Heterogeneity in Family Firms:
Contextualizing the adoption of family governance mechanisms

Running title: Family governance mechanisms in context

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Introduction

Family firms represent the most common type of organisation in historical and contemporary economies all over the world (Anderson & Reeb, 2003). Even though the label ‘family firm’ connotes a family’s influence on a firm, ambiguities about the definition persist in the literature (Díaz-Moriana, Hogan, Clinton and Brophy, 2019). Traditionally, family involvement in ownership and management and the intention to pass firm ownership to the next generation have been considered the factors that distinguish family firms from non-family companies (Dibrell & Memili, 2019). Moving beyond factors towards a more theoretical approach, scholars seeking to define the concept have focused on the ‘essence’ of the family-firm approach (Chua, Chrisman, & Sharma, 1999), its distinctiveness – familiness (Habbershon & Williams, 1999) and the non-economic goals that family firms pursue (Gomez-Mejia, Haynes, Nunez-Nickel, Jacobson, & Moyano-Fuentes, 2007).

Corporate governance has been the primary topic of investigation in articles on family firms (Chrisman, Chua, Le Breton-Miller, Miller, & Steier, 2018; De Massis, Sharma, Chua, & Chrisman, 2012). Governance structures in family firms support both the family and the business and seek to separate the roles of ownership from those of management (Gimeno, Baulenas, & Coma-Cros, 2010). The characteristics, processes and structures of company governance bodies, especially boards of directors, have been widely addressed (Bammens, Voordeckers, & Van Gils, 2008). However, knowledge about family governance mechanisms remains in its infancy (Memili, Singal, & Barrédy, 2016; Suess, 2014). Family governance differs slightly from mainstream corporate governance (Mustakallio, Autio, & Zahra, 2002; Saidat, Silva, & Seaman, 2018; Schulze, Lubatkin,
Dino, & Buchholtz, 2001). Family governance mechanisms—informal meetings and family assemblies, councils and protocols—link a family and a business, creating opportunities for family members to discuss all related issues (Frank, Kessler, Bachner, Fuetsch, & Suess-Reyes, 2019; Mustakallio, Autio, & Zahra, 2002). The main function of these systems is to maintain and increase family members’ unity and communication among themselves (Gallo & Kenyon-Rouvinez, 2005). Although family governance mechanisms have proved useful, only a small percentage of family firms have adopted them (Gallo & Kenyon-Rouvinez, 2005; Sharma & Nordqvist, 2008). A recent study developed in Spain by the Instituto de la Empresa Familiar (Family Firms’ Institute) showed that only 11.3% of family firms have a family council. Regarding family protocols, the study showed that 74.3% of companies do not think they need one, 6.3% do not know what one is and only 11.3% have developed a protocol to regulate the relationship between family and business.

While these figures may be a cause for concern, one limitation in the family firm governance literature is the assumption of homogeneity regarding the way that family firms should be governed (Jaffe & Lane, 2004; Melin & Nordqvist, 2007; Sharma & Nordqvist, 2008).

Despite the recognition of the importance of family governance (Gallo & Kenyon-Rouvinez, 2005), there is little research on the governance practices of distinct types of family firms (Nordqvist, Sharma, & Chirico, 2014). An emerging understanding of the heterogeneity of family firms has led to the development of family firm typologies (e.g. Stanley, Hernandez-Linares, Lopez-Fernandez, & Kellermanns, 2019; Westhead & Howorth, 2007); however, this development has primarily aimed at understanding the differences between family- and non-family firms and a single dimension, such as family involvement in ownership and management (Chua, Chrisman, Steier, & Rau, 2012;
Neubaum, Kammerlander, & Brigham, 2019). To a lesser extent, this development has aimed at exploring governance-related typologies and the governance mechanisms distinguishing firms.

Given this research gap, the objective of this study is to develop a family firm typology based on distinguishing factors: family involvement in ownership and/or management, the generation in control and company size. Moreover, inspired by the social systems theory (Frank, Suess-Reyes, Fuetsch, & Kessler, 2018; Frank, Kessler, Rush, Suess-Reyes, & Weismeier-Sammer, 2017, Frank, Lueger, Nosé, & Suchy, 2010), we use our typology to understand the association between firm types and the two most relevant and prescribed family governance mechanisms—family councils and family protocols (Berent-Braun, & Uhlaner, 2012; Suess, 2014). We perform a two-step cluster analysis of a sample of 490 Spanish family firms and find four types of firms. We argue that the types of firms that emerge from our study have different levels of complexity and are characterised by the communication needs of the family, owner and managers. Consequently, they are differently associated with the development of a family council and/or a family protocol.

This study makes three contributions to knowledge about corporate governance in family firms. First, we develop a typology of family firms that combines family involvement and complexity and addresses heterogeneity. We focus on family involvement factors (i.e. family involvement in ownership and management), which capture the unique essence of a family business (Carney, 2005; Stanley et al., 2019), and family and firm characteristics (i.e. generation in control and company size), which convey the complexity of the relationships within the organisation (Downing, 2005). These factors shape the differentiation of family firms and may determine the adoption of distinct family firm governance structures. They highlight the importance of understanding the family firm
heterogeneity that influences family businesses’ governance structures (Nordqvist & Melin, 2002). Second, this work responds to the calls in the family firm literature to apply more holistic theories to family governance research (Suess, 2014). We demonstrate the instrumentality of the social system theory (Frank et al., 2010) in understanding the choices family firms make regarding their communication needs and adoption of family governance mechanisms. Third, this study applies classificatory methods to better understand the characteristics of family firms, illustrating how the two-step cluster approach can provide more detailed descriptions of family-firm features and their implications.

The rest of the paper is structured as follows. First, we provide a literature review on family firm typologies and present the factors that capture family firm heterogeneity. Next, we present the social systems theory as a useful perspective for exploring the adoption of family firms’ respective governance mechanisms. Then, we present our data collection methodology and results. The paper concludes with a discussion of the research implications, limitations and future directions.

