

**Family power in the boardroom: the counterbalance by other large
shareholders**

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Family power in the boardroom: is it counterbalanced by other large shareholders?

This study analyses how the existence, the number, their ownership, and the identity of other large shareholders coexisting with families, influence disproportionate family board power of listed firms. Using a database of the Spanish market over an 8-year period, the results show that the number of other large shareholders and their relative ownership over the family increase disproportionate family board power in the boardroom. Moreover, when the other large shareholders have more ownership than the family, disproportionate family board representation increases. The findings also highlight the significance of the other large shareholders' identity. Foreign investors reduce disproportionate family board power, while it does not appear to be affected by families and individuals or institutional investors. In sum, this research confirms the use of disproportionate board power by families as a control-enhancing mechanism to entrench family power on the board and protect their socioemotional wealth.

Keywords: Family firms, corporate governance, multiple large shareholders, shareholders' disproportionate board representation, control-enhancing mechanisms, socioemotional wealth.

Introduction

Family firms account for two-thirds of all business entities around the world, comprising 70-90% of global GDP (Family Firm Institute, 2019) and they are also responsible for 50-80% of all private sector employment (European Family Businesses, 2012). For instance, the 500 largest family-owned businesses generate US\$7.28 trillion in revenue and employ 24.1 million people (Family Business Index, 2021). Family companies come in all sizes, and a significant percentage of large companies are public (Anderson and Reeb, 2003; Family Business Index, 2021). In large family firms, family members, involved as major owners or managers (Miller et al., 2007), frequently coexist with other investors (families, financial firms, non-financial firms, foreign firms, etc.). The ownership structure of family firms becomes more complex as time passes and multiple large owners are incorporated. The natural evolution of family ownership (Gersick et al., 1997) brings new owners to the companies. For instance, in East Asia and Europe, authors such as Claessens et al. (2000) and Faccio and Lang (2002) document, respectively, that 32.2% of East Asian listed firms and 45.26% of Western European public firms have multiple large shareholders. Similarly, for European listed family companies, López de Foronda et al. (2007) report that multiple blockholders are present.

The socioemotional wealth (SEW) theory explains the behaviour of family firms, of families as large shareholders (Berrone et al., 2012; Gómez-Mejía et al., 2007; Miller and Le Breton-Miller, 2014). The socioemotional wealth perspective suggests that family firms have non-economic objectives (Gómez-Mejía et al., 2011; Berrone et al., 2012). Families adopt decisions to protect their socioemotional wealth (Berrone et al., 2012). Socioemotional wealth preservation influences the desire of families to exercise authority and influence, maintain clan membership within the firm, appoint trusted family members to important posts, retain a strong family identity, continue the family dynasty, and so on (Gómez-Mejía et al., 2007). In other words, families look for continuity, to preserve the family dynasty across generations and make

decisions that ensure family happiness and the satisfaction of family needs (Debicki et al., 2016).

One such decision may be to maintain the control of the company. When new owners join the firm, family members use different strategies to maintain family control, leveraging it through different control-enhancing mechanisms (Villalonga and Amit, 2009). Controlling the board by appointing family members as directors (García-Ramos et al., 2017) is an approach frequently used by families to retain their command over strategies and outcomes, i.e., company performance (Hettler and Forst, 2019), leverage (Jewartowski and Kaldonski, 2015) or dividend policy (González et al., 2014). The wish to maintain control of the firm by the family when multiple shareholders conform the family firm ownership structure may lead to the family occupying more seats on the board than those to which it is entitled (Villalonga and Amit, 2009), that is, having disproportionate family board representation (DFBR).

Existing literature has explored different aspects of multiple shareholdings, such as their determinants (Kang et al., 2018) and impact on firm value (Ruiz-Mallorquí and Santana-Martín, 2011; Sacristán-Navarro et al., 2014; Cai et al., 2015; Santos et al., 2015; Jara et al., 2019), leverage (Santos et al., 2014), tunnelling (Boateng and Huang, 2017), reduction of agency costs (Rossi et al., 2018), CSR reporting (Cao et al., 2019), and executive compensation (Fang et al., 2018). Jara-Bertín et al. (2008), Laeven and Levine (2008) and Sacristán-Navarro et al. (2014) point out that further research into the corporate governance structures of companies that have multiple large shareholders is needed, especially in the family business literature, which is even more scant. To the best of our knowledge, previous literature has not analysed the interplay between multiple shareholders within family firms and DFBR. Our paper aims to fill this gap. The socioemotional lens provides a comprehensive framework that allows studying different aspects of family firms; among them, families' reaction regarding board control to the presence of the other large shareholders. Building on the SEW theory, we argue and test empirically if

DFBR is used in family firms with multiple blockholders as a means to preserve family socioemotional wealth. We analyse how the existence, the number, their ownership, and the identity of multiple large shareholders affect disproportionate family control on the board, used as a socioemotional wealth preservation mechanism. As other large shareholders may balance firms' control on the part of families by reducing family board control, the ambition of families to protect themselves and their socioemotional wealth from possible monitoring and intervention by other large shareholders leads to increases of family power on boards and DFBR.

Our study makes a three-fold contribution. First, from a theoretical perspective, we contribute to the socioemotional wealth theory literature, a relatively 'new "homegrown" theoretical formulation' within family-firm research (Berrone et al., 2012, p. 259). The SEW lens facilitates the distinction between family and non-family firms (Gomez-Mejia et al., 2011). It justifies a family firm's specific behaviour: disproportionate family board representation as a reaction to the presence of other large shareholders. Our research also contributes to the literature that studies the behaviour of multiple large shareholders. Previous research has been mostly based on agency theory (i.e., Zwiebel, 1995; Pagano and Röel, 1998; Bennesen and Wolfenzon, 2000). Our work provides a new explanation of the interplay between multiple shareholders within family firms based on the SEW theory.

Second, we focus on an important and yet to be analysed topic: the impact of the coexistence of other large shareholders with families on family firms' corporate governance structures, particularly on the board of directors. While previous studies have considered the effects of disproportionate family board power on corporate decisions (debt or dividend policy, performance), we focus on the effect of multiple large shareholders on such an excess of control.

Third, while previous literature has focused on the different tools that exist to entrench disproportionate control, such as dual-class shares (Ruiz-Mallorquí and Santana-Martín, 2009; Villalonga and Amit, 2009; Forst et al., 2019) in various institutional contexts, we focus on a different mechanism, the board of directors, specifically on the Spanish market, a continental non-emerging market. Previous research studies the DFBR effect on leverage and dividends focusing on different emerging markets such as Colombia or Poland (Gonzalez et al., 2014; Jewartowski and Kaldonski, 2015). The Spanish context offers a unique combination of elements that allows us to test our hypotheses. Apart from having an important family ownership presence, Spain relies strongly on corporate enhancement mechanisms that must be enforced by the board of directors, while the country's legal framework (CNMV, 2020, recommendation nº 1) encourages firms not to limit the maximum number of voting rights, nor to impose any restrictions that limit corporate takeovers. Therefore, control-enhancing mechanisms are usually based not on shares but on other mechanisms such as the board of directors and the disproportionate power it gives insiders.

We find that relationships among multiple large shareholders are important in shaping disproportionate family control on the board. In particular, the number of multiple shareholders is associated with an overall excess of DFBR. Our findings also suggest that the more shares the other large shareholders own, the more excessive the family's control of board seats. Additionally, we observe that the excess of family board control may be influenced by the identity or typology of the other large shareholders. Foreign investors seem to reduce DFBR. Institutional investors, as well as families and individuals, appear to be neutral and do not influence DFBR.

The rest of the paper is organized as follows: Section 2 explains the theoretical background and the hypotheses to be tested. Section 3 presents the database, variables of the study and

methodology. Section 4 sets out the results of our analyses, Section 5 presents the discussion and Section 6 the conclusions.

Theoretical background and hypotheses

Board control as a corporate-enhancing mechanism

Corporate governance relates to “*practices that allocate power and control within public corporations*” (Benton, 2016, p.661). As part of a firm’s corporate governance, the board of directors, the ultimate decision-making authority (Adams and Ferreria, 2007), performs two main functions that are essential to a company’s survival: monitoring management and advising it on key decisions (Mace, 1971; Hambric and D’Aveni, 1992). Boards comprise individuals, who play different roles (Fama and Jensen, 1983) and represent the interests of shareholders. Board composition reflects each company’s specific needs (Hermalin and Weisbach, 1988; 1998 and Lehn et al., 2009) and signals to the markets whether the interests of all shareholders are being balanced (Acero and Alcalde, 2016). Endogenous and exogenous organizational design variables such as firm ownership (its structure and identity), the composition of the management team, and company complexity drive how the board is structured. From this perspective, higher levels of ownership allow shareholders to choose governance mechanisms (including the board) that are closer to their objectives (Adams et al., 2010).

