categorize a firm that is less than 30 years old as controlled by the founder or founder’s first generation, between 30 and 60 years old as controlled by the second generation, and more than 60 years as controlled by the third or later generation. Accordingly, we define young firms as firms that are less than or equal to 30 years old and old firms as more than 30 years old. Thus, YFBD (FBD) is a dummy variable that equals 1 if the company is a YFB (family business), and zero otherwise.

We also interact with ownership concentration the first and second significant shareholder dummy (FSSS), which equals 1 if the main owner has less than 50% of shares and another second shareholder has more than 10% of shares. The 10% threshold is a breakpoint in Western Europe to control for firms that do not have any controlling shareholder (Maury, 2006; Maury & Pajuste, 2005).

To complete the models, we enter the following control variables, which we select based on prior studies of firm value: firm size; debt, firm risk; cash flow; the previous year's firm value; and time, country and industry dummies. Firm size is the log of the replacement value of total assets; debt is the market value of long-term debt divided by the market value of long-term debt, book value of short-term debt, and market value of equity; firm risk is the standard deviation of monthly stock returns; and cash flow is the net profit plus book depreciation divided by the replacement value of total assets.

3.3. Models and methodology

We develop several models to explore the relation between ownership concentration and firm value and validate our hypotheses. To test Hypothesis 1a, we develop the following model:

$$\begin{aligned} Firm\ value_{it} = & \alpha_0 + \alpha_1 Ownership\ concentration_{it} + \alpha_2 Ownership\ concentration_{it}^2 \\ & + \varphi Control\ variables_{it} + \epsilon_{it}, \end{aligned} \quad (1)$$

where ϵ_{it} is the error term.

To test Hypothesis 1b we interact an investor protection index, $IPD_{i,t}$ with $Ownership\ concentration_{i,t}$ and its square in the following model:

$$\begin{aligned} Firm\ value_{it} = & \alpha_0 + (\alpha_1 + \gamma_1 IPD_{it}) Ownership\ concentration_{i,t} \\ & + (\alpha_2 + \gamma_2 IPD_{it}) Ownership\ concentration_{it}^2 + \varphi X_{it} + \epsilon_{it} \end{aligned} \quad (2)$$

In addition, to test Hypothesis 1b, we use another indicator of the level of investor protection based on the legal origin system. We interact these dummy variables with the ownership variable and its square in the following model:

$$\begin{aligned} Firm\ value_{it} = & \alpha_0 + (\alpha_1 + \gamma_1 FREN_{it} + \gamma_2 GERM_{it} + \gamma_3 SCAN_{it}) Ownership\ concentration_{it} \\ & + (\alpha_2 + \gamma_4 FREN_{it} + \gamma_5 GERM_{it} + \gamma_6 SCAN_{it}) Ownership\ concentration_{it}^2 \\ & + \varphi X_{it} + \epsilon_{it} \end{aligned} \quad (3)$$

To test Hypotheses 2 and 3, we estimate Model 2 including in the interaction terms YFBD and FSSS, respectively. In addition, to corroborate the lack of correlation between family ownership and firm value when we aggregate both young and old family-owned businesses, we substitute the YFB dummy variable for a family business variable, and use the interaction term of ownership concentration and FBD.

We estimate the models using panel data methodology and the generalized method of moments (GMM), specifically the system GMM estimator. The use of the system GMM estimator provides two main advantages. First, it controls for the individual effect or unobserved heterogeneity, such as the family culture, which causes some family owners to be more or less willing to lose control and, as a result, affects their level of ownership in the business. We control this heterogeneity in firms to avoid biased results by modelling it as individual effects, η_i . In this vein, the error term in our models, ϵ_{it} , is split into three components: the individual effects, η_i ; the time dummies, d_t , to control for the effect of macroeconomic variables on firm value; and the random disturbance, v_i .