**Family Firm Typology: Identification of Dimensions**

Family firms are highly heterogeneous (Chua et al., 2012), and such heterogeneity must be factored into the design of organisational initiatives (Westhead & Howorth, 2007). Thus, the identification of types of family firms can be useful in articulating the differences in organisational forms and understanding their outcomes (Gibb, 2006; Neubaum et al., 2019). Typologies can explain variations among family firms (Chrisman et al., 2012) and provide a starting point for understanding the appropriate governance mechanism for each type of family firm (Nordqvist et al., 2014).
Various typologies of family firms have been proposed based on the level of family involvement in ownership and management (e.g. Gibb 2006; Westhead & Howorth, 2007). Nordqvist et al. (2014) suggest that the nature of family involvement determines which governance mechanism is better suited to an organisation and its goals. According to the authors, ‘in general, the higher the variance of involvement in ownership and managerial roles, the greater will be the need of different governance bodies’ (Nordqvist et al., 2014, p. 204). Recently, Diéguez-Soto, López-Delgado, and Rojo-Ramírez (2015), Barontini and Bozzi (2018) and Stanley et al. (2019) presented similar approaches, albeit with different links to important organisational outcomes (Neubaum et al., 2019).

Following Nordqvist et al. (2014), we address family firm heterogeneity by identifying a typology that will consider family involvement variables (i.e. family involvement in ownership and management). We also consider sources of managerial and organisational complexity as they pertain to the characteristics of the owner family (i.e. the generation in control) and firm size. The combination of these variables comprises the contexts and the level of managerial complexity. Below, we describe the dimensions of our typology in more detail.

**Family Involvement in Ownership**

Family involvement in ownership (FIO) has been included in many family firm typologies (e.g. Nordqvist et al., 2014; Stanley et al., 2019). Family firm researchers agree that FIO brings several benefits to the organisation (Sciascia & Mozzola, 2008). Among its positive effects are less managerial myopia, more valuable investments, better control of managers, long-lasting relationships with other stakeholders and high levels of internationalisation (Fama & Jensen, 1983; Zahra, 2003).
Variance in the family ownership of a firm creates an organisational context that may determine how owners communicate with one another and, consequently, the intensity of the communication system (Lansberg, 1988). When several family members hold the company capital, maintaining communication among them is necessary to set priorities and account for different sensibilities. However, when only one family shareholder holds 100% of the capital, or a dominant majority, the family member’s priorities will likely overshadow the formation of the firm’s objectives and priorities. Thus, family firms develop their own unique communications systems to facilitate the sharing of experiences, priorities and knowledge (Frank et al., 2017). These systems influence the adoption of formal governance mechanisms that fit the patterns and complexity of the communication within the owner’s family.

**Family Involvement in Management**

Family firms can be managed by family or non-family members, who determine the nature of family involvement in management (FIM) (Corbetta & Montemerlo, 1999). FIM is an important differentiation variable between family firms, and it can take different forms (Stanley et al., 2019). Family members may serve on the top management team (TMT) in different authority positions, such as the CEO or as members of the board of directors (Zahra, 2003).

A family CEO confers a strong capacity to influence decision-making in the firm to the individual holding such a position or to his/her family branch. Several authors have hypothesised the positive effects of a family member (typically, a founder or founder descendant) being the CEO (e.g. Anderson & Reeb, 2003; Schulze et al., 2001). Likewise, the presence of a family CEO can create a sense of psychological ownership among family members (Pierce, Kostova, & Dirks, 2003). However, in family firms, if the CEO
is a family member, he or she may assume a dominating role, taking overall responsibility to lead the performance of the entire organisation, which may constrain communications with other family members and exacerbate tensions between them (Le Breton-Miller & Miller, 2006; Minichilli, Corbetta, & MacMillan, 2010). In addition, when family members assume leading managerial positions with psychological ownership, it may engender the expectation that the succession of the CEO position should remain within the family. In contrast, when the owner family delegates the managerial roles to non-family executives, the owner family can adopt a role that is more oriented towards control and establish a general strategy for the company. As a non-family CEO’s tenure increases, he or she may develop a feeling of psychological possessiveness towards the family firm (Huybrechts, Voordeckers, & Lybaert, 2012). The owner family may need to establish a communication system to set priorities and transmit them to the company. Consequently, FIM can significantly influence the implementation of different family governance mechanisms.

**Generation in Control**

The generation in control (GC) leads the family firm and is a factor that introduces different levels of complexity in terms of personal and family relationships. It can determine the necessity of adopting family governance mechanisms and the decision about which one to adopt (Bammens, Voordeckers, & Van Gils, 2008; Lubatkin, Schulze, Ling, & Dino, 2005). Typically, younger family firms tend to prefer less formal governance structures, while mature firms tend to professionalise (Stanley et al., 2019). In later generations, several categories of owners, including in-law relatives, coexist (Nordqvist et al., 2014). Having different owner categories results in a higher need for frequent communication and induces more varied social interactions, which may impact
the need to adopt governance mechanisms (Lubatkin et al., 2005). However, when a new
generation takes over, social interactions may decline, and family members’
identification can decrease with the organisation (Mustakallio et al., 2002).

*Company Size*

Finally, it is important to consider company size as a factor in differentiating family firms
(Stanley et al., 2019). Company size can show the degree of division and complexity in
a business (Corbetta, 1995). Company size is a factor that is closely related to the survival,
investment activity and needs of the family firm (Nordqvist et al., 2014). A larger size
implies a greater availability of financial and managerial resources (Claver, Rienda, &
Quer, 2009). Larger family firms can provide incentive compensation systems to align
the interests of managers with owners, reducing the risk of agency conflict (Fang,
Randolph, Memili, & Chrisman, 2016). Thus, size can decrease costs and increase the
benefits of relying on non-family managers (Fang et al., 2015). When an organisation
grows, its complexity increases, its communication systems become more complicated,
and more professional management practices may be required (Fiegener, Brown, Dreux,
& Dennis, 2000). Some family firm researchers argue that the size of a family business
grows in subsequent generations and that it is the size, rather than the generation, that
influences the level of professionalism in a firm (e.g. Sonfield & Lussier, 2004). When
firms grow larger, formal styles of management become more prevalent, reducing the
likelihood of family firm favouritism (Fang et al., 2015).
Family Governance Mechanisms in Family Firms: The Social Systems Theory Perspective

Social systems theory, also called the new system theory (Frank et al., 2010), explains how organisations adopt a governance structure (Suess, 2014). Thus, social systems theory is appropriate for social science research on family firms because it focuses on communication structures as the foundation of social systems (Frank et al., 2018; Von Schlippe & Frank, 2013). Previous family firm studies have employed a number of approaches, including agency theory (e.g. Lubatkin, 2007; Schulze et al., 2001), stewardship theory (e.g. Eddleston & Kellermanns, 2007; Miller & Le Breton-Miller, 2005), and institutional theory (e.g. Melin & Nordqvist, 2007), to examine governance in family firms (Goel et al., 2014; Melin & Nordqvist, 2007; Sundaramurthy & Lewis, 2003). In recent decades, social systems theory has become useful for family firm research (Frank et al., 2018; Simon, 2012; Von Schlippe & Frank, 2013), especially for familiness (Frank et al., 2017; Frank et al., 2010) and governance (Suess, 2014).