It is well documented in the literature that families tend to be actively involved in ownership and management (Villalonga et al., 2015) and that family firm boards usually have a high representation of family members (Sciascia and Mazzola, 2008) that increases over generations (Bammens et al., 2008). Family-controlled firms prefer to appoint affiliate directors to the board (those with business ties with the firm), even if this constrains the board’s ability to monitor managers and provide independent advice (Jones et al., 2008). Family directors contribute to the transmission of family values in the firm, protect family members’ employment and

perpetuate the dynasty. They support the preservation of SEW-(Gómez-Mejía et al., 2007; 2010; 2011). In this vein, families may appoint directors regardless of the number of votes controlled, as this allows them to maintain control (Jewartowski and Kaldonski, 2015) over the company by holding DFBR. This behaviour is more frequent in continental European markets that have legal restrictions over other control-enhancing mechanisms, i.e., dual-class shares (while in the USA dual-class shares are common, countries in Continental markets –Spain included– place legal restrictions on the use of dual-class shares by public companies, OECD, 2007).

The use of disproportionate board control by families may be explained thus making use of the SEW theory: it is driven both by economic and non-economic motivations such as socioemotional factors (Gomez-Mejia et al., 2010). SEW is key in family businesses; it operates at a deep psychological level among family members whose identity is integrally connected to their membership of the family firm (Debicki et al., 2016). The desire to retain SEW includes a variety of forms (Gómez-Mejía et al., 2007), such as the desire to exercise authority, the enjoyment of family influence, the preservation of the family dynasty, the conservation of a family firm's social capital, the fulfilment of family obligations based on kinship and the opportunity to be altruistic to family members. Strong family control of the board may be linked to a firm's value maximizing objectives, fulfilling the role of boards in the preservation of wealth (Gómez-Mejia et al., 2007, 2010, 2011). Overall, a higher family representation on the board ensures the maintenance of socioemotional wealth. In fact, family control is one of the dimensions proposed by Berrone et al. (2012) to measure such wealth.

The effect of multiple large shareholders on disproportionate family board representation

In listed (and in large) family firms, several categories of owners may coexist and determine the governance mechanisms necessary to ensure a fair voice for all (Nordqvist et al., 2014). The presence of multiple owners with different interests, time horizons and strategies (Aguilera and Jackson, 2003) and the relationships they establish between them will shape board composition

and may impact family representation on boards within family firms. In fact, the effect of the interplay between families as large shareholders with other large owners on DFBR is an interesting research question. To study this topic, building upon SEW theory, we propose four hypotheses (Figure 1).

–Insert Figure 1–

First, we consider in Hypothesis 1 that other large owners will tend to participate in corporate governance (Bennedsen and Wolfenzon, 2000), competing with families for board seats. That is, families may have to share board seats and power with other large shareholders who will compete with the family DFBR. We argue that families, fearing losing SEW (Gómez Mejía et al., 2010), will increase, as a reaction, their presence on boards. That is, families will try to protect their SEW by enhancing their presence on boards, increasing their disproportionate board representation. Families will make decisions to preserve accumulated endowment in the firm (Berrone et al., 2012), including benefits of control that are part of families' socioemotional capital (Kellermanns et al., 2012). The results reported for Spain by Sacristán-Navarro et al. (2015) show that the Spanish market values the existence of multiple large shareholders positively only if the family retains control, supporting this argumentation. Thus, we propose the following hypothesis:

H1: In family firms, the presence of other multiple shareholders increases disproportionate family board representation.

The interplay of other large shareholders with families depends on factors such as the number and strength of the multiple shareholders (Laeven and Levine, 2005; Ruiz-Mallorquí and Santana-Martín, 2011). We contemplate that families may fear interventions by each large shareholder individually, and consequently will perceive a need to “prevent” as many potential interventions (or rebellions) by the other large shareholders as the actual number of other large

shareholders. Consequently, to secure SEW, they will increase family presence on boards as the number of multiple shareholders increases. In this vein, a greater number of other large owners will increase disproportionate family board power. We propose the following hypothesis:

H2: In family firms, the number of other large shareholders increases disproportionate family board representation.

Related to the strength of multiple blockholders, the distribution of shares among them determines intervention incentives (Edmans and Manso, 2011; Edmans, 2014). The choice to intervene will depend on the ratio of the relative shareholdings of other non-controlling owners to that of the controlling shareholder (Cai et al., 2015). Higher blockholdings of other large shareholders in comparison with those held by the family will favour other large shareholders' willingness and propensity to intervene in firms' decisions. Thus, family fear of this and the willingness of families to protect SEW leads to higher DFBR. Following this argument, we present the following hypothesis:

H3: In family firms, the relative ownership of other large shareholders compared to family ownership increases disproportionate family board representation.

Another factor that may determine disproportionate board control is the typology or identity of the other main owners. Different types of shareholders may have varying strategic goals (Aguilera and Crespi, 2012) that will influence their attitudes toward the largest shareholder. Moreover, different types of owners have a significant voice in the selection and appointment of directors and thus, ultimately, influence the board's composition (Sur et al., 2013). Their differing expectations regarding strategic decisions (Thomsen and Pedersen, 2000) will be a factor in whether and how they intervene in firms' decisions. Using this perspective, Maury and Pajuste (2005) show that the type of other large owners affects their incentives; Attig et al.

(2008) point out the significance for family-controlled firms of the identity of other large shareholders in determining the risk of expropriation, while Cheng et al. (2013) suggest it is necessary to consider the identities of non-controlling shareholders when examining the effects of multiple large shareholders on corporate governance or firms' value.

In family firms, the second largest shareholder is predominantly a family, while foreign owners and institutional investors are also important (Sacristán-Navarro et al., 2011). Following the SEW theory, we argue that families, as other large shareholders, sharing a homogeneous identity with the largest shareholder due to their common interests, may ally with the main family shareholders to ensure the maintenance of SEW. Consequently, the main family (the largest shareholder) will not need to protect SEW by increasing disproportionate family presence on boards. Thus, the presence of families as other large shareholders will lead to a decrease in DFBR.

A different situation would be to have heterogeneity between other large shareholders and families as main owners. Maury and Pajuste (2005) and Jara-Bertín et al. (2008) argue that shareholder coalitions are less likely among heterogeneous shareholder groups, which would be the case with foreign owners and institutional investors. Specific characteristics of foreign shareholders and institutional investors also support the argument of fear of families towards these blockholders' interventions. Foreign companies looking out for their own interests usually hold shares in firms as part of company group structures to facilitate access to valuable technology and other specific resources (Sacristán-Navarro et al., 2011) and will tend to occupy board seats in order to have power to intervene in firms' strategies. Families, fearing the presence of foreign investors, would be prone to protect themselves by increasing DFBR. Institutional investors (mutual funds, pension funds, insurance funds) have traditionally not engaged in company management (Ruiz-Mallorquí and Santana-Martín, 2011; Rock, 2015), since they are not usually represented on the board of directors. However, their role has evolved

as they have become more active in the governance of their investee firms (Benton, 2016). They seek higher returns for their investments and could favour restraining families' "freedom of action", which the latter would prevent, seeking to preserve SEW by increasing DFBR.

We therefore state the following hypotheses:

H4a: In family firms, the presence of families and individuals as other large shareholders decreases disproportionate family board representation.

H4b: In family firms, the presence of foreign investors as other large shareholders increases disproportionate family board representation.

H4c: In family firms, the presence of institutional investors as other large shareholders increases disproportionate family board representation.

Database, variables and methodology

Sample and data collection

Our sample refers to Spanish listed firms. Spain is an interesting country for this study, with an appreciable family ownership presence as 89% of all companies are family firms. They account for 57.1% of GDP and create more than 66% of the country's jobs (Spanish Family Firm Institute, 2019). Our focus on Spanish firms has an additional advantage. It allows us to look more deeply into the identity of families, and to determine who owns and who controls the companies and to what extent those stakeholders belong to the same family. Moreover, by focusing on a single country, we offset differences stemming from legal systems.

The database we used comprises Spanish non-financial and non-insurance companies listed on the Madrid Stock Exchange during a period before and after the 2008 financial crisis, ending in 2013, the year after the EU Corporate Governance Action Plan of 2012 was approved¹, an important milestone in the development of European corporate governance policy: the period covered is from 2005 to 2013. Financial, insurance and investment service companies were not considered from the outset because of their special characteristics, especially from an accounting point of view (170 observations, 27 firms). Also excluded from the initial database were subsidiaries, a business that is more than 90% owned by another listed firm in our sample (two companies, six observations). After applying these filters and also taking into account that some companies entered and others exited the stock market during the period considered, the

¹ This Action plan brought in considerable changes to corporate governance issues. For example, Directive 2017/828 encourages more long-term engagement of shareholders; the 2018 Commission Implementation Regulation (EU) 2018/lays down minimum requirements regarding shareholder identification, the transmission of information and facilitating the exercise of shareholders' rights. Rules relating to Banks and systemic investment firms were laid out in the Capital Requirement Directive (Directive 2013/36/ EU) and the Capital Requirements Regulation (Regulation 5757/2013). Rules on corporate governance and remuneration for non-systemic investment firms are part of the Investment Firms Directive (Directive 2019/2034) and the Investment Firms Regulation (Regulation 2019/2033).

initial sample comprised an unbalanced panel of 122 firms and 913 observations. We combined three separate sub-data sets to obtain the information necessary for our analysis. These data sets contain information about shareholders and boards of directors (extracted from the Corporate Governance Report the firms provide to the Spanish Supervisory Authority, CNMV). Company financial information and data on the firms' sectors of activity were obtained from the CNMV and the SABI (Sociedad de Análisis de Balances Ibéricos) database.