Second, our estimation method helps to mitigate the endogeneity problem. Endogeneity means that the error term is correlated with any of the explanatory variables. This correlation violates one of the main assumptions of ordinary least squares methodology. To solve this problem we use a method of instrumental variables: the GMM, which embeds the use of instrumental variables. Specifically, we use the system GMM to overcome the weak instruments problem that suffers the difference GMM. Thus, in all our models we estimate two equations: equations in differences, where the instruments are the right-hand-side variables in levels, and the equations in levels, where the instruments are the right-hand-side variables in differences. In both equations, we adequately treat the individual effects. In the equations in differences, we remove the individual effects due to the first differences transformation of the variables. Although the individual effects are still in the error in the

equations in levels, we use the right-hand-side variables in difference as instruments, which are orthogonal to the composite error.

Finally, once we estimate the model, we conduct several specification tests. First, we run the Hansen test, which tests the lack of correlation between the instruments and the random disturbance. Second, we run the m_2 test, derived by Arellano and Bond (1991), which tests the lack of second order serial correlation of the first differenced residuals. Finally, we run four Wald tests to check for the joint significance of reported coefficients, temporal variables, country variables, and industry variables.

4. Results

4.1. Summary statistics

Table 1 provides the summary statistics and the correlation matrix of the variables used to test the hypotheses. On average, companies in the 16 European countries included in our sample have an ownership concentration of 38%, which is high given that the sample includes listed companies. Our explanatory variables are not highly correlated, which means our model does not suffer from multicollinearity problems.

Table 2 presents the distribution of the sample and medians of our ownership concentration variable by country. The median of ownership concentration is the minimum percentage of ownership in the hands of the largest shareholder by one-half of the companies in each country. We find that even in those European countries, such as United Kingdom (15%) and Ireland (16%), where ownership is presumably dispersed, the level of concentration is still important. This finding reveals that Europe is a highly concentrated environment, where main shareholders have high levels of interest in their companies. On average, one-half of the companies of our European sample have a significant shareholder with more than 38% of voting rights (this result is the average of means for the 16 countries).

Table 1
Descriptive Statistics and correlations ($N=8,467$)

| | Mean | s.d. | 1 | 2 | 3 | 4 | 5 | 6 |
|---------------------------|------|------|--------|--------|--------|-------|-------|------|
| 1 Firm value | 0.73 | 0.57 | 1.00 | | | | | |
| 2 Ownership concentration | 0.38 | 0.23 | -0.08* | 1.00 | | | | |
| 3 Debt | 0.20 | 0.16 | -0.52* | 0.00 | 1.00 | | | |
| 4 Size | 6.09 | 1.92 | 0.01 | -0.03* | 0.17* | 1.00 | | |
| 5 Risk | 3.46 | 6.57 | 0.02* | 0.09* | 0.00 | 0.17* | 1.00 | |
| 6 Cash flow | 0.06 | 0.08 | 0.36* | -0.16* | -0.16* | 0.17* | 0.05* | 1.00 |

* $p < 0.01$.

Table 2
Median of ownership concentration by country

| Country | Med (%) | Country | Med (%) |
|---------|---------|----------------|---------|
| Austria | 50 | Italy | 54 |
| Belgium | 50 | Netherlands | 23 |
| Denmark | 30 | Norway | 32 |
| Finland | 32 | Portugal | 42 |
| France | 50 | Spain | 28 |
| Germany | 52 | Sweden | 30 |
| Greece | 45 | Switzerland | 29 |
| Ireland | 16 | United Kingdom | 15 |

4.2. Regression results

Table 3 presents the results from the estimation of the Models 1 through 3. Column 1 refers to Model 1, which tests Hypothesis 1a; and Column 2 and 3 refer to the Models 2 and 3, respectively, which test Hypothesis 1b. Table 4 presents the results from the estimation of Model 2, which test Hypothesis 2 (Columns 1 and 2) and Hypothesis 3 (Column 3).

Column 1 of Table 3 shows that ownership concentration in the hands of the main shareholder has a negative effect on firm value ($\alpha_1 = -0.296$, $p < 0.001$) for lower levels of ownership and a positive effect on firm value ($\alpha_2 = 0.233$, $p < 0.001$) for higher levels of ownership. This result supports Hypothesis 1a. In an environment with high concentration, the free-rider problem is not found. At lower levels of ownership, the main shareholder is motivated to extract private benefits because the costs are lower than the benefits. However, when the main owner has higher levels of ownership, the costs of this extraction are higher and assumed only by the main shareholder. At this point, the cost becomes too high, the

motivation to extract private benefits disappears, and the monitoring function overcomes the incentives to collude.