Social systems theory is a branch of systems theory dealing with the communication systems that underlie the structures of a family and a business (Frank et al., 2017). From the perspective of social systems theory (Frank et al., 2018; Von Schlippe & Frank, 2013), family firms represent a unique communication system that incorporates the decision premises shaped by a couple of systems: family and business (Weismeier-Sammer, Frank, & Von Schlippe, 2013). The two systems use each other to build their structures (Von Schlippe & Frank, 2013). This theory assumes that family firms emerge through a sequence of intertwined communication decisions (Frank et al., 2017). Therefore, communication is the constitutive element of a family business, and it can make the family business efficient in creating a meaningful and validated network of decisions (Frank et al., 2017).
According to a systems approach (Donnelley, 1964; Tagiuri & Davis, 1982), the family governance system is shaped by forums that promote collaborative discussions to secure cohesion within the family (Gallo & Kenyon-Rouvinez, 2005; Soleimanof, Rutherford, & Webb, 2017). From a systems-theoretical point of view, implementing family governance is a unique communication process for each family firm. It starts with unplanned discussions directed by a few simple rules and develops into a formalised, guided conversation (Frank et al., 2018). Family councils and protocols have been considered the two formal family governance mechanisms most relevant to facilitating communication in family firms (Berent-Braun & Uhlaner, 2012; Suess, 2014). Family firm consultants and associations frequently promote family councils and protocols as formal mechanisms for facilitating the communication process (Carlock & Ward, 2001; Melin & Nordqvist, 2007).

Family Council

A family council is a governance mechanism that is unique to family firms (Siebels & zu Knyphausen-Aufseß, 2012). Governing communication and information, a family council provides a setting in which different voices are heard, consolidated and presented to the board and the TMT (Gallo & Kenyon-Rouvinez, 2005). The prime function of a family council is to voice shareholders’ concerns formally and accommodate family members’ preferences (Jaffé & Lane, 2004). A family council might promote cohesion among shareholders, thus reducing information asymmetry, increasing social interaction and ensuring the effective continuity and profitability of the core business (Jaffé & Lane, 2004; Siebels & zu Knyphausen-Aufseß, 2012). The adoption of a family council demands open communication between the business and the family (Brenes, Madrigal, & Requena, 2011; Mustakallio et al., 2002) and may be critical for opening formal
communication channels through which family members can discuss family and business issues together and in subgroups (Lansberg, 1988).

A family council is a systematic communication forum that grows and evolves with a family (Hutcheson, Lane, & Jaffe, 2003; Sundaramurthy, 2008). Considered the most important system of family governance, a family council often comprises representatives from different generations and family branches and should include in-laws and blood relatives (Gallo & Kenyon-Rouvinez, 2005). Based on family communication patterns, as suggested by Fitzpatrick and Ritchie (1994), and social systems theory, we assume that family firms with family councils may be highly oriented towards conversation. We argue that intensive communication systems generated by firms in which the main family investor owns a low ratio of shares (FIO) can create trust, which may encourage the implementation of family councils. However, when the power of a family CEO increases, a ‘patriarchal aura’ grows and can constrain communication (Voordeckers et al., 2007). In this context, the need to adopt family councils may not be appreciated.

Furthermore, when a new generation (GC) takes over, and the organisation grows (company size), its communication system may become more complicated, and a family council may be required. Thus, the firm’s family and business interests become more complex in terms of family involvement in ownership and management, the generation in control and company size. Family firms can develop stronger communication processes and may develop family councils. Hence:

**Hypothesis 1.** The adoption of family councils will be more likely in family firms characterised by high levels of complexity (i.e. later GC and larger company size) and no dominant actors (shared FIO and lower levels of FIM).
A family protocol or family constitution is a governance mechanism that formally describes the rules of interaction between family members and the business (Siebels & zu Knyphausen Aufseß, 2012). It is a collection of policies on how the family and business interact. They are highly heterogeneous but can contain some of the following issues: a description of family values; decisions about how the family firm should be governed and managed; rules about the participation of family members in the company (ownership and employment); agreements about succession and leadership; norms about the economic rights of the family members (liquidity, dividends, company valuation); orientations regarding conflict resolutions and the preservation of family harmony; the social responsibility of the family company; codes of conduct; and contingency plans (Gallo & Kenyon-Rouvinez, 2005). It is a formal, living, flexible document that enhances open and transparent communication within and between the family and the business (Berent-Braun & Uhlaner, 2012; Gimeno et al., 2010). Family protocols formalise communication processes, strengthening a shared commitment to norms and values (Neubauer & Lank, 2016). Family protocols mostly revolve around anticipating potential conflicts related to succession processes and the incorporation of family members in managerial positions in the firm. They are intended to create policies to provide potential solutions to issues that may become conflictive, reducing family members’ interference in ownership and management (Gallo & Kenyon-Rouvinez, 2005). Thus, the development of family protocols is meant to facilitate trust, goal alignment and family firm continuity (Berent-Braun & Uhlaner, 2012; Suess, 2014).

Drawing on social systems theory and Fitzpatrick and Ritchie (1994), we assume that family firms with high family involvement in management and a need to prevent potential succession problems will be more oriented towards formalising norms and agreements.
through protocols. However, if a unique, powerful family member (e.g. the founder, who holds the majority of the shares and is the CEO of the company) dominates the firms, he or she will be inclined to interact in person, through informal communication processes and consider the adoption of family protocols unnecessary.