Variables of the study

To classify a business as a family firm we define a dummy variable (FF10) that adopts the value of one if the largest shareholder is a family or individual over the 10% threshold (as main or ultimate owner), and zero otherwise. For this purpose, we used the methodology employed by La Porta et al. (1999) and Claessens et al. (2000) to identify ultimate owners. We searched for the stakes held by individuals or families (adding for families the voting rights held by all the family members). Family members were identified through their surnames (first or second surname); that is, they were defined as those who are blood-related. Family members by marriage were also taken into account. Of the 913 firm-observations, 623 were classified as family firms, representing 68% of the observations.

–Insert Table 1–

As shown in Table 1, the dependent variable to test our hypotheses is DFBR. Following Villalonga and Amit (2009), we measure DFBR as the difference between the percentage of the board seats controlled by the family minus the percentage of the cash flow rights held by the family. Other authors, such as Dey et al. (2009), use a similar measure, e.g., the difference between board election rights and cash flow rights. For descriptive statistics, we define additionally a dummy variable that adopts the value of one if the family firm has a positive value in DFBR and zero in other cases (DDFBR).

We define several other variables related to the ownership structure and proposed hypotheses (see Table 1). Regarding Hypothesis 1, as proxy for the presence of multiple shareholders, we estimate a dummy variable that relates to whether there are multiple owners with stakes over the 3% threshold apart from the largest owner (MLSH)². For Hypothesis 2, we define a continuous variable that measures the number of other large owners (NLSH) apart from the largest owner. For Hypothesis 3, we include a variable that measures the power of the other large owners in relation to the first large shareholder (VOTING2341), defined as the sum of voting rights of the other large shareholders –the second, third and fourth– over those of the largest owner. We also measure the power of the other large shareholders in relation to the largest owner by defining three dummy variables to capture how power is distributed among the main owners, determining which shareholders hold more than the sum of the rest (WHOCONTROLS1, WHOCONTROLS2 and WHOCONTROLS3). With regard to Hypothesis 4 and the identity of the multiple large shareholders (see Table 1), we define variable OTHERS_FAM as a dummy variable that adopts the value of one if all the large shareholders are families and individuals over the 3% threshold, and zero otherwise; variable OTHERS_FOR, a dummy variable that adopts the value of one, if other blockholders except the largest blockholder are foreign firms over the 3% threshold, and zero otherwise; and variable OTHERS_INST, a dummy variable that adopts the value of one if other blockholders except the largest blockholder are institutional investors over the 3% threshold, and zero otherwise³.

² There is little agreement in the literature about what defines a large shareholder. A 10% blockholding is used by Faccio and Lang (2002), Maury and Pajuste (2005) and Laeven and Levine (2008). Others, such as Holderness (2009), use 5%. We opt to use 3% in line with the Spanish Supervisory Authority's (CNMV) definition.

³ Although there are several combinations with regard to shareholder identity, as the typology is so huge, we have focused on those extreme cases in which all significant owners apart from the family share the same identity.

Like other variables relating to the firm's characteristics, we consider company size (SIZE), age (AGE), leverage (LEV) and industry (SECTOR). In addition, we have included as control variables the family firm cash flow rights (FF_CFR), the total number of directors (BOARD_SIZE) and the presence of other large shareholders in addition to the largest one (the family) on the board (LSH_BOARD).

Methodology

To test Hypotheses 1, 2, 3 and 4 (a, b, and c), due to the fact we are studying a relationship in a subsample of the whole sample, standard regression techniques do not allow us to control for the endogeneity bias from self-selection. One of the best solutions is to apply the Heckman (1979) two-stage method, which eliminates the bias (Greene, 1999; Wooldridge, 2002) as follows: (1) It requires the identification of at least one variable that may be a significant regressor in the selection equation but not in the regression equation (we chose CEOFSH, defined as a dummy variable that relates to whether the largest owner is also the CEO, as it complies with this condition); and (2) It requires most of the regressors in the regression equation to be included in the selection equation⁴. In the first stage, the selection equation is estimated as a maximum-likelihood probit model to analyse the propensity for being a family firm and calculating the *Inverse Mills Ratio* (λ_i). In the second stage, the corrected regression equation is estimated by OLS regression, defined as:

$$DFBR_{it} = \alpha_0 + \beta X_{it-1} + \sum_{t=2005}^{2013} D_t + \varepsilon_{it} \quad (\text{regression equation}) (1)$$

Where $DFBR_{it}$ is the family i disproportionate board representation in the year t , X_{it-1} denotes the explanatory variables and control variables of family i in the year $t-1$ (note that to control for endogeneity problems in the models proposed, potential endogenous explanatory and

⁴ Nevertheless, it is necessary to consider that apart from this requirement each dependent variable can have some additional potential regressors.

control variables are lagged by one year). D_t is a set of time dummy variables covering any non-variant time effect of the firm not included in the regression and ϵ_i is a normal error term. This equation uses data exclusively from family firms.

The selection equation is as follows: $FFi^* = \gamma Z_i + \mu_i$ (selection equation) (2)

where the latent variable FFi^* is observed as $FFi = 1$ (the firm i is a family firm) if $FFi^* > 0$, and as $FFi = 0$ (the firm i is not a family firm) if $FFi^* \leq 0$; Z_i is a vector of variables that affect a firm's propensity for being owned by a family. Specifically, we consider SIZE (total assets), AGE (firm age), LEV (firm leverage), SECTOR (regulated or not), ROA (return on assets), WEDGE (the separation between voting rights and cash flow rights), and CEOFSH (see Table 1). μ_i is a normal error term. The fact that Y_i is observed only if $FFi = 1$ might lead to bias from self-selection. Thus, the *Inverse Mills Ratio* (λ_i), which approximates the likelihood of a company being a family firm, is added to the estimations. After incorporating this correction, the final regression equation is:

$$DFBR_{it} = \alpha_0 + \beta X_{it-1} + \sum_{t=2005}^{2013} D_t + \theta \lambda_{it} \text{ (corrected regression equation)}$$

Results: the effect of multiple shareholders on families' board power

Summary of statistics and correlations

To estimate the descriptive statistics, we use a sample without any missing values in the variables considered in the first and second stage of Heckman analyses (both in the main results as well as in the additional and robustness results). Thus, although the initial sample is composed of 913 observations, descriptive results are calculated with a sample of 772 observations. As shown in Table 2, although the excess of family power on the board (DFBR) is not a mean positive (-0.352), 44.30% of firm observations have disproportionate board power (DDFBR). This result confirms previous studies that document disproportionate board representation for families (Anderson and Reeb, 2003; Setia-Atmaja et al., 2009; Villalonga

and Amit, 2009) and the extent of control enhancing mechanisms in Spanish listed firms (Ruiz-Mallorquí and Santana-Martín, 2011). 85.75% of the firms also have multiple shareholders (MLSH) and the average number of other shareholders (NLSH) is close to three. The excess of voting rights of all owners over the largest shareholder (VOTING2341) is approximately 0.8, revealing that the largest shareholder has on average more ownership than the sum of the rest of the large shareholders. As for the distribution of ownership, in 14.25% of the cases there is only one large shareholder without another significant shareholder (WHOCONTROLS1). In 50.13% of the cases, there are other large shareholders, but the largest shareholder has more voting rights than the sum of the rest (WHOCONTROLS3). In 35.62% of the cases, the other large shareholders have more voting rights than the largest shareholder (WHOCONTROLS2). For 9.72% of the observations, the other large shareholders are families or individuals (OTHERS_FAM); foreign investors (OTHERS_FOR) are present in 34.84% of the observations. All the other large shareholders are institutional investors in only 1.42% of the sample (OTHERS_INST).

– Insert Table 2 –

Table 3 lists the correlation coefficients of the main explanatory and control variables as well as the dependent variable used in the regression models in the second stage of the Heckman model. Once the non-normality of the explanatory and control continuous variables was confirmed and considering the fact that Pearson's correlation coefficient did not function adequately for discrete variables, as it was very sensitive to violations of normality assumptions, Spearman's rank correlations were calculated. Although some of the variables were significantly correlated, the analysis of the variance inflation factors (VIF) revealed no evidence of multicollinearity, as all of them remained under 10 (Kleinbaum et al., 1998) and in some cases even under five (Hair et al., 2010).

–Insert Table 3–

The effect of multiple shareholders on families' board power

Next, we test our four hypotheses. For this, we run a two-stage Heckman model. Following the methodology chosen and in order to control for a possible self-selection bias, we begin by calculating the results of the first-stage probit regression in the Heckman model. The results (Appendix 1) show that the size of the company (SIZE) and profitability (ROA) negatively and significantly affect a company's propensity for being a family firm. In contrast, the separation between voting rights and cash flow rights (WEDGE), and whether the first shareholder is also the CEO (CEOFSH), have a positive effect on the propensity for being a family firm.

