



REGULAR ARTICLE

Diversification decisions among family firms: The role of family involvement and generational stage



Fernando Muñoz-Bullon^a, Maria J. Sanchez-Bueno^{a,*}, Isabel Suárez-González^b

^a Department of Business Administration, Universidad Carlos III de Madrid, Calle Madrid, 126, E-28903 Getafe, Madrid, Spain

^b Facultad de Economía y Empresa, Universidad de Salamanca, Campus Miguel de Unamuno, s/n, E-37007 Salamanca, Spain

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Abstract While prior literature has focused on whether family firms are more or less inclined to diversification than non-family firms, the examination of differences in diversification among family firms has received much less attention. We analyze how family involvement (in ownership, control, and management) and the generational stage in the company (first versus later generations) influence diversification among family firms. The empirical evidence is provided by a sample of publicly listed family firms from the EU. Our results show that larger levels of family involvement in the firm are associated with lower diversification. Furthermore, first-generation family firms are found to be less diversified than their later-generation counterparts.

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Introduction

Recent decades have witnessed an increase in research into the field of family business (e.g., [Anglin et al., 2017](#); [Basco, 2017](#); [Carney et al., 2015](#)). Prior literature confirms there are differences between family and non-family firms in terms of major strategic decisions (e.g., [Boellis et al., 2016](#); [Defrancq et al., 2016](#); [Gomez-Mejia et al., 2011](#); [Muñoz-Bullón and Sanchez-Bueno, 2011](#); [Strike et al., 2015](#)). As a result, some empirical studies have specifically analyzed

whether there are differences in the propensity to diversify in family firms compared to non-family firms (e.g., [Anderson and Reeb, 2003](#); [Ducassy and Prevot, 2010](#); [Gomez-Mejia et al., 2010](#); [Schmid et al., 2015](#); [Hernandez-Trasobares and Galve-Gorri, 2016](#)). In this sense, business diversification may be a controversial decision across family firms because it highlights the potential mismatch among their multiple objectives. On the one hand, certain factors such as low performance, uncertainty of expected cashflows, and the desire for risk reduction may create internal incentives for diversification ([Hoskisson and Hitt, 1990](#)). In these circumstances, diversification offers the potential to enhance long-term value by increasing a firm's viability through entry into new product markets. On the other hand, diversification is perceived by family owners as a threat to the aim of

* Corresponding author.

E-mail address: marijose.sanchez@uc3m.es
(Maria J. Sanchez-Bueno).

preserving their affective endowment—known as socioemotional wealth (SEW) (Gomez-Mejia et al., 2007). Thus, over and above financial considerations, family owners will be averse to embracing diversification strategies because such a strategy poses an immediate threat to their control over the firm (Gomez-Mejia et al., 2010).

SEW preservation is a key reference point for all family businesses, to the extent that this may lead them to make strategic decisions that favor non-economic goals (Gomez-Mejia et al., 2010). However, the impact these emotional concerns have on their preferences toward diversification may also vary among family firms and throughout their organizational life (Berrone et al., 2012; Strike et al., 2015). A growing body of literature has emphasized the heterogeneity among family firms, and highlighted their diversity in various ambits, including family involvement in ownership, control, and management (Berrone et al., 2012; Chrisman et al., 2012; Chua et al., 2012; Nordqvist et al., 2014). Heterogeneity among family firms also stems from their unique and potentially varied set of family goals. Recognizing that family firms are a heterogeneous group of companies renders it important to understand the factors that may increase or reduce SEW aspirations (or change the relative importance of their different dimensions), and hence affect their diversification decisions.