When managerial functions are transferred to a non-family CEO, family members are likely to adopt a different role (control). Issues typically included in protocols, such as the incorporation of family members into firm managerial bodies, become less conflictive and problematic. In addition, the non-family CEO may also bring new ideas and skills to the family firm, which can help to clarify the roles of family firm owners, particularly in decisions that affect the family and the business systems (Huybrechts et al., 2013; Sundaramurthy, 2008). According to Aronoff, Ward and Astrachan (1996, p. 232), a non-family CEO helps owners see ‘which hat they are wearing on a particular topic’ (p. 232). In performing this task, the non-family CEO may build formal and informal bridges among family members, substituting the typical role of family protocols.

As the ownership of the firm passes from one generation to another and the company grows, a network of siblings or cousins will control a larger organisation, and some shareholders may not be actively involved in the organisation (Sundaramurthy, 2008). In this context, social interactions and knowledge about the business may naturally decline (Mustakallio et al., 2002). Accordingly, the need to make norms, rules or procedures explicit may help family members understand what is acceptable in the firm, and consequently, the adoption of family protocols may increase. Thus:

_Hypothesis 2. The adoption of family protocols will be more likely in family firms characterised by high levels of complexity (i.e. later GC and larger company size) and a need to regulate family members’ access to managerial positions (higher levels of FIM)._
Data and Methodology

Data

Data collection was performed as part of a broader research project that started in 2017. The sample resulted from a combination of primary and secondary data collections. We obtained primary data from two surveys seeking to characterise Spanish family firms. The definitions of what constitutes a family firm vary widely (Díaz-Moriana et al., 2019; Dibrell & Memili, 2019). For sample identification, we follow the circle model approach to define a family business; it is the most frequently applied method in both research and practice. We use the definition from the Institute of Family Business (2015) in Spain, which states that

A business, independently of its size, is considered a family business when it meets the following conditions: 1. Most of the votes are owned by the person or persons of the family that founded the company, or are owned by the individual who has acquired the social capital of the company, or are owned by their spouses, parents, descendant(s), or direct heirs of the descendant(s). 2. The required majority of votes can be achieved directly or indirectly. 3. At least one representative of the family or relative is involved in the management or governance of the company.

Both surveys asked questions about the adoption of different governance structures. In both cases, the sampling process began with the initial identification of a population of 87,345 businesses that could be clearly characterised as family firms from the SABI1 database. The Spanish network of Chairs in Family Business, under the umbrella of the

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1 SABI Informa Database (Bureau Van Dijk) is the most important source of business, accounting and financial information in Spain.
Spanish Institute of Family Business (Instituto de la Empresa Familiar, IEF), identified the population. One of the surveys was conducted through a questionnaire mailed to the CEOs of 1,200 Spanish family firms randomly selected from the identified population in SABI. It had a 10% response rate (120). The second survey of the same population was conducted using computer-assisted telephone interviewing (CATI). The researchers randomly approached family firms from the initial population and obtained 370 valid responses. Our final sample had a total of 490 valid responses. Secondary data on these firms were obtained from the SABI database.

With regard to the characteristics of the sample, 55.8% of the companies operate in service industries (distribution and retail; finance; hospitality; information and communication; professional, technical and scientific activities; energy and water supplies; transportation and logistics), and 44.2% operate in manufacturing industries.

The companies in the sample are mainly small and medium-sized. They have a turnover of EUR 7,869 million and 38 employees on average, with a median of EUR 2,942 million for turnover and 19 for employees, and a maximum of EUR 253 million and 800 employees, respectively. Regarding their governance structures, 40.2% of them have a formal board of directors, 84% of which are managed by a male CEO.

For both surveys, we adopted procedural remedies to minimise the potential effects of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). First, we designed the questions so that respondents would provide only objective answers, and we combined primary and secondary data to avoid acquiescence or social desirability bias. We checked the consistency of our primary data sources by comparing the characteristics of the companies and found no significant differences in size or profitability within the samples.
Methodology

To identify the profiles in our sample, we conducted a two-step cluster analysis (Chiu, Fang, Chen, Wang, & Jeris, 2001). Two-step cluster analysis involves two stages. First, original cases are grouped into pre-clusters by constructing a cluster feature tree (Okazaki, 2007). Second, the standard hierarchical clustering algorithm on the pre-clusters is applied (Norusis, 2011). These stages produce a range of solutions, which is then reduced to the best number of clusters based on Schwarz’s Bayesian Information Criterion (BIC). This approach avoids the arbitrariness of traditional clustering techniques (Chiu et al., 2001) and provides objectivity (Stanley, Kellermanns, & Zellweger, 2017). This method uses log-likelihood distance measures and automatically determines the number of clusters based on the changes in a distance measure (Chiu et al., 2001); thus, we did not have to predetermine the number of clusters. Two-step cluster analysis was the most appropriate technique for this study, because it can form clusters based on continuous and categorical data (Stanley et al., 2017). Additionally, two-step cluster analysis allowed us to retain full information and provide a rich explanation of our family firm research process. The comparison between the clusters of the baseline parameters was performed using one-way analysis of variance (ANOVA) for parametric variables, the \( \chi^2 \) test for parametric variables and Kruskal-Wallis for nonparametric variables. In conducting a between-profile analysis of covariance (ANCOVA), we tested for differences in the dependent variables (i.e. the existence of family councils and/or family protocols) between the clusters, using cluster membership as the independent variable.

Measures

Dependent variable
The dependent variable is the adoption of formal family governance mechanisms, such as family councils and protocols. Family councils have been adopted as a measure of formal family governance mechanisms for an extensive period (Gersick et al., 1997; Siebels & zu Knyphausen-Aufseß, 2012), whereas family protocols have only recently begun receive explicit consideration as a governance mechanism in the literature (Fleischer, 2018).

**Independent variables**

We treat proxy family involvement in ownership (FIO) as the percentage of capital share that belongs to the major family owner (Kowalewsky, Talavera, & Stetsyuk, 2010). When the main family shareholder holds the majority of the shares (concentrated FIO), it means that the power is concentrated in one person. In contrast, when the main shareholder has a lower percentage of the capital of the company (shared FIO), the power is shared among several family owners. We define FIM as a binary variable that equals 1 if the CEO belongs to the family and 0 otherwise (Voordeckers et al., 2007). GC is measured by distinguishing family firms that are under the control of the first family generation from those that are controlled by second or later generations (Westhead & Howorth, 2007). Firms controlled by the first generation are measured using 1=yes and 0=no. Finally, company size is measured using the logarithm of the number of employees (Zahra, 2003).
Results

Means, standard deviations and correlations of the variables are presented in Table 2.