As we considered lagged values for the endogenous variables and due to some missing values for the variables in particular cases, we eventually worked with a sample of 786 observations in the estimations of the second stage of Heckman models. Model 1 of Table 4 relates to Hypothesis 1, where we consider the effect of the existence or presence of multiple large owners (MLSH) on DFBR; Model 2 relates to Hypothesis 2: we take into account the number of other large shareholders (NLSH) on the possible DFBR (Model 2). Models 3 and 4 relate to Hypothesis 3: in Model 3 we consider the effect of other large shareholders' voting rights in relation to those of the largest shareholder (VOTING2341); and in Model 4, we examine how the final distribution of power affects excessive family power on the board. WHOCONTROLS is a qualitative variable that considers the family company's final distribution of power divided into three possible categories; thus, to make it operative, we define three dummy variables. However, in the regression models it is only possible to add $k-1$ dummies (in our case two) because in the other case the parameters cannot be estimated. Therefore, we present our results combining the dummies into pairs to understand what their coefficients really mean. It is sufficient to state the results of the combination of dummy WHOCONTROLS1 and WHOCONTROLS2 because the results of the remaining combinations can be deduced.

–Insert Table 4–

The results of Model 1 of Table 4 do not support Hypothesis 1. The existence of multiple large shareholders (MLSH) (at 3% level) does not significantly affect disproportionate representation. Supporting Hypothesis 2, the results of Model 2 of Table 4 suggest that the number of other large shareholders (NLSH) positively affects DFBR. The higher the number of other significant shareholders, the greater the family's disproportionate representation.

Model 3 of Table 4 tests the effect on DFBR of the amount of voting rights the other large shareholders have over those held by the family. These results support Hypothesis 3. The coefficient of variable VOTING 2341 is positive, indicating that the greater the other large blockholders' voting power is in relation to that of the largest shareholder, the higher the excess family power on the board ($\beta = 10.479$, $p < 0.001$). The findings of Model 4 (Table 4) also support that final distribution of power among shareholders affects board representation. What the results show is that in comparison with WHOCONTROLS3, when the main owner –the family– exclusively controls the firm and there are no other large shareholders (WHOCONTROLS1), the expected value of the disproportionate board representation is lower although this difference is not statistically significant. However, if the family coexists with other large shareholders whose sum of voting rights is higher than the family's (WHOCONTROLS2) ($\beta = 9.339$, $p < 0.001$), the expected value of the disproportionate board representation is higher and statistically significant. These results suggest that families, fearing other large shareholders' contestability and control, will be prone to secure their SEW by means of control over the board.

Regarding other control variables, company age (AGE), industry (SECTOR) and the total number of directors (BOARD_SIZE) have a positive and significant impact on DFBR. Older firms have more excessive family representation. This result is consistent with previous literature that describes how the number of family directors increases over generations

(Bammens et al., 2008). Moreover, when a family firm belongs to a regulated industry there is a higher probability of disproportionate board representation. The higher the number of directors on the board (BOARD_SIZE), the more family disproportionate representation increases as a way of maintaining family control. Nevertheless, when other large shareholders outside the family (LSH_BOARD) also have a voice at the board, DFBR falls. We find that company size (SIZE) has a negative and significant effect on DFBR. Finally, the higher the family holdings are (FF_CFR), the less need there is to control the firm through DFBR.

Table 5 relates to Hypotheses 4a, 4b and 4c. Models 1, 2 and 3 pertain to the existence of families and foreign and institutional investors as other large shareholders. The results show that the identity of the other large shareholders is important in the composition of family firm boards. For variable OTHERS_FAM the coefficient is non-significant (Model 1, Table 5); the coefficient for variable OTHERS_FOR is negative and significant (Model 2, Table 5), while the coefficient for variable OTHERS_INST is negative but non-significant (Model 3, Table 5). The results remain the same if the three explanatory variables (OTHERS_FAM; OTHERS_FOR; OTHERS_FOR) are considered together along the control variables. Thus, not supporting Hypothesis 4a, the presence of families as large shareholders does not seem to decrease disproportionate family board power. Foreign investors (OTHERS_FOR), contrary to Hypothesis 4b, appear to reduce family appropriation of excessive voting power ($\beta = -9.288$, $p < 0.001$). In addition, not supporting Hypothesis 4c, when other large shareholders are institutional investors (variable OTHERS_INST), the results do not suggest that they significantly influence family board power (these findings must be interpreted with caution given the small number of observations in the sample where the other large shareholders are institutional investors). Overall, our results suggest that in firms where there are other large shareholders that are families or institutional investors, the possibility of having a board with

excessive family control remains the same, but when there are foreign investors among the other large shareholders, family board power decreases.

–Insert Table 5–

Robustness and additional results

For robustness purposes, we have used different measures of the above-mentioned variables (MLSH, NSLH, and control variables). Appendix 2 shows the descriptive statistics of the new/additional variables employed in this subsection.

First, we have considered different thresholds in some independent variables such as MLSH and NSLH, as they were defined initially using a threshold of 3%. If we increase the threshold to consider the existence of other large shareholders up to 5 or even 10%, most of the results do not change in Table 4. However, concerning the results reported in Table 4 that consider the impact of other large shareholders on family firm disproportionate board representation, a different threshold in the variable MLSH (5% or 10%) does change results in Model 1 (Table 4), as these variables now turn out to be positive and significant. The increase of the considered threshold up to 5% or 10%, does not significantly affect the results of Table 5 either. Model results 1, 2 and 3 do not vary.

Second, instead of including firm age as a control variable, we consider family generation (1st, 2nd and 3rd generation) by including a dummy variable with three categories (AGE2) (value 0 if firm age is lower than 25 years, value 1 if firm age is between 25-50 years, value 2 if firm age is more than 50 years). The results do not change when we consider this new variable either in Table 4 or 5. These results reinforce the view that family disproportionate power on board increases over generations. Third, if we measure the variable VOTING2341 as the sum of voting rights of the second, third and fourth large shareholders, minus the voting rights of the first shareholder (VOTING2341_2) instead of the initial variable, the results

remain the same, as this new variable presents a positive and significant effect on the dependent variable. Fourth, we have added a new control variable: the percentage of independent directors (PINDEP) in Tables 4 and 5. We aim to take into account how, linked to agency theory, the protection of minority shareholders (exemplified by independent directors) relates to DFBR. The results reveal a negative and significant coefficient of variable PINDEP. These findings suggest that independent directors reduce disproportionate family board power. The results do not vary for the rest of the variables except for variable NLSH that does not turn out to be significant.

Fifth, if the dependent variable is calculated as the difference between the percentage of board seats controlled by the family (FAMDIR) minus the percentage of the votes held by the family instead of subtracting cash flow rights (DFBR2), the results are the same as those shown in Tables 4 and 5 and additionally MLSH and OTHERS_FAM turn out to be positive and significant, while WHOCONTROLS1 presents a negative and significant coefficient. Sixth, we have worked with a different definition of variable FAMDIR, subtracting the number of independent directors (see descriptive results of the new variable DFBR3 in Appendix 2). When the new dependent variable is considered (DFBR3), the results suggest that MLSH, NLSH, VOTING 2341 variables have a positive and significant effect (Models 1-3, Table 4). WHOCONTROLS2 remains significant and positive and now WHOCONTROLS1 also presents a significant negative coefficient. These results reinforce the notion that in the presence of other large owners, disproportionate family board power increases while when the family is the sole owner, disproportionate power decreases as families do not have the need to defend their SEW. The results of Models 1 and 2 of Table 5 do not vary either. In addition, in Model 3 (Table 5) INST_OTHERS turns out to be negative and significant at a 10% level.

Finally, as additional results, we have considered the effect on DFBR when new owners increase or change their holdings. To that end, we have defined three dummy variables that

refer to whether there is a significant variation (entrance or increase) of the holdings owned by the second, third and fourth largest shareholders, above 3% or not (SSHVAR, TSHVAR, IVSHVAR). To capture how relationships between types of shareholders may change when new shareholders enter the firm or when the existing shareholdings of the three typologies of owners increase, we define three more variables: OTHERS_FAM2 that takes the value of one if families or individuals enter the firm as large shareholders or a family and individual increase their holdings above 3%, and zero otherwise; OTHERS_FOR2, a dummy variable that takes the value of one if foreign investors enter the firm as another large shareholder or increase their ownership above 3%, and zero otherwise; and OTHERS_INST2 as a dummy variable that takes the value of one if institutional investors enter the firm's capital or increase their ownership above 3%, and zero otherwise. Results (Appendix 3) show how the entrance or increase in shareholdings of other new main owners as second or third large owners, contributes to decreasing DFBR. Models 1, 2 and 3 (Panel A) of Appendix 3 consider the effect of variations in ownership held by other large shareholders, whether they are the second, third or fourth (SSHVAR, TSHVAR, IVSHVAR multiplied by MLSH). They suggest that when there is a significant variation in large owners' shareholdings (second and third) either due to their entrance, or to an increase in their holdings, disproportionate family power on the board decreases. A variation in shareholdings of the fourth largest owner does not affect family board power (Model 3, Appendix 3). However, if a complete model is estimated with these three variables (SSHVAR, TSHVAR, IVSHVAR multiplied by MLSH) and control variables, only SSHVAR remains significant.