Table 3
Main shareholder ownership and firm value: Hypothesis 1a and 1b

| | (1) | (2) | (3) |
|---------------------------------------|----------------|------------------|----------------|
| Intercept | 0.472*(0.032) | 0.520*(0.030) | 0.499*(0.023) |
| Firm value (n-1) | 0.532*(0.008) | 0.537*(0.007) | 0.547*(0.005) |
| Ownership concentration | -0.296*(0.058) | -0.296*(0.071) | -0.757*(0.080) |
| Ownership concentration × IPD | | -0.220 (0.109) | |
| Ownership concentration × FREN | | | 0.584*(0.109) |
| Ownership concentration × GERM | | | 0.736*(0.120) |
| Ownership concentration × SCAN | | | 0.239 (0.105) |
| Ownership concentration square | 0.233*(0.060) | 0.187****(0.068) | 1.133*(0.085) |
| Ownership concentration square × IPD | | 0.373*(0.114) | |
| Ownership concentration square × FREN | | | -0.992*(0.111) |
| Ownership concentration square × GERM | | | -1.216*(0.123) |
| Ownership concentration square × SCAN | | | -0.651*(0.111) |
| IPD | | 0.004 (0.023) | |
| FREN | | | -0.083*(0.024) |
| GERM | | | -0.092*(0.025) |
| SCAN | | | 0.094*(0.019) |
| Debt | -0.820*(0.031) | -0.823*(0.028) | -0.877*(0.020) |
| Size | -0.016*(0.005) | -0.021*(0.004) | -0.013*(0.002) |
| Risk | 0.005*(0.000) | 0.005*(0.000) | 0.004*(0.000) |
| Cash flow | 1.081*(0.046) | 1.080*(0.040) | 1.071*(0.032) |
| t_1 | | | -2.328*** |
| t_2 | | | -0.259 |
| t_3 | | | 1.987 |
| t_4 | | | -1.022 |
| t_5 | | | 6.405* |
| z_1 | 1220 (7) | 1230 (9) | 2137 (13) |
| z_2 | 288 (7) | 339 (7) | 637 (7) |
| z_3 | 6.39 (15) | 6.65 (15) | 5.84 (15) |
| z_4 | 3.68(6) | 4.13 (6) | 7.04 (6) |
| m_1 | -12.44 | -12.49 | -12.45 |
| m_2 | -2.71 | -2.66 | -2.61 |
| Hansen | 599.18 (310) | 653.95 (393) | 754.61 (559) |

t_1 is the t -statistic for the linear restriction test under the null hypothesis $H_0: \alpha_1 + \gamma_1=0$; t_2 is the t -statistic for the linear restriction test under the null hypothesis $H_0: \alpha_2 + \gamma_4=0$; t_3 is the t -statistic for the linear restriction test under the null hypothesis $H_0: \alpha_1 + \gamma_2=0$; t_4 is the t -statistic for the linear restriction test under the null hypothesis $H_0: \alpha_2 + \gamma_5=0$; t_5 is the t -statistic for the linear restriction test under the null hypothesis $H_0: \alpha_1 + \gamma_1 + \gamma_2=0$.

* $p < 0.001$, *** $p < 0.01$.

In column 2 of Table 3 we examine country differences in the expropriation effect based on the level of investor protection. Thus, we examine the inflection point where the motivation to expropriate disappears using an investor protection index as a moderator