[Insert Table 2.]

Two-Step Cluster Analysis Results

The two-step cluster analysis results identified four clusters as the optimal solution, according to Schwarz’s Bayesian Information Criterion (BIC = 1.054) The silhouette measure of cohesion and separation (0.4 > 0.0) suggested the validity of the distances within and between the clusters (Norusis, 2011). The results of the comparisons between the clusters indicate significant differences between the profiles in the independent variables. Of the 487 valid cases, 120 (24.6%) were assigned to the first cluster, 165 (33.9%) to the second, 131 (26.9%) to the third and 71 (14.6%) to the fourth (Table 3).

[Insert Table 3.]

Cluster 1 comprises the smallest companies in terms of the number of employees (on average, 6). Companies within this cluster have their capital highly concentrated in the hands of the major shareholder (78%). All the family firms within Cluster 1 have a family CEO and are characterised as being run by their first generation. Cluster 2 constitutes the more frequent profile of family firms in our sample. Companies in Cluster 2 are larger than those in Cluster 1 but have fewer employees (on average, 17 employees) than companies in Cluster 4 (on average, 36 employees). In Cluster 2, the number of shares owned by the main family stockholder ranks between the number of shares of the other groups. Within Cluster 2, 100% of family firms have a family CEO and are controlled by a second or later generation. The size of the firms (on average, 18 employees) within
Cluster 3 is similar to that of Cluster 2, and between that of the other groups. Family firms in Cluster 3 exhibit a lower ownership concentration (shared FIO). Most of the firms have a family CEO (93%) and are mainly characterised as being run by second or later generations (60%). Cluster 4, the smallest cluster in our sample, comprises the largest companies in terms of the number of employees (on average, 36 employees). In Cluster 4, the number of shares owned by the largest family investor is lower than in Cluster 1 but higher than in Clusters 2 and 3. Within this cluster, 100% of the family firms have a non-family CEO and are mainly characterised as being run by a second or later generation. Figure 1 displays the location of each cluster in the three-dimensional grid of the three variables (FIO, FIM, and GC) as well as cluster size.

[Insert Figure 1.]

**Analysis of covariance to test differences in family firm governance**

A post hoc analysis using pairwise comparisons (Scheffe Test), which is one of the most conservative post hoc tests (Winer, 1962), confirmed that the clusters vary significantly across the segmentation variables. The results also indicate that there are significant differences between the clusters regarding family firm corporate governance (Table 4). For the family council factor, post hoc analysis revealed significant differences between Clusters 1 and 3 (p = 0.000), 1 and 4 (p = 0.000), 2 and 3 (p = 0.000), 2 and 4 (p = 0.000) and 3 and 4 (p = 0.000). There was no significant difference between Clusters 1 and 2 (p = 0.980). Post hoc analysis for the family protocol factor showed significant differences between Clusters 1 and 2 (p = 0.002), 1 and 3 (p = 0.000), 2 and 1 (p = 0.002), 2 and 3 (p = 0.000), 2 and 4 (p = 0.070) and 3 and 4 (p = 0.000). There was no significant difference between Clusters 1 and 4 (p = 0.951). Finally, for the family council and protocol factors,
post hoc analysis revealed no significant differences between Clusters 1, 2 and 4 (p = 1.000). There were significant differences between Clusters 1 and 3, 2 and 3 and 3 and 4 (p = 0.000). These results provide support for hypotheses 1 and 2, which generally suggest that types of family firms grouped according to family involvement and complexity will present significant differences in terms of family governance mechanisms. In the following section, we discuss these results in detail.

[Insert Table 4.]

Names are typically assigned to clusters using quantitative differences and existing theories (Stanley et al. 2017). We took into consideration the family firm communication needs, the adopting of family councils and protocols, and the family communication typology by Fitzpatrick and Ritchie (1994). Then, we labelled the resulting clusters as founder-centric, protective, consensual and business-evolved family firms. Table 4 summarises the distinctive family corporate governance styles of these archetypes.

The results indicate that companies in Cluster 1, founder-centric firms, do not emphasise the adoption of family councils and protocols. None of the founder-centric firms has a family council or protocol. Cluster 2, protective firms, has a significantly large number of companies with no family councils (100%) and a low emphasis on the adoption of family protocols (14% have family protocols). Within Cluster 3, consensual firms, there is a heavy emphasis on family councils (100% have family councils), and almost one-third of the companies have family protocols (30.5%). Finally, 22.5% of companies in Cluster 4, business-evolved firms, have a family council, but only 2.8% have a family protocol. The core findings of our typology are summarised in Figure 2, which also shows which family governance systems are preferred in different contexts and the characteristics of the four contexts identified in our study.
Discussion of Results

Family governance structures are posited to effectively manage the complexity generated by the closely intertwined elements at the core of a family business (i.e. family and business; Gimeno et al., 2010). However, knowledge about family governance is frequently characterised by assumptions about its homogeneity (Jaffe & Lane, 2004; Melin & Nordqvist, 2007). The present study aims to elucidate the antecedents of the adoption of family councils and protocols in different types of family firms. In testing our typology based on family involvement (i.e. FIO and FIM) and family and firm complexity (i.e. GC and company size), we find four types of firms. Our results show that firms belonging to Clusters 1 (founder-centric) and 2 (protective) are not prone to the establishment of family councils. In contrast, all firms belonging to Cluster 3 (consensual) and 22.5% of those from Cluster 4 (business-evolved) are more inclined to adopt family councils.

As we anticipated in our first hypothesis, larger and relatively older (second-generation or later) family firms (i.e. Clusters 3 and 4) have more organisational and family complexity, which encourages the formalisation of family governance systems. Those companies evolving toward second or later generations, in which there are fewer dominant shareholders but still maintain a high involvement of family members in managerial positions (cluster 3), are more likely to adopt family councils. These results indicate that family ownership and control of the firm do not sufficiently capture the nuances of family influence. The complexities of a family and a firm are highly relevant to understanding family firm behaviour towards the adoption of governance mechanisms (Díaz-Moriana et al., 2019).
The adoption of family protocols (H2) seems to be more frequent among second- or later-generation firms in which FIO is less concentrated and FIM is high (Clusters 2 and 3). Larger companies seem to be more prone to formalising their rules in a family protocol. However, the presence of non-family CEOs and, consequently, the adoption of a different role for family members (control instead of management), along with the concentration of power in terms of ownership (concentrated FIO) could moderate the need to make rules explicit in a family protocol (see Cluster 4). Our results show that the characteristics of the family (generation and involvement) and the firm (size, managerial or governance mechanisms) interact in shaping the adoption of distinct family governance systems.