When we repeat the analyses considering the effect of variation (entrance/increase) in shareholdings of the different typologies of owners (Models 4, 5 and 6, Panel B, Appendix 3), the results reinforce the concept that the identity of some of the other large shareholders is important. Results show how the increase of institutional investors and foreigners' ownership

as other large owners affects disproportionate family power. The coefficient for the interaction between variable OTHERS_FOR2 and MLSH and between OTHERS_INST2 and MLSH is negative (Models 5 and 6). Thus, the presence of foreign shareholders or other large institutional shareholders entering the firm or increasing their ownership tends to reduce family appropriation of excessive voting power. However, if a completed model is estimated, the significance of the OTHERS_INST2 variable disappears. As for other family investors (OTHERS_FAM2), our results do not support that a variation in their shareholdings impacts family representation on the board (Model 4).

Moreover, other analyses have considered how the economic cycle could affect the entrance of new shareholders in the search for new firm resources. We have split the period of analysis into two periods, one from 2005-2007 (pre-crisis) and another from 2008-2013 (post-crisis) and repeated the analyses from Appendix 3. In the pre- and post-crisis scenarios the results from Appendix 3 (Panel A) only remain significant for the SSHVAR variable. In the case of other shareholders (Appendix 3, Panel B), in the pre-crisis scenario the typology of the other large shareholders (families and institutional) does negatively and significantly affect disproportionate board power. In the post-crisis period, only being a foreign owner remains significant. Additionally, we have controlled for prior year performance in case it were possible that some “new” owners might gain a share in family firms to impose governance changes after the crisis. The results of Appendix 3 do not vary and the proxy employed for prior firm performance (ROA) does not turn out to be significant.

Discussion

Our results show that families not only maintain, but rather increase DFBR the larger the number and the greater the relative power of other large shareholders, while only foreign investors decrease families’ power on the board. The existence per se of large shareholders in family firms as a consequence of the company’s history (for example, they are the original

founders or have entered the firm with the family's approval, perhaps as white knights) does not seem to affect families' power; but in the "game" of forces, in the balance of power on the board between the controlling family and other large shareholders, as the number and power of other large shareholders increase, families appear to consider a need to protect SEW increasing DFBR. This effect is even more pronounced in family firms in which second and third generations are present. Thus, families will be more prone to increase their control on boards to preserve their SEW as time passes.

However, the image changes when new shareholders enter the firm as the second-largest blockholders (or when they increase their shareholdings). In this case, the results indicate a reduction in excessive family board representation. A possible explanation could be that this change in ownership, the entrance of the second largest shareholder, has been agreed with the majority shareholder. The family, consequently, does not fear a loss of SEW and would not need to protect it increasing DFBR. On the contrary, the family would be willing to decrease it. An example could be the entrance of Bill Gates in the Spanish FCC as second largest shareholder. This could be an interesting future research topic.

As for the effect of other large shareholders' identity, our results support that different types of large shareholders have varying interests and strategic goals that determine their behaviours (Aguilera and Crespí, 2012). Other families as large shareholders and institutional investors do not have a significant impact on family board configuration. With regard to families as other large shareholders, a possible explanation could be that when two families coexist, their coexistence (because of history, increase or entrance) is linked to the firm's history or has been agreed by both. If this is the case, both families could have agreed upon the division of seats on the board, both trying to preserve their SEW. For institutional investors, their usual tendency to avoid engaging in firm management (Ruiz-Mallorquí and Santana-Martín, 2011; Rock, 2015) may be the explanation for the non-significant relation.

The presence or entrance of foreign investors, however, reduce the board power of the main family shareholder. Previous authors argue that contestability is more likely among heterogeneous shareholder groups (Maury and Pajuste, 2005; Jara-Bertín et al., 2008), an argument that is in line with the findings of Gudri et al. (2017) and Cai et al. (2015). Foreign investors' power could be a possible explanation for the reduction in DFBR. Notwithstanding families' willingness to increase DFBR to preserve SEW, they may be unable to do so. Another possible explanation could be the same as that proposed for the results related to the second largest shareholder: foreign investors coexist or enter the firm after an agreement with the family (the example of Bill Gates in FCC) and consequently, the family, would not fear possible losses of SEW and would agree on facilitating foreign investors' presence on the board.

Conclusions

Our analyses confirm previous studies that conclude families as large shareholders tend to be overrepresented on boards using disproportionate family board control as a control-enhancing mechanism (Anderson and Reeb, 2003; Setia-Atmaja et al., 2009; Villalonga and Amit, 2009). Consistent with previous literature that reports that the number of family directors increases over generations (Bammens et al., 2008), our results also find that this disproportionate family board control also increases over generations and years. Families are able to maintain family control even though different owners exist over generations.

Family companies are heterogeneous and need to develop structures and processes to address the concerns of various internal and external stakeholders (Nordqvist et al., 2014). Our study addresses the role other large shareholders play on family firm boards and how the voices of other large owners may alter family board power and corporate governance structures. We find for existing large shareholders, that their number and their voting power increase family board presence when their voting power exceeds that of the family, while their presence, per se, does not always affect disproportionate family board control. Fearing threats to SEW and willing to

preserve it, families as the largest shareholders tend to ring-fence it by increasing their power on boards. However, when new shareholders enter the firm as second largest shareholders or when the other large shareholders are foreign investors (either as outstanding or as new shareholders), families as large shareholders do not seem to need to implement this behaviour. The entrance or increase in shareholdings of a second largest shareholder and foreign investors reduce disproportionate family control on boards. These behaviours open an avenue for future research. A possible explanation could be that families favour or agree upon these scenarios and do not feel the need to increase DFBR to protect SEW.

Our paper conveys several implications. First, from an academic perspective, the need for more complex research models in the family firm literature that not only analyse families as main shareholders but also take into account the number, power, influence and typology of other large shareholders coexisting with families and entering family firms. Similarly, the impact of all large shareholders on firm decisions, corporate governance, strategies and performance requires analysis. Second, the consideration of SEW as a theory that explains the behaviour of family shareholders towards other large shareholders within family firms provides arguments (from an academic and managerial perspective) to defend disproportionate family board control and is another valuable academic implication. Third, in regard to policy makers, our paper reinforces the need to take into account family firms' particularities when designing corporate governance codes. Family firms need to fulfil both financial and emotional objectives. The desire to protect their SEW is legitimate.

We note the following limitations of our study. Firstly, other measures of family firms (with a different family ownership threshold) can be employed. Secondly, our sample is drawn uniquely from the Spanish context, so considering firms from other countries or institutional contexts would help generalize the scope of this research. Thirdly, we have not considered other defensive measures as control variables apart from board disproportion; this opens avenues for

future research which could use different measures of family board control or family board involvement (from solely measuring board composition –family directors– to measuring institutional positions of the family on the board, such as family chairs or family vice-chairs); these could provide more detail about family positions on the board (family proprietary directors, family executive directors, etc.); or they could consider family participation on committees (auditing committees, appointments committees, strategy committees, etc.). In other words, future studies could measure family board activity and specificities more precisely. Finally, researchers could improve the understanding of family boards by considering directors' characteristics, such as age, background or gender. Whether the effect of disproportionate family board power on firm value is positive or negative remains an empirical question.

Declaration of interests: None.