variable in the ownership–firm value relation. We find a U-shaped relation between ownership and firm value for companies with both high ($\alpha_1 + \gamma_1 = -0.296, p < 0.001; \alpha_2 + \gamma_2 = 0.187 + 0.373 = 0.56, p < 0.01$) and low ($\alpha_1 = -0.296, p < 0.001; \alpha_2 = 0.187, p < 0.01$) investor protection. To study which of these companies is more likely to expropriate, we calculate the inflection point. Following Miguel, Pindado and de la Torre (2004), and Chen and Yu (2012); we run the first derivative of the firm value–ownership equation and sum the equation to zero. We find that the inflection point from which the motivation to expropriate disappears is smaller for companies with higher investor protection (26.42%) than for companies with lower investor protection (79.14%). Thus, the motivation to expropriate is lower when minority shareholders are more protected; that is, the negative effect of ownership on firm value is weaker when the company operates in a country with higher investor protection. In addition, in column 3 of Table 3 we examine country differences in the expropriation effect based on the legal origin system. In concordance with theory, we find that companies from common law countries are less prone to expropriate than other companies, with an inflection point of 33.40%, while Scandinavian countries have a higher inflection point of 78.52%. Companies from French origin countries expropriate for all levels of ownership (a negative relation for all levels of ownership), and we do not find relation between ownership and firm value for German origin countries. These results support Hypothesis 1b.

Hypothesis 2 establishes the lack of a negative effect of the main shareholder on firm value when the firm is a YFB. Column 1 of Table 4 shows the moderating effect of a YFB in the ownership–firm value relationship. That is, when the firm is not a YFB, the relation between ownership concentration and firm value is negative for lower levels of ownership ($\alpha_1 = -0.311, p < 0.001$) and positive for higher levels ($\alpha_2 = 0.224, p < 0.001$) of ownership. However, looking at the coefficients of the interaction term between YFBD with ownership

concentration and its square, respectively, we find that the first coefficient is statistically positive ($\gamma_1 = 0.443$, $p < 0.001$), and the second is nonsignificant ($\gamma_2 = -0.205$, $p > 0.001$). These results suggest that when the firm is a YFB, the negative effect because of the extraction of private benefits disappears ($\alpha_1 + \gamma_1 = -0.311 + 0.443 = 0.132$, statistically nonsignificant, see t_1 in column 1, and $\alpha_2 + \gamma_2 = 0.224 + 0 = 0.224$), supporting Hypothesis 2.

Table 4
Drivers of the effect of the main shareholder on firm value: Hypothesis 2 and 3

| | (1) | (2) | (3) |
|--------------------------------------|----------------|----------------|----------------|
| Intercept | 0.447*(0.026) | 0.486*(0.031) | 0.453*(0.023) |
| Firm value (n-1) | 0.533*(0.006) | 0.536*(0.008) | 0.538*(0.006) |
| Ownership concentration | -0.311*(0.057) | -0.334*(0.064) | -0.347*(0.053) |
| Ownership concentration* FBD | | 0.303 (0.122) | |
| Ownership concentration* YFBD | 0.443*(0.084) | | 0.493*(0.080) |
| Ownership concentration*FSSS | | | 1.335*(0.376) |
| Ownership concentration square | 0.224*(0.059) | 0.263*(0.066) | 0.254*(0.055) |
| Ownership concentration square *FBD | | -0.266 (0.115) | |
| Ownership concentration square *YFBD | -0.205 (0.085) | | -0.265*(0.079) |
| Ownership concentration square *FSSS | | | -1.984*(0.562) |
| FBD | | -0.086 (0.030) | |
| YFBD | -0.102*(0.020) | | -0.114*(0.018) |
| FSSS | | | -0.216*(0.056) |
| Debt | -0.863*(0.024) | -0.847*(0.028) | -0.865*(0.022) |
| Size | -0.011*(0.003) | -0.016*(0.004) | -0.009 (0.003) |
| Risk | 0.005*(0.000) | 0.005*(0.000) | 0.005*(0.000) |
| Cash flow | 1.102*(0.035) | 1.070*(0.042) | 1.084*(0.031) |
| t_1 | 2.059 | | 2.304 |
| t_2 | | | -0.186 |
| t_3 | | | 2.686 |
| t_4 | | | -3.120* |
| t_5 | | | 3.852* |
| z_1 | 1610 (9) | 1213 (9) | 1712 (11) |
| z_2 | 729 (7) | 340 (7) | 751 (7) |
| z_3 | 7.68 (15) | 8.03 (15) | 8.60 (15) |
| z_4 | 5.38 (6) | 4.12 (6) | 4.60 (6) |
| m_1 | -12.50 | -12.43 | -12.46 |
| m_2 | -2.59 | -2.70 | -2.61 |
| Hansen | 675.38 (394) | 640.48 (394) | 717.08 (479) |