Our hypotheses strongly accord with the results, which confirm that the context and typology of the family firm determine the use of different family governance mechanisms. They may respond to dissimilar needs, complementing or substituting each other in different contexts.

Almost 25% of family firms in the sample are founder-centric (N = 120). In these small and young firms, one family investor has the highest percentage of ownership, and all have family CEOs. Founder-centric family firms are oriented towards maintaining the status quo (cf. Le Breton-Miller & Miller, 2006). The majority of firms within this cluster do not perceive any need to regulate the relationships between family and business. These relationships are likely channelled through a unique family member who possesses the authority and legitimacy to run the organisation. These small and young companies, with unified family ownership and management, do not use family councils or protocols. This result may suggest negative attitudes towards formal communication and formalising governance structures in that they may represent an unnecessary use of time and resources in this context (cf. Nordqvist et al. 2014).
Protective firms (N = 165) have family CEOs, and the number of shares owned by the main family investor ranks between the number of shares of the other groups. Most of these firms are controlled by a second or later generation, and they are the second smallest firms in the sample. Protective firms do not tend to use family councils, but some perceive the need to formalise the relationships between family and business through family protocols. In the high-risk context of potential conflicts in the future (shared FIO, high FIM, and second or later GC), the need to establish norms becomes important. Thus, while their FIO is the least concentrated, their size may constrain efforts to formalise their governance systems. They may opt for the protocol option. It is the more popular mechanism among practitioners, and it may seem easier to adopt with the help of experts or consultants. Family councils, in contrast, are less known, require more time to work properly, and demand high levels of orientation towards a conversation among family members. These concerns have been reinforced by recent institutional initiatives that have provided support to family firms to facilitate the adoption of family protocols. Thus, the development of family protocols in protective firms may be attributed to conformity to institutional pressures (cf. Parada, 2015).

Consensual family firms (N = 131) have the lowest percentage of ownership in the hands of one family investor. Even though the vast majority of consensual firms have a family CEO, there is a tendency of having a non-family member as a CEO. Second and later generations control more than half of these firms, and they are the second largest average size in the sample. Shared FIO, the involvement of second or later generations and a relatively high FIM necessitate more structured family governance systems. Indeed, family councils and protocols are frequently used in governance structures. All consensual firms use family councils, and 30.5% complement them by formalising their agreements through protocols or using protocols to regulate their family councils. These
firms are similar to those of Cluster 2 (protective), but 40% of them are still in their first generation, and FIO is shared more often, which means a significant percentage of these firms may have begun as sibling or marital family firms. They appear to be more open to incorporating non-family members in key managerial positions. Consensual firms also seem more encouraging of open communication within the family and the firm (Koerner & Fitzpatrick, 1997) and formalising communication processes.

Business-evolved firms (N = 71) have a significantly high percentage of ownership in the hands of one investor (concentrated FIO). However, the CEO position tends to be delegated to a non-family member. Second and later generations manage almost two-thirds of these firms, and the average number of employees is higher than that of the other profiles. In this type of firm, the separation of ownership and control is clear, and the need for a formal forum for discussions between owners and managers is important (Nordqvist et al., 2014). Approximately one-fourth of business-evolved firms have implemented family councils, but only a minority have family protocols. This trend may indicate an open attitude towards the arena of discussion represented by a council and less interest in the formalisation represented by family protocols. These results are consistent with the literature that emphasises that a non-family CEO gathers deep and intimate knowledge of the family, develops feelings of psychological ownership (Huybrechts et al., 2012) and becomes a bridge between the family and the firm, mediating potential family conflicts of interest. The intervention of a non-family (neutral) CEO, who is highly committed to the firm, may decrease the need to develop a family protocol to govern the degree and nature of family involvement in the organisation. The evidence presented in our study shows that there are clear relationships between the variables related to the variance of family involvement (i.e. family involvement in ownership and management), sources of managerial and organisational complexity (i.e. the generation in control and family size)
and the implementation of formal family governance mechanisms. Cluster analysis allowed us to differentiate the family firms with family councils and protocols from those without. Cluster 3, *consensual* firms, are the only ones that use family councils, which are also relevant to the formalisation of agreements through protocols. The other three clusters present characteristics that warrant further investigation. Though clusters enable the exploration of what determines the adoption of formal family governance structures, we do not suggest that the four categories identified in this study represent a complete picture of our family firm typology.

**Conclusion**

This study supports the notion that family firms are not a homogeneous group. Further, all family firms do not have the same needs nor interests regarding the adoption of family governance mechanisms. In social systems theory, the basic elements of a family and a business system are acts of communication (Frank et al., 2018). Drawing on this perspective, our results show that family firm types have differences in family involvement (i.e. in ownership and management), the complexity of the family and organisation (i.e. generation in control and company size), which influence the decision to adopt specific family governance mechanisms (i.e. family councils and protocols). Understanding their behaviours requires considering the traditional dimensions of ownership and involvement and the complexity of the family and the company (Suess, 2014). The adoption of family governance mechanisms in family businesses is closely associated with the perception of key decision-makers regarding the need to anticipate problems and establish communication bridges among business, family and ownership systems (Brenes et al., 2011; Jaffe & Lane, 2004). We rely on the literature that suggests that family councils and protocols represent different communication arenas in which
members of a family firm can discuss and formalise matters (Poutziouris, Smyrnios, & Klein, 2008). However, our results show that these mechanisms respond to distinct needs and may substitute or complement each other in different contexts. We argue that families may be more oriented towards conversation in contexts where family and organisational complexity imply potentially serious conflicts. However, the evolution of family members towards controlling roles (shared FIO in second or later generations or separation between control and management, i.e. Clusters 3 and 4) encourages the use of family councils. In contrast, complexity, combined with high FIM, necessitates the regulation of leadership succession, the incorporation of new family members in managerial positions and institutional pressures (normative and imitative), which may encourage the use of family protocols. Our results help to discriminate the type of involvement a family has in a firm (ownership and control vs. management) and discussions and worries revolving around issues. Families with exclusive ownership roles typically emphasise transferring values, developing interest and control capabilities to the next generations and managing the family legacy. In contrast, family members involved in managerial roles need to address issues, such as intergenerational succession, developing entrepreneurial spirit, identifying and cultivating leadership and establishing rules or conditions for family members to assume roles of responsibility in the company.