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Figure 1. Research model

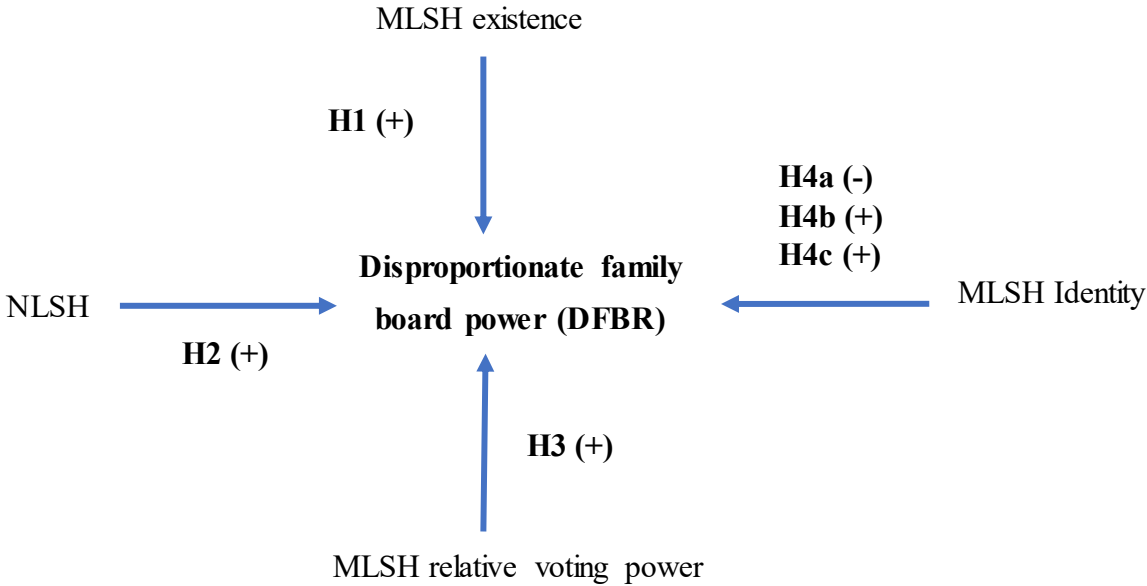


Table 1. Study variables

Variables	Description
FF10	A dummy variable that adopts the value of one if the largest (direct or indirect) or ultimate shareholder is a family or an individual over a 10% threshold and zero in other cases.
DFBR	Continuous variable for family firms that measures disproportionate board representation of the family directors on the board as the difference between the percentages of the board seats controlled by the family minus the percentage of the cash flow rights held by the family. If the variable is positive, it means an excess of family board power. If it is negative, no excess.
DDFBR	A dummy variable that adopts the value of one if the family firm has a positive value in DFBR and zero in other cases.
MLSH	Dummy variable that takes the value of one if there are multiple significant (over 3%) large owners apart from the largest, and zero otherwise.
NLSH	Number of significant (over 3%) owners (excluding the largest).
VOTING2341	Voting rights (VR) of the second largest shareholder + VR of the third shareholder + VR of the fourth shareholder divided by the voting rights of the largest shareholder (FSH).
WHOCONTROLS1	Dummy variable that takes the value of one if the firm has only one large shareholder, and zero otherwise.
WHOCONTROLS2	Dummy variable that takes the value of one if the firm has multiple large owners and the largest shareholder has less voting power than the sum of the remaining owners (the second, the third and the fourth large owner), and zero otherwise.
WHOCONTROLS3	Dummy variable that takes the value of one if the firm has multiple large owners and the largest shareholder has more voting power than the sum of the remaining owners (the second, the third and the fourth large owner), and zero otherwise.
OTHERS_FAM	Dummy variable that takes the value of one if all blockholders are families and individuals over the 3% threshold, and zero otherwise.
OTHERS_FOR	Dummy variable that takes the value of one if all blockholders are foreign owners over the 3% threshold, and zero otherwise.
OTHERS_INST	Dummy variable that takes the value of one if all blockholders are institutional owners over the 3% threshold, and zero otherwise.
SIZE	Total book assets in thousands of Euros (included in the analysis in logarithm).
AGE	Firm age as a proxy of generation (included in the analysis in logarithm). $Year_{it} - INC_i$, where $Year_{it}$ is the corresponding period and INC_i is the date the firm was incorporated.
LEV	Book value of total debt/book value of total assets.
SECTOR	Dummy variable that takes the value of one if the firm belongs to a regulated industry (energy, electricity, telecommunications or transport) (considering primary and secondary sic code), and zero otherwise.
FF_CFR	Sum of the cash flow rights of family ultimate owners when the family holds more than 10% of the shares.
BOARD_SIZE	Total number of directors on the board of directors of each firm each year.
LSH_BOARD	Dummy variable that takes the value of one when the other large owners except the family are on the board of directors and zero otherwise.
ROA	Return on assets (operating income over total assets).
WEDGE	Difference between control rights and cash flow rights following the methodology of Claessens <i>et al.</i> (2000, 2002), Faccio and Lang (2002) and La Porta <i>et al.</i> (1999).
CEOFSH	Dummy variable that adopts the value of one if the CEO is also the largest shareholder of the firm and zero in other cases.

Table 2. Descriptive statistics of main explanatory and control variables

	Mean	Min.	Max.	St. Dev.
DFBR	-0.352	-86.408	53.846	22.674
NLSH	2.855	0	9	2.107
VOTING2341	0.802	0	3	0.699
SIZE	7,327,505	14,977	1.30e+08	1.79e+07
AGE	44.387	2	142	27.189
LEV	0.660	-6.269	3.426	0.340
FF_CFR	28.681	0	99.5	26.389
BOARD_SIZE	10.939	4	22	3.382
ROA	0.036	-1.937	0.562	0.139
WEDGE	3.352	-2	46.364	7.608
Number of observations (Percentage)				
FF10	544 (70.47)			
DDFBR	342 (44.30)			
MLSH	662 (85.75)			
WHOCONTROLS1	110 (14.25)			
WHOCONTROLS2	275 (35.62)			
WHOCONTROLS3	387 (50.13)			
OTHERS_FAM	75 (9.72)			
OTHERS_FOR	269 (34.84)			
OTHERS_INST	11 (1.42)			
SECTOR	404 (52.33)			
LSH_BOARD	503 (65.16)			
CEOFSH	232 (30.05)			

n = 772

DFBR: Difference between the percentages of the board seats controlled by the family minus the percentage of the cash flow rights held by the family. NLSH: Number of significant (over 3%) owners (excluding the largest). VOTING 2341: The sum of the voting rights of the second largest shareholder, the third shareholder and the fourth shareholder divided by the voting rights of the largest shareholder. SIZE: Logarithm of total book assets in thousands of Euros. AGE: Logarithm of firm age. LEV: Book value of total debt/book value of total assets. FF_CFR: Sum of the cash flow rights of family ultimate owners when the family holds more than 10% of the shares. BOARD_SIZE: Total number of directors. ROA: Return on assets. WEDGE: Difference between control rights and cash flow rights. FF10: A dummy variable that adopts the value of one if the largest (direct or indirect) or ultimate shareholder is a family or an individual over the 10% threshold and zero in other cases. DDFBR: A dummy variable that adopts the value of one if the family firm has a positive value in DFBR and zero in other cases. MLSH: Dummy variable that takes the value of one if there are multiple significant (over 3%) large owners apart from the largest, and zero otherwise. WHOCONTROLS1: Dummy variable that takes the value of one if the firm has only one large shareholder, and zero otherwise. WHOCONTROLS2: Dummy variable that takes the value of one if the firm has multiple large owners and the large shareholder has less voting power than the remaining owners (the second, the third and the fourth owner), and zero otherwise. WHOCONTROLS3: Dummy variable that takes the value of one if the firm has multiple large owners and the largest shareholder has more voting power than the sum of the remaining owners (the second, the third and the fourth owner), and zero otherwise. OTHERS_FAM: Dummy variable that takes the value of one if all blockholders are families and individuals over the 3% threshold, and zero otherwise. OTHERS_FOR: Dummy variable that takes the value of one if other blockholders except the largest are foreign firms over the 3% threshold and zero otherwise. OTHERS_INST: Dummy variable that takes the value of one if other blockholders except the largest are institutional investors over the 3% threshold, and zero otherwise. SECTOR: Dummy variable that takes the value of one if the firm belongs to a regulated industry and zero otherwise. LSH_BOARD: Dummy variable that takes the value of one when the other large owners except the family are on the board of directors and zero otherwise. CEOFSH: Dummy variable that adopts the value of one if the CEO is also the largest shareholder of the firm and zero in other cases.

Table 3. Correlation matrix of main explanatory and control variables (second stage of Heckman model)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. DFBR	1															
2. MLSH	0.275***	1														
3. NLSH	0.317***	0.609***	1													
4. VOTING2341	0.420***	0.603***	0.794***	1												
5. WHOCONTROLS1	-0.275***	-1.000	-0.609***	-0.603***	1											
6. WHOCONTROLS2	0.337***	0.307***	0.631***	0.834***	-0.307***	1										
7. WHOCONTROLS3	-0.133***	0.399***	-0.184***	-0.384***	-0.399***	-0.750***	1									
8. OTHERS_FAM	0.035	0.133***	-0.168***	-0.079*	-0.133***	-0.156***	0.244***	1								
9. OTHERS_FOR	-0.135***	0.284***	0.154***	0.154***	-0.285***	0.063†	0.138***	-0.145***	1							
10. OTHERS_INST	-0.028	0.042	0.087*	0.047	-0.042	0.002	0.027	-0.034	0.148***	1						
11. SIZE	-0.194***	-0.071†	-0.084*	-0.018	0.072†	0.065†	-0.113**	-0.149***	0.167***	0.064†	1					
12. AGE	0.155***	0.002	-0.066†	0.017	-0.002	0.014	-0.013	-0.011	-0.015	-0.075**	0.201***	1				
13. LEV	-0.130***	0.124***	-0.079*	-0.080*	0.124***	0.005	-0.092*	-0.054	-0.025	0.011	0.432***	0.178***	1			
14. SECTOR	-0.061†	-0.127***	-0.097**	-0.012	0.127***	-0.003	-0.085*	-0.008	0.101**	0.048	0.151***	-0.189***	0.150***	1		
15. FF_CFR	-0.465***	-0.354***	-0.400***	-0.637***	0.354***	-0.482***	0.218***	0.049	-0.155***	-0.069†	-0.097**	-0.115**	0.069†	-0.080*	1	
16. BOARD_SIZE	0.011	0.100**	0.165***	0.208***	-0.100**	0.227***	-0.149***	-0.149***	0.099**	0.001	0.617***	0.223***	0.171***	0.165***	-0.206***	1
17. LSH_BOARD	-0.049	0.054	0.206***	0.242***	-0.054	0.231***	-0.184***	0.031	0.098**	-0.006	0.261***	0.126***	0.099**	0.208***	-0.316***	0.365***