In line with this stream of research, the objective of this study is to explore differences in the diversification decision among family firms. We thus intend to extend the present understanding of strategic decisions within the family business context by considering family firm heterogeneity. Specifically, we contend that heterogeneity among family firms derives from both family involvement in the business (in terms of ownership, control and/or management) and the generational stage (first generation in charge versus later generations). These three core business characteristics, which are dimensions that can be shaped by the controlling family, will allow higher levels of family participation in the business, and may thus be a factor that contributes to higher concerns over preserving SEW (Gomez-Mejia et al., 2010; Berrone et al., 2012). Furthermore, the generational stage may influence SEW preservation because emotional attachment in first-generation family firms is expected to be an important goal for family members (Sciascia et al., 2014). We therefore contend that the characteristics of family firms mentioned above reveal differences not only between family and non-family firms, but also within family firms, which means these factors may be important determinants of SEW aspirations and lead to different choices for engaging in diversification. We thus emphasize the role the family plays as a source of firm heterogeneity that may influence the desire to maintain their SEW, and therefore their level of diversification.

The empirical evidence is based on a dataset of publicly listed firms in 27 EU countries over the 2005–2009 period. We find that a high level of family involvement and the presence of first-generation family members impact negatively on family firms' levels of diversification. Our results are consistent with the SEW perspective's line of reasoning. Furthermore, family firms' emphasis on maintaining their SEW is sensitive to the degree of family involvement in the company. SEW aspirations increase in firms with a high presence of family members in management and in early generational

stages. Such a goal will determine their strategic behavior by reinforcing their reluctance to engage in extensive diversification. By contrast, family firms in later generational stages seem to be more prone to diversification, showing how family priorities may change throughout the different stages in an organization's life.

This study contributes to the existing literature on family firms and diversification in several ways. First, this work enriches the idea that heterogeneity within family firms must be taken into account. We therefore contribute both theoretically and empirically to a better understanding of this relevant issue. Our paper thus falls in line with a number of significant works that have highlighted the relevance of advancing our knowledge in this field (e.g., Berrone et al., 2012; Boellis et al., 2016; Chua et al., 2012; Strike et al., 2015). As Jaskiewicz and Dyer (2017, p. 111) have recently reported, "ignoring differences among families in family business research is problematic because the results of our work may be misleading". Accordingly, we emphasize how family involvement in the company and also the generational stage (family firm run by the first generation) may affect diversification decisions among family firms. The consideration of family involvement is, for example, in line with Berrone et al. (2010, p. 86), who have recently reported that "family business research has long stressed the unique characteristics and peculiarities of family ownership".

Likewise, there have been several recent calls encouraging family business scholars to provide new empirical evidence on the effect that generation has on family-firm decisions (e.g., Cruz and Nordqvist, 2012; Duller, 2013; Sciascia et al., 2013; Sciascia et al., 2014; Sonfield and Lussier, 2004). Family members' emphasis on protecting their SEW might be sensitive to the generation in charge. In short, we posit that the aforementioned characteristic affect the emphasis given to SEW preservation (and its different dimensions), and that this helps explain the differences in diversification decisions among family firms. We thus provide an avenue for further developing the SEW approach in the field of diversification among family firms.

Second, we provide a fine-grained theoretical explanation on diversification decisions in family firms by developing several empirical tests and using a broad sample of European family firms. Thus, the paper provides new evidence on a significant issue regarding family firms that has been the subject of little empirical research (e.g., Anderson and Reeb, 2003; Ducassy and Prevot, 2010; Gomez-Mejia et al., 2010; Hautz et al., 2013; Schmid et al., 2015; Hernandez-Trasobares and Galve-Gorri, 2016). Prior literature has found that lower levels of diversification provide particular advantages in terms of preserving SEW in family firms (e.g., Anderson and Reeb, 2003; Gomez-Mejia et al., 2010). However, other contributions have shown that family firms are not averse to pursuing a diversification strategy (e.g., Ducassy and Prevot, 2010; Miller et al., 2010). We understand that the consideration of different dimensions of family influence in terms of family-firm heterogeneity may help to integrate and explain these inconsistent past empirical results.

The paper is organized as follows. The second section sets out the theoretical framework in order to test our hypotheses. The third section describes the data and methodology used in the empirical analyses. The fourth section presents

the results and provides several robustness tests. Finally, the fifth section discusses the implications and topics for future research that can be derived from our work.