We have identified four types of family firms, namely, founder-centric, protective, consensual and business-evolved, which provide support for our hypotheses, which predicted that family firm types would show differences in the adoption of family governance systems. Founder-centric family firms rarely differentiate ownership and managerial roles, and the majority of them have not yet addressed family-related issues that may need to be governed. Most protective firms are in second or subsequent generations but remain dominated by family leaders. Some of them have begun to
consider the succession and incorporation of family members and have implemented protocols to set rules about these issues. Cluster 3, *consensual* firms, shows the highest levels of family council and protocol existence. This cluster contains firms in which family ownership is less concentrated and combined with active family management (i.e. family CEO). They also have a size that provides resources and justifies adopting structures to govern ownership and managerial issues. In *business-evolved* firms, ownership is highly concentrated, which reduces the need to address ownership issues among several family members. Management is delegated to non-family CEOs, reducing the need to resolve the succession or access of family members to managerial positions. These results are consistent with literature that emphasises that the higher the variance of family, business and ownership factors, the greater the need for different types and levels of governance mechanisms (Nordqvist et al., 2014; Stanley et al., 2019).

**Contributions and Implications**

This study fills a gap in the literature concerning evidence of the effect of family firm heterogeneity on the adoption of family governance mechanisms. This study offers three contributions. First, the study shows the heterogeneous nature of family firms through family, business and ownership dimensions and offers an empirically deduced typology. The detailed empirical classification fits previous theoretical configurations (e.g. Nordqvist, et al., 2014), complementing them by providing a better understanding of the family governance outcomes derived from those forms. Second, this study highlights the instrumentality of social system theory in understanding the choices family firms make regarding formal governance mechanisms. This theory is particularly applicable to family businesses (Frank et al., 2010) as such firms can develop unique communication patterns
because of the coupling of family and business systems (Weismeier-Sammer et al., 2013) and the varying degrees of involvement in ownership.

Finally, we show that the two-step approach is an appropriate clustering method for family business research. It determines the number of clusters automatically based on changes in a distance measure, avoids the arbitrariness of traditional clustering techniques and provides objectivity and a rich description of clusters (Chiu et al., 2001).

This study also has important practical implications. First, although there is no ‘one size fits all’ rule for family governance (Suess, 2014), the existence of different typologies of family firms helps to design tailored solutions based on specific needs (Arredondo & Cruz, 2019). The existence of typologies permits family firm owners, managers and advisors to better understand when governance mechanisms are appropriate and identify ‘best governance practices’ and recommendations based on firm- and family-specific characteristics. Second, it offers a better framework to assess whether family firms are using the appropriate mechanisms to prevent potential problems or conflicts in different contexts. It may offer a more accurate image of family business gaps in terms of the adoption of family councils and protocols. Different types of family firms have characteristics and contexts that figure into the convenience or necessity of adopting a family council or protocol.

**Limitations and Directions for Future Research**

The results of this study have potential limitations. First, our sample is composed of small- and medium-sized family firms in Spain. Our definition of a family firm is based on ownership and current control by a family. It does not consider the intention to pass firm ownership to the next generation. Nevertheless, recent data from Spain of the STEP project (Escribá-Esteve et al., 2020) show that only 27% of family firms declare that there
is a high likelihood of passing the control of the firm to the next generation, while 16% state that the likelihood is low. These figures imply that the necessity of implementing family governance mechanisms in many family firms may be lower than typically assumed. There is consistent evidence that a low percentage of firms use family governance systems. Nevertheless, it is important to understand the heterogeneity of family firms in order to recognise the conditions that increase the necessity of such mechanisms. Future studies based on surveys should include questions about intentions to maintain firm ownership and governance under family control.

Variations in institutional environments can play a critical role in explaining differences in corporate governance mechanisms (Aguilera, Florackis, & Kim, 2016). Spanish companies may have developed unique family governance structures because of national culture or institutional conditions. These circumstances may limit the generalisability of our findings to other countries. Analogous investigations should be conducted in other institutional contexts to increase the external validity of our results. Another limitation may lie within the level of analysis. Although we support our reliance on the family communication typology by Fitzpatrick and Ritchie (1994), which treats orientations towards conversation and formalisation as communication constructs, we do not directly measure those orientations among family members. Future research could take a different approach to explore more specific communication patterns in business families.

This study suggests potential avenues for researchers interested in theory building or empirical analysis. First, it highlights that family firms are not a homogeneous group (Westhead & Howorth, 2007). Further, different types of family firms do not show equal interest in adopting family councils and protocols. Future studies may consider other informal governance structures, such as family meetings. Qualitative studies could also be conducted to uncover other governance mechanisms and explore why and how
different types of families develop their firm governance structures. Future studies could
examine whether there are patterns of evolution between firm types and family
governance models, studying their outcomes in terms of results and long-term survival.
Finally, two-step cluster analysis provides many benefits for management research in
general (Tkaczynski, 2017) and family firms in particular. It has been successfully
employed in various academic studies (e.g. Okazaki, 2006; Tkaczynski, Rundle-Thiele,
& Beaumont, 2010), and we see many opportunities for future family firm research to
apply this method.