† p < 0.10; * p < 0.05; ** p < 0.01; *** p < 0.001

n= 786

DFBR: Difference between the percentages of the board seats controlled by the family minus the percentage of the cash flow rights held by the family. MLSH: Dummy variable that takes the value of one if there are multiple significant (over 3%) large owners apart from the largest, and zero otherwise. NLSH: Number of significant (over 3%) owners (excluding the largest). VOTING 2341: The sum of the voting rights of the second largest shareholder, the third shareholder and the fourth shareholder divided by the voting rights of the largest shareholder. WHOCONTROLS1: Dummy variable that takes the value of one if the firm has only one large shareholder, and zero otherwise. WHOCONTROLS2: Dummy variable that takes the value of one if the firm has multiple large owners and the largest shareholder has less voting power than the remaining owners (the second, the third and the fourth owner), and zero otherwise. WHOCONTROLS3: Dummy variable that takes the value of one if the firm has multiple large owners and the largest shareholder has more voting power than the sum of the remaining owners (the second, the third and the fourth owner), and zero otherwise. OTHERS_FAM: Dummy variable that takes the value of one if all blockholders are families and individuals over the 3% threshold, and zero otherwise. OTHERS_FOR: Dummy variable that takes the value of one if other blockholders except the largest are foreign firms over the 3% threshold and zero otherwise. OTHERS_INST: Dummy variable that takes the value of one if other blockholders except the largest are institutional investors over the 3% threshold, and zero otherwise. SIZE: Logarithm of total book assets in thousands of Euros. AGE: Logarithm of firm age. LEV: Book value of total debt/book value of total assets. SECTOR: Dummy variable that takes the value of one if the firm belongs to a regulated industry and zero otherwise. FF_CFR: Sum of the cash flow rights of family ultimate owners when the family holds more than 10% of the shares. BOARD_SIZE: Total number of directors. ROA: Return on assets. LSH_BOARD: Dummy variable that takes the value of one when the other large owners except the family are on the board of directors and zero otherwise.

Table 4. The impact of the existence, number and voting power of other large shareholders on family firm disproportionate board representation

VARIABLES	MODEL1	MODEL2	MODEL 3	MODEL 4
MLSH	1.860 (0.67)			
NLSH		1.558** (2.98)		
VOTING 2341			10.479*** (5.04)	
WHOCONTROLS1				-1.860 (-0.68)
WHOCONTROLS2				9.339*** (4.09)
SIZE	-4.552*** (-6.44)	-4.402*** (-6.25)	-4.470*** (-6.46)	-4.715*** (-6.77)
AGE	3.399** (2.75)	4.214** (3.34)	3.806** (3.14)	3.632** (2.99)
LEV	0.900 (0.35)	1.256 (0.49)	1.114 (0.45)	1.202 (0.48)
SECTOR	4.428* (2.33)	5.048** (2.69)	4.635* (2.53)	4.828* (2.58)
FF_CFR	-0.398*** (-8.63)	-0.335*** (-7.00)	-0.226*** (-4.20)	-0.306*** (-6.03)
BOARD_SIZE	1.057** (2.97)	0.954** (2.69)	1.061** (3.06)	1.051** (3.00)
LSH_BOARD	-13.006*** (-6.29)	-14.345*** (-6.83)	-15.528*** (-7.46)	-14.377*** (-6.97)
Annual effect considered	Yes	Yes	Yes	Yes
Inverse Mills ratio Lambda	5.775† (1.74)	6.507† (1.96)	6.349† (1.95)	5.222 (1.59)
Wald	$\chi^2(15) = 257.51***$	$\chi^2(15) = 268.98***$	$\chi^2(15) = 294.12***$	$\chi^2(16) = 282.77***$
R-Squared	0.336	0.353	0.352	0.353
No. observations	786	786	786	786
No. family firms' observations	523	523	523	523

Values are unstandardized coefficients, with t values in parentheses. Wald test is a χ^2 test of all coefficients in the regression model except the constant; they are equal to 0. Models are estimated with the constant but are not reported in the table.

Dependent variable is DFBR: Difference between the percentages of the board seats controlled by the family minus the percentage of the cash flow rights held by the family.

MLSH: Dummy variable that takes the value of one if there are multiple significant (over 3%) large owners apart from the largest, and zero otherwise. NLSH: Number of significant (over 3%) owners (excluding the largest). VOTING 2341: The sum of the voting rights of the second largest shareholder, the third shareholder and the fourth shareholder divided by the voting rights of the largest shareholder. WHOCONTROLS1: Dummy variable that takes the value of one if the firm has only one large shareholder, and zero otherwise. WHOCONTROLS2: Dummy variable that takes the value of one if the firm has multiple large owners and the largest shareholder has less voting power than the remaining owners (the second, the third and the fourth owner), and zero otherwise. SIZE: Logarithm of total book assets in thousands of Euros. AGE: Logarithm of firm age. LEV: Book value of total debt/book value of total assets. SECTOR: Dummy variable that takes the value of one if the firm belongs to a regulated industry and zero otherwise. FF_CFR: Sum of the cash flow rights of family ultimate owners when the family holds more than 10% of the shares. BOARD_SIZE: Total number of directors. LSH_BOARD: Dummy variable that takes the value of one when the other large owners except the family are on the board of directors and zero otherwise.

† p < 0.10; * p < 0.05; ** p < 0.01; *** p < 0.001

Table 5. The impact of the typology of other large shareholders on family firm disproportionate board representation

VARIABLES	MODEL1	MODEL 2	MODEL 3
OTHERS_FAM	2.077 (0.70)		
OTHERS_FOR		-9.288*** (-4.88)	
OTHERS_INST			-13.892 (-1.38)
SIZE	-4.497*** (-6.30)	-4.057*** (-5.81)	-4.468*** (-6.30)
AGE	3.347** (2.72)	3.441** (2.86)	3.332** (2.71)
LEV	0.838 (0.33)	0.245 (0.10)	0.696 (0.27)
SECTOR	4.095* (2.19)	4.932** (2.70)	4.343* (2.33)
FF_CFR	-0.416*** (-10.46)	-0.447*** (-11.35)	-0.420*** (-10.54)
BOARD_SIZE	1.076** (3.03)	0.970** (2.79)	1.036** (2.92)
LSH_BOARD	-13.056*** (-6.31)	-12.598*** (-6.23)	-13.123*** (-6.35)
Annual effect considered	Yes	Yes	Yes
Inverse Mills ratio Lambda	5.604† (1.68)	4.666 (1.43)	5.406 (1.62)
Wald	$\chi^2(15) = 257.71***$	$\chi^2(15) = 293.17***$	$\chi^2(15) = 259.98***$
R-Squared	0.335	0.358	0.320
No. observations	786	786	786
No. family firms' observations	523	523	523

Values are unstandardized coefficients, with t values in parentheses. Wald test is a χ^2 test of all coefficients in the regression model except the constant; they are equal to 0. Models are estimated with the constant but are not reported in the table.

Dependent variable is DFBR: Difference between the percentages of the board seats controlled by the family minus the percentage of the cash flow rights held by the family.

OTHERS_FAM: Dummy variable that takes the value of one if all blockholders are families and individuals over the 3% threshold, and zero otherwise. OTHERS_FOR: Dummy variable that takes the value of one if other blockholders except the largest are foreign firms over the 3% threshold and zero otherwise. OTHERS_INST: Dummy variable that takes the value of one if other blockholders except the largest are institutional investors over the 3% threshold, and zero otherwise. SIZE: Logarithm of total book assets in thousands of Euros. AGE: Logarithm of firm age. LEV: Book value of total debt/book value of total assets. SECTOR: Dummy variable that takes the value of one if the firm belongs to a regulated industry and zero otherwise. FF_CFR: Sum of the cash flow rights of family ultimate owners when the family holds more than 10% of the shares. BOARD_SIZE: Total number of directors. LSH_BOARD: Dummy variable that takes the value of one when the other large owners except the family are on the board of directors and zero otherwise.

† p < 0.10; * p < 0.05; ** p < 0.01; *** p < 0.001

APPENDIX 1

First stage probit regression: Predicting the propensity for being a family firm

VARIABLES	MODEL 1
SIZE	-0.165*** (-4.87)
AGE	-0.094 (-1.15)
LEV	0.085 (0.31)
SECTOR	-0.006 (-0.05)
ROA	-1.98*** (-3.67)
WEDGE	0.037*** (4.47)
CEOFSH	2.163*** (9.03)
Annual effect considered	Yes
Number of total observations	786
Number of censored observations	263
Chi2	238.14***
Log-likelihood	-335.956
Pseudo-R2	0.262

Values are unstandardized coefficients, with t values in parentheses. Wald test is a χ^2 test of all coefficients in the regression model, except the constant; they are equal to 0.