t_1 is the t -statistic for the linear restriction test under the null hypothesis $H_0: \alpha_1 + \gamma_1=0$; t_2 is the t -statistic for the linear restriction test under the null hypothesis $H_0: \alpha_2 + \gamma_3=0$; t_3 is the t -statistic for the linear restriction test under the null hypothesis $H_0: \alpha_1 + \gamma_2=0$; t_4 is the t -statistic for the linear restriction test under the null hypothesis $H_0: \alpha_2 + \gamma_4=0$; t_5 is the t -statistic for the linear restriction test under the null hypothesis $H_0: \alpha_1 + \gamma_1 + \gamma_2=0$. Standard errors are in parentheses.

* $p < 0.001$.

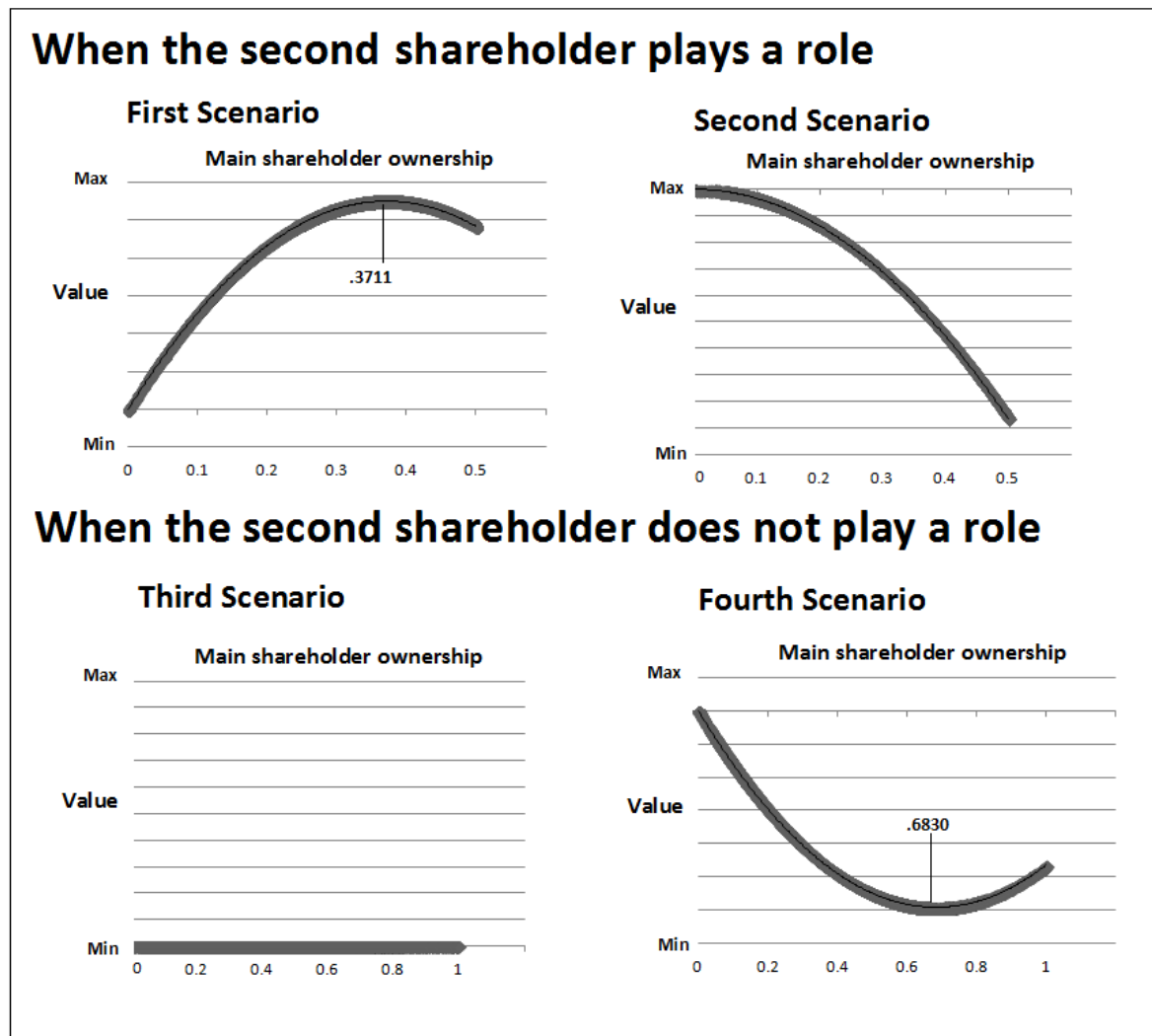
Furthermore, we test Hypothesis 2 for different thresholds (5%, 10%, 20%, and 25%) and find that, for thresholds equal to or larger than 10%, the negative effect due to the extraction of private benefits disappears, and the effect of family shares is positive for all