References


Table 1. Sample distribution

<table>
<thead>
<tr>
<th>Industry</th>
<th>Valid percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>33,1</td>
</tr>
<tr>
<td>Construction</td>
<td>11,0</td>
</tr>
<tr>
<td>Distribution &amp; retail</td>
<td>32,2</td>
</tr>
<tr>
<td>Transportation &amp; Logistics</td>
<td>7,3</td>
</tr>
<tr>
<td>Other services</td>
<td>6,1</td>
</tr>
<tr>
<td>Hospitality</td>
<td>4,3</td>
</tr>
<tr>
<td>Professional &amp; Scientific</td>
<td>3,5</td>
</tr>
<tr>
<td>Information &amp; Communication</td>
<td>1,4</td>
</tr>
<tr>
<td>Finance</td>
<td>0,6</td>
</tr>
<tr>
<td>Supplies – energy &amp; water</td>
<td>0,4</td>
</tr>
<tr>
<td>Total</td>
<td>100,0</td>
</tr>
<tr>
<td>Variable</td>
<td>Mean</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>1. Existence of family council</td>
<td>0.30</td>
</tr>
<tr>
<td>2. Existence of family protocol</td>
<td>0.13</td>
</tr>
<tr>
<td>3. Existence of family council and protocol</td>
<td>0.08</td>
</tr>
<tr>
<td>4. FIO</td>
<td>0.69</td>
</tr>
<tr>
<td>5. FIM (Family CEO)</td>
<td>0.84</td>
</tr>
<tr>
<td>6. Generation (First)</td>
<td>0.42</td>
</tr>
<tr>
<td>7. Generation (Second+)</td>
<td>0.57</td>
</tr>
<tr>
<td>8. Firm size (ln number employees)</td>
<td>2.94</td>
</tr>
</tbody>
</table>

Note: Number of firms by age group: 24.1% microenterprises (fewer than 10 employees), 54.9% small companies (between 10 and 50 employees), 17.6% medium enterprises (between 50 and 250 employees), and 3.5% large companies (more than 250 employees).

* and ** indicate correlations significant at p<0.05 and p<0.01, respectively.
Table 3. Results of two-step cluster analysis

<table>
<thead>
<tr>
<th></th>
<th>Cluster 1</th>
<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
<th>Combined</th>
<th>F*</th>
<th>Post Hoc</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>120</td>
<td>165</td>
<td>131</td>
<td>71</td>
<td>487</td>
<td>100%</td>
<td>(Sig)</td>
</tr>
<tr>
<td>%</td>
<td>24.6%</td>
<td>33.9%</td>
<td>26.9%</td>
<td>14.6%</td>
<td>71%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIO Number of shares in hands of the main family owner [mean (SD)]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.78 (0.27)</td>
<td>0.64 (0.30)</td>
<td>0.56 (0.30)</td>
<td>0.75 (0.27)</td>
<td>0.69 (0.29)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIM Family CEO [n (%)]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>120 (29.5)</td>
<td>165 (40.5)</td>
<td>122 (30.0)</td>
<td>0 (0.0)</td>
<td>407 (100)</td>
<td></td>
<td>4,1:2,3</td>
</tr>
<tr>
<td>No</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>9 (11.3)</td>
<td>71 (88.8)</td>
<td>80 (100)</td>
<td></td>
<td>(0.001)</td>
</tr>
<tr>
<td>GC Generation [n (%)]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First</td>
<td>120 (58.5)</td>
<td>7 (3.4)</td>
<td>53 (25.9)</td>
<td>25 (12.2)</td>
<td>205 (100)</td>
<td></td>
<td>4,3:2</td>
</tr>
<tr>
<td>Second or later</td>
<td>0 (0)</td>
<td>158 (56.0)</td>
<td>78 (27.7)</td>
<td>46 (16.3)</td>
<td>282 (100)</td>
<td></td>
<td>(0.019)</td>
</tr>
<tr>
<td>Size ln number employees [mean (SD)]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.60 (1.13)</td>
<td>2.84 (1.07)</td>
<td>2.98 (1.11)</td>
<td>3.62 (1.26)</td>
<td>2.94 (1.17)</td>
<td></td>
<td>2,3,4:1</td>
</tr>
</tbody>
</table>

Notes: (%) horizontal percentages

* Denotes overall comparison among clusters using the Kruskal-Wallis test or chi-square test at p<0.05.

** Post hoc comparisons (using Sheffe tests) indicate which profile means differ significantly at p<0.05.
Table 4. Governance mechanisms associated with the four-cluster model

<table>
<thead>
<tr>
<th></th>
<th>Cluster 1 Founder-centric</th>
<th>Cluster 2 Protective</th>
<th>Cluster 3 Consensual</th>
<th>Cluster 4 Business-evolved</th>
<th>Combined</th>
<th>F*</th>
<th>Post Hoc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n= 120</td>
<td>n= 165</td>
<td>n= 131</td>
<td>n= 71</td>
<td>n= 487</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>24.6%</td>
<td>33.9%</td>
<td>26.9%</td>
<td>14.6%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family council [n (%)]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>131 (89.1)</td>
<td>16 (10.9)</td>
<td>147 (100)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>120 (35.3)</td>
<td>165 (48.5)</td>
<td>0 (0)</td>
<td>55 (16.2)</td>
<td>340 (100)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family protocol [n (%)]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0 (0)</td>
<td>23 (35.4)</td>
<td>40 (61.5)</td>
<td>2 (3.1)</td>
<td>65 (100)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>120 (28.4)</td>
<td>142 (33.6)</td>
<td>91 (21.6)</td>
<td>69 (16.4)</td>
<td>422 (100)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family council and protocol [n (%)]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>40 (100)</td>
<td>0 (0)</td>
<td>40 (100)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>120 (26.8)</td>
<td>165 (36.9)</td>
<td>91 (20.4)</td>
<td>71 (15.9)</td>
<td>447 (100)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: (% ) horizontal percentages

*Denotes overall comparison among clusters using the Kruskal-Wallis test or chi-square test at p<0.05.

**Post hoc comparisons (using Sheffe tests) indicate which profile means differ significantly at p<0.05
Figure 1. 3D cluster visualisation

Notes: Black: Cluster 1; yellow: Cluster 2; grey: Cluster 3; blue: Cluster 4.
**Figure 2.** Family governance in Spanish family firms in the sample

<table>
<thead>
<tr>
<th>Family council (FC)</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cluster 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Founder-centric</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concentrated FIO (78%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIM. 100% Family CEO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smallest firms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GC. 100% 1st generation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cluster 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relat. shared FIO (64%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIM. 100% Family CEO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second smallest firms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GC. 95% 2nd+ generation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cluster 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business-evolved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concentrated FIO (75%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIM. 100% Non-family CEO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Largest firms</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cluster 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consensual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared FIO (56%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIM. 93% Family CEO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second largest firms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GC. 60% 2nd+ generation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** Circle sizes indicate cluster size; GC = Generation in control

Between-cluster comparisons: Family Council: C3>C1*, C2*; C4>C1*, C2*.

Between-cluster comparisons: Family protocol: C2>C1*, C4*; C3>C1*, C2*, C4*.

* p-value<0.05