Theoretical background

SEW concerns and diversification in family firms

According to the SEW approach, family firms often have multiple objectives, and not merely financial ones, and the most critical one may be the preservation of the stock of their socioemotional investment in the firm (Gomez-Mejia et al., 2007). Moreover, Berrone et al. (2012) review the concept of SEW and posit that it is multidimensional.¹ Prior research assumes that the two more influential and salient dimensions of SEW refer to family control and the intention of handing the business down to future generations (Strike et al., 2015). Corporate diversification may be viewed as a 'double-edged sword' decision by family firms, evincing the potential inconsistency among these multiple objectives.

On the one hand, a diversified business portfolio allows spreading the financial risk because cashflow streams from different business segments are not perfectly correlated. As family owners often have a high proportion of the family's wealth invested in a single firm (the family firm), they can reduce their personal risk by reducing firm risk (Anderson and Reeb, 2003; Gomez-Mejia et al., 2010; Jones et al., 2008). A diversification strategy also provides an opportunity for the firm to grow, and it improves the chances of survival (Bercovitz and Mitchell, 2007; Borghesi et al., 2007), which may be key to the preservation and growth of the family dynasty over the long term, providing increased opportunities for future generations.

On the other hand, diversification is perceived by family owners as an immediate threat to the preservation of family control and, ultimately, also the family's socioemotional endowment (Gomez-Mejia et al., 2010). Diversification strategies usually require the entry of new outside players, and this may dilute family ownership, redistribute power and influence to nonfamily parties, and even favor the loss of family identity. Investments in new businesses may involve additional external funding (e.g., via debt or stock issues), but family firms will avoid raising equity or new debt to finance diversification when this means diluting family ownership (Gallo et al., 2004; Jones et al., 2008; Gomez-Mejia et al., 2010; Vandemaele and Vancauteren, 2015). Diversification choices also require more delegation, as well as the incorporation of new executives or directors with specialized skills, with different background experience, and more cognitive diversity in order to achieve the flexibility to manage a more complex environment (Hatum and Pettigrew, 2004). Although family members do not always have the knowledge, skills, talent, qualifications, or professional

expertise required to diversify, family firms may avoid hiring directors outside the family so as not to forfeit ownership and control (Gomez-Mejia et al., 2010; Jones et al., 2008). Moreover, external directors and managers may increase information asymmetries and introduce conflicting goals, thereby eroding family SEW (Gomez-Mejia et al., 2010).

Diversification decisions in family firms therefore involve a trade-off, favoring the management of risk and thereby, the firm's survival, on the one hand, but on the other, possibly compromising the retention of control and SEW goals. The SEW literature suggests that these latter concerns will prevail because any damage to SEW is perceived as a major loss. Family firms are willing to accept a greater threat to firm performance to prevent that loss, and thereby even endanger the firm's very survival (Gomez-Mejia et al., 2007). Furthermore, prior research on diversification in family firms in the US supports this view, providing evidence that family firms diversify less than non-family firms (Anderson and Reeb, 2003; Jones et al., 2008; Gomez-Mejia et al., 2010). In sum, our baseline argument is that concerns over SEW preservation would lead to lower diversification in general in family firms. However, acknowledging that family firms do not constitute a homogeneous group, we next seek to explain the differences across family firms in terms of diversification, focusing on the following two issues: (1) family involvement in the firm, whereby we jointly consider the concentration of family ownership, the proportion of family board members, and the presence of a family CEO; (2) generational stage: regarding this dimension, we analyze the presence of the first generation versus later generations.