levels of ownership. However, when the shares of the family are not big enough (equal to or smaller than 5%), this positive effect disappears. This finding means that, to find a positive effect of young family ownership on firm value, the family must own enough shares of the company; otherwise, the company's behaviour changes given that no family control exists according to the European standard of ownership concentration. The unreported results (available on request) show that the sign and significance of the control variables do not change.

Column 2 of Table 4 provides the results of the same regression as in column 1 but uses the family business dummy as a moderating variable instead of the YFBD. The results show that the coefficients of the interaction between the family business dummy with ownership concentration ($\gamma_1 = 0.303, p > 0.001$) and its square ($\gamma_2 = -0.266, p > 0.001$) are nonsignificant. Thus, we corroborate the lack of relation between ownership concentration and firm value when we aggregate young and old family firms in the same group. This lack of significance may be the result of aggregating young and old family-owned businesses into the same group, where both groups have different effects on firm value, which is consistent with previous works that differentiate different family generations (Villalonga & Amit, 2006; Chen, Gray, & Nowland, 2013). Furthermore, we test Hypothesis 2 with the family business dummy for different thresholds (5%, 10%, 20%, and 25%); the unreported results (available on request) do not change.

Column 3 of Table 4 provides support for Hypothesis 3, but only when the main owner is a YFB. When the main owner is a YFB, a quadratic effect of ownership exists on firm value. That is, for lower levels of ownership, the effect of ownership on firm value is positive ($\alpha_1 + \gamma_1 + \gamma_2 = -0.347 + 0.493 + 1.335 = 1.481, p < 0.001$), and for higher levels of ownership, the effect of ownership on firm value is negative ($\alpha_2 + \gamma_3 + \gamma_4 = 0.254 - 0.265 - 1.984 = -1.995, p < 0.001$).

Figure 1
Relation between ownership and firm value



The first two scenarios occur when $FSSS_{it}$ equals 1, that is, when a second significant shareholder exists and the main owner does not have absolute control over the firm. The first scenario occurs when $YFBD_{i,t}$ equals 1, and the second scenario takes place when $YFBD_{i,t}$ equals zero. The third and fourth scenarios occur when $FSSS_{it}$ equals zero. In the third scenario $YFBD_{i,t}$ equals 1, and the fourth scenario happens when $YFBD_{i,t}$ equals zero. To find the inflection point in each scenario, we calculate the first derivative and equal to zero.

Figure 1 illustrates the relation between ownership and firm value when both the owner type and the owners' relationships are taken into account. In the first scenario, we find the typical inverted U-shaped relationship, which occurs when a second significant shareholder with influence is present. However, when the main owner is not a YFB (scenario 2), the relation is negative for all levels of ownership, which suggests that the likelihood of collusion and expropriation of minority shareholders is stronger for old family and nonfamily firms than for YFBs. This finding further explains again the role of YFB as an investor with

fewer propensities to expropriate minority shareholders (via collusion with other large shareholders) compared to other types of owners.

The third and fourth scenarios occur when a second shareholder able to control the main owner's actions is not present, which is the case in highly concentrated environments. In this situation, we find a U-shaped relation, which previous results show for Hypothesis 1a, when the firm is not a YFB. When the main shareholder is a YFB, no negative effect exists due to the expropriation of minority shareholders, thanks to the high involvement of this type of owner in the business. Given this lack of expropriation, a change in ownership level does not have any positive effect on firm value. Thus, this lack of relation is represented with a horizontal line in the abscissa, which shows that changes in ownership do not lead to a change in firm value.