† p < 0.10; * p < 0.05; ** p < 0.01; *** p < 0.001

Dependent variable is FF10: A dummy variable that adopts the value of one if the largest (direct or indirect) or ultimate shareholder is a family or an individual over a 10% threshold and zero in other cases.

SIZE: Logarithm of total book assets in thousands of Euros. AGE: Logarithm of firm age. LEV: Book value of total debt/book value of total assets. SECTOR: Dummy variable that takes the value of one if the firm belongs to a regulated industry and zero otherwise. ROA: Return on assets. WEDGE: Difference between control rights and cash flow rights. CEOFSH: Dummy variable that adopts the value of one if the CEO is also the largest shareholder of the firm and zero in other cases.

APPENDIX 2

Descriptive statistics of variables included in the Robustness and Additional Results Section

	Mean	Min.	Max.	St. Dev.
DFBR2	-3.301	-97.721	53.846	26.580
DFBR3	-35.767	-147.38 0	50	34.390
NLSH5%	1.655	0	3	1.158
NLSH10%	0.549	0	2	0.724
VOTING2341_2	-21.352	-99.5	20.675	28.365
PINDEP	33.003	0	100	17.179

Number of observations = 1 (Percentage)	
MLSH5%	600 (77.72)
MLSH10%	317 (41.06)
AGE2	Value 0: 218 (28.24); Value 1: 273 (35.36); Value 2: 282 (36.40)
SSHVAR x MLSH	71 (9.20)
TSHVAR x MLSH	59 (7.64)
IVSHVAR x MLSH	58 (7.51)
OTHERS_FAM2 x MLSH	70 (9.07)
OTHERS_FOR2 x MLSH	109 (14.12)
OTHERS_INST2 x MLSH	80 (10.36)
ECO_CYCLE	192 (24.87)

n = 772

DFBR2: Difference between the percentages of the board seats controlled by the family minus the percentage of the voting rights held by the family. DFBR3: Difference between the percentages of the board seats controlled by the family corrected by the number of independent directors minus the percentage of the voting rights held by the family. NLSH5%: Number of other large shareholders over 5%. NLSH10%: Number of other large shareholders over 10%. VOTING2341_2: Difference between the sum of voting rights of the second, third and fourth large shareholders, and voting rights of the first shareholder. PINDEP: % of independent directors. MLSH5%: Dummy variable that takes the value of one if there are multiple significant (over 5%) large owners apart from the largest, and zero otherwise. MLSH10%: Dummy variable that takes the value of one if there are multiple significant (over 10%) large owners apart from the largest, and zero otherwise. AGE2: Dummy variables that take the value of zero if firm age is lower than 25 years, value of one if firm age is between 25-50 years old, value of two if firm is more than 50 years old. SSHVAR: Dummy variable that takes the value of one if the variation of the holdings owned by the second largest owner between two periods (t1-t0) increases above 3%, and zero otherwise. TSHVAR: Dummy variable that takes the value of one if the variation of the holdings owned by the third largest owner between two periods (t1-t0) increases above 3%, and zero otherwise. IVSHVAR: Dummy variable that takes the value of one if the variation of the holdings owned by the fourth largest owner between two periods (t1-t0) increases above 3%, and zero otherwise. OTHERS_FAM2: Dummy variable that takes the value of one if a family or individual enters the firm as a large shareholder, or a family or individual increases their shareholdings above 3% and zero otherwise. OTHERS_FOR2: Dummy variable that takes the value of one if a foreign investor enters the firm as another large shareholder or increases its ownership above 3% and zero otherwise. OTHERS_INST2: Dummy variable that takes the value of one if institutional investors enter the firm's capital or increase their ownership in the firm's capital above 3% and zero otherwise. ECO_CYCLE: Dummy variable that takes the value of one from 2005 to 2007 and value 0 from 2008 to 2013.

APPENDIX 3 The impact of the variation of other large shareholders' shareholdings and typology on family firm disproportionate board representation

Panel A: The impact of the variation of other large shareholders' shareholdings on DFBR				Panel B: The impact of the typology of other large shareholders on DFBR			
VARIABLES	MODEL 1	MODEL 2	MODEL 3	VARIABLES	MODEL 4	MODEL 5	MODEL 6
SSHVAR x MLSH	-9.724** (-3.12)			OTHERS_FAM2 x MLSH	1.519 (0.51)		
TSHVAR x MLSH		-8.123* (-2.06)		OTHERS_FOR2 x MLSH		-7.586** (-2.69)	
IVSHVAR x MILSH			-3.334 (-0.95)	OTHERS_INST2 x MLSH			-5.970* (2.26)
SIZE	-4.311*** (-1.11)	-4.581*** (-6.51)	-4.538*** (-6.72)	SIZE	-4.201*** (-5.26)	-3.804*** (-4.72)	-4.028*** (-5.06)
AGE	3.487** (2.85)	3.322** (2.70)	3.425** (2.77)	AGE	3.746** (2.73)	3.827** (2.81)	3.633** (2.66)
LEV	0.973 (0.38)	0.976 (0.38)	0.754 (0.30)	LEV	1.109 (0.43)	0.885 (0.34)	0.956 (0.37)
SECTOR	3.906* (2.11)	3.928* (2.11)	4.215* (2.26)	SECTOR	4.844* (2.40)	4.663* (2.32)	4.323* (2.14)
FF_CFR	-0.422*** (-10.71)	-0.412*** (-10.44)	-0.417*** (-10.49)	CASH_FLOW	-0.492*** (-10.31)	-0.504*** (-10.76)	-0.506*** (-10.76)
BOARD_SIZE	0.954** (2.70)	1.060*** (3.00)	1.047** (2.95)	BOARD_SIZE	0.959* (2.45)	0.874* (2.24)	0.878* (2.24)
LSH_BOARD	-12.908*** (-6.30)	-13.137*** (-6.37)	-13.008*** (-6.29)	LSH_BOARD	-12.653*** (-5.81)	-12.887*** (-5.96)	-13.060*** (-6.01)
Annual effect considered	Yes	Yes	Yes	Annual effect considered	Yes	Yes	Yes
Inverse Mills ratio Lambda	5.958† (1.81)	5.786† (1.75)	5.815† (1.75)	Inverse Mills ratio Lambda	6.405† (1.96)	6.642* (2.05)	6.476* (1.99)
Wald	$\chi^2(15) = 271.21***$	$\chi^2(15) = 263.25***$	$\chi^2(15) = 258.21***$	Wald	$\chi^2(14) = 248.21***$	$\chi^2(14) = 259.24***$	$\chi^2(14) = 255.91***$
R-Squared	0.346	0.322	0.336	R-Squared	0.360	0.372	0.369
No. observations	786	786	786	No. observations	687	687	687
No. family firms' observations	523	523	523	No. family firms' observations	424	424	424

Values are unstandardized coefficients, with t values in parentheses. Wald test is a χ^2 test of all coefficients in the regression model except the constant; they are equal to 0. Models are estimated with the constant but it is not reported in the table. † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Dependent variable is DFBR: Difference between the percentages of the board seats controlled by the family minus the percentage of the cash flow rights held by the family. SSHVAR: Dummy variable that takes the value of one if the variation of the holdings owned by the second largest owner between two periods (t1-t0) increases above 3%, and zero otherwise. TSHVAR: Dummy variable that takes the value of one if the variation of the holdings owned by the third largest owner between two periods (t1-t0) increases above 3%, and zero otherwise. IVSHVAR: Dummy variable that takes the value of one if the variation of the holdings owned by the fourth largest owner between two periods (t1-t0) increases above 3%, and zero otherwise. OTHERS_FAM2: Dummy variable that takes the value of one if a family or individual enters the firm as a large shareholder, or a family or individual increases their shareholdings above 3% and zero otherwise. OTHERS_FOR2: Dummy variable that takes the value of one if a foreign investor enters the firm as another large shareholder or increases its ownership above 3% and zero otherwise. OTHERS_INST2: Dummy variable that takes the value of one if institutional investors enter the firm's capital or increase their ownership in the firm's capital above 3% and zero otherwise. MLSH: Dummy variable that takes the value of one if there are multiple significant (over 3%) large owners apart from the largest, and zero otherwise. SIZE: Logarithm of total book assets in thousands of Euros. AGE: Logarithm of firm age. LEV: Book value of total debt/book value of total assets. SECTOR: Dummy variable that takes the value of one if the firm belongs to a regulated industry and zero otherwise. FF_CFR: Sum of the cash flow rights of family ultimate owners when the family holds more than 10% of the shares. BOARD_SIZE: Total number of directors. LSH_BOARD: Dummy variable that takes the value of one when the other large owners except the family are on the board of directors and zero otherwise.