A comparison of the third and fourth scenarios shows that the type of owner matters. In environments in which the main owner has effective control over the company, the expropriation of minority shareholders disappears in YFBs. Furthermore, a comparison of scenarios 1 and 2 shows that in a less concentrated framework, where a second significant shareholder is present, the expropriation of minority shareholders for lower levels of ownership does not appear for YFBs.

Concerning the control variables, in general their coefficients are statistically significant and have the same effect and similar size in all our models. Debt and size have a negative effect on firm value, while risk and cash flow have a positive effect. The literature provides no consensus for the effect of all these variables. Some works find a negative relation between firm size and firm value (Anderson & Reeb, 2003), others find a positive effect (Barontini & Caprio, 2006), and yet others find no relation (Villalonga & Amit, 2006). Regarding the risk variable, we find again opposite effects on firm value in the literature: positive in some cases (Miller, Le Breton-Miller, Lester, & Cannella, 2007) and negatives in

others (Anderson & Reeb, 2003). These results regarding our other two control variables, debt and cash flow, are consistent with previous research on the relation between ownership and firm value (Anderson & Reeb, 2003; Andres, 2008; Barontini & Caprio, 2006; Villalonga & Amit, 2006).

5. Conclusions

This article studies the effect of the largest shareholder on firm value and its negative effect on different levels of investor protection; and two variables that moderate this relationship: the type of owner and the owner's level of control and relationship with other shareholders. In particular, we consider the specific case of YFBs. We use a sample of 1,064 listed companies (8,467 observations) that comprises 16 European countries over the period from 2000 to 2009. We study the agency problem between minority and majority shareholders and explain what makes this problem greater or weaker. When we study the effect of ownership on performance, we also consider the moderating effect of YFBs and their relation with other ownership models.

Our findings provide several insights. First, we find a U-shaped relation between ownership concentration and firm value in our subsample comprised by companies characterized by the presence of a main owner who has an effective control over the firm. This result means that when the main owner's stake becomes large enough, his or her interest to extract private benefits disappears. However, for lower levels of ownership and when no second significant shareholder is present to monitor his or her behaviour, the main owner has motivation to extract private benefits because the costs are smaller. In addition, we find that the negative effect of ownership on firm value due to the expropriation of minority shareholders by the main owner is weaker for those countries with higher investor protection.

Second, we find that the negative effect of the main shareholder ownership on firm value is driven by those companies that are less involved in the business such as nonfamily firms and old family-owned firms. However, the expropriation of minority shareholders is weaker for YFBs. Furthermore, the stake of the main owner is detrimental to firm value whenever that participation allows him or her to collude with other owners and share the costs of the expropriation of minority shareholders.

Finally, this study provides some implications for research and practice. First, we propose new scenarios that researchers should consider when studying the role of ownership on firm value as a good corporate governance mechanism. Ownership concentration, as a partial solution to the manager–owner conflict, cannot be studied without taking into account important factors such as the ownership distribution (or framework), the propensity of some types of owners to expropriate, and the interaction between different shareholders.

Second, we provide important implications for practice. We give insight on the behaviour of family ownership according to the age and level of ownership, which can help minority shareholders assess appropriate relationships with family businesses. To select the most appropriate company in which to invest, investors should take into account the distribution of ownership in family businesses and the potential for family conflicts, which, in turn, can increase the probability of expropriation. In addition, appropriate relationships within family businesses encourage these firms to enter efficiency in the economy system and increases the social welfare.

While our research offers new perspectives to study the convenience of ownership as a good mechanism of corporate governance, some limitations should be noted. First, we study how the behaviour of YFBs shapes their propensity to expropriate minority shareholders; it would also be interesting to consider other types of owners, such as banks or financial companies, which can also play an important role in corporate governance. Second, we

consider the relationship between the main and the second owner of the firm. Future research should consider the interactions between more than two shareholders and even take into account not only the distribution of their shares but also whether the relationship is different based on the types of owners in the relationship. For instance the motivation to collude and thus expropriate minority shareholders is different if the collusion is between a YFB and a corporate or between a YFB and a financial company.

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