Family involvement and diversification among family firms

Family involvement is typically categorized by several components, such as ownership, control, and management (Chua et al., 1999). As Le Breton-Miller et al. (2011, p. 707) have recently noted, "family influence may be a function of diverse things such as the family presence. These things may be driven by governance conditions such as the number and power of family members involved in the business, the distribution of their ownership, and the simultaneous participation of multiple generations". Although the SEW perspective postulates that all family firms frame problems in terms of assessing the immediate impact actions may have on their affective endowment (Gomez-Mejia et al., 2011), the influence of SEW is unlikely to remain constant, and could vary across situations (Berrone et al., 2012; Strike et al., 2015). For example, different levels of family involvement may be associated with different levels of SEW concerns. The preservation of SEW will carry more significance over economic concerns in family firms in which ownership is more concentrated among family members, the family is present on the board, and those that are family-managed (Gomez-Mejia et al., 2010; Le Breton-Miller et al., 2011).

Greater commitment and identification are expected from large family owners, as a high ownership stake increases the family's ability to influence corporate decisions through the unrestricted exercise of personal authority (Kabbach de Castro et al., 2017), and thus the power to act

¹ Berrone et al. (2012) report an explicit set of dimensions in the SEW concept for developing their FIBER model, such as the following: F: family control and influence; I: identification of family members with the firm; B: binding social ties; E: emotional attachment of family members; R: renewal of family bonds to the firm through dynastic succession.

and pursue family goals. In addition, when family members own a larger stake in the firm, family wealth is largely tied up with firm wealth, and the well-being of family owners depends more closely on the success of the business. These large family owners become more loss-averse when their SEW is threatened.

Likewise, the participation of family members on the board of directors emphasizes their wish to protect the family's interests closely linked to their emotional attachment. Family involvement on the board is one of the main ways in which owner families exercise substantial control over the firm, and avoid diluting it as a way of preserving their SEW (Jones et al., 2008; Le Breton-Miller et al., 2011; Minichilli et al., 2014; Feldman et al., 2016; Basco and Calabro, 2017). Thus, the more family involvement on the board, the more emphasis will be placed on the preservation of current SEW over other financial considerations (Gomez-Mejia et al., 2011; Minichilli et al., 2014).

Moreover, top management positions in family firms are generally held by family members in order to maintain control and prevent a loss of their SEW, and family CEOs tend to enjoy long tenures and paternal altruism (Herrero, 2011; Schulze et al., 2001; Strike et al., 2015; Vandemaele and Vancauteren, 2015). Such positions are not chosen in a competitive context because they are awarded on the strength of family ties. A family CEO has ample experience in the family tradition and a sense of belonging to the family business (Peng and Jiang, 2010). Thus, a family CEO contributes to maintaining their SEW endowment (Gomez-Mejia et al., 2010; Jones et al., 2008; Stockmans et al., 2010), and firm owners may prefer to have a family CEO.

In sum, the more family involvement (in ownership, control, and management), the more emphasis will be placed on the preservation of SEW over other financial considerations (Gomez-Mejia et al., 2011; Minichilli et al., 2014). Therefore, according to our baseline hypothesis, family firms with a high involvement in the business will be even more reluctant to implement diversification strategies. Besides risk aversion to the loss of control, assumed in all family firms, the preference for focused strategies will be further accentuated by the managerial and board involvement of family members.

Family members highly involved in the business are generally more resistant to the organization's professionalization because they play multiple roles in managing and governing the firm: ownership, management, and the board of directors often overlap with the same people, or people from the same family (Mustakallio et al., 2002). Furthermore, for reasons of altruism, loyalty, and commitment among family members, this larger and broader family presence in the firm should lead to strategic consensus, which may be detrimental to diversification. A certain level of conflict or disagreement may lead to a more diverse approach to problem-solving, which may be required for making a diversification decision. Within family firm boards and management teams, where family members are in a majority, such diverse considerations may be suppressed in the spirit of preserving family harmony and sustainability as reflections of the importance of SEW.

Lastly, firms with high family involvement are more likely to expropriate the wealth of minority (non-family) shareholders, and therefore benefit family members. The family

firm would thus allocate available resources to giving generous rewards to their relatives (e.g., gifts, secure positions in the company, high remuneration, or other benefits) (Le Breton-Miller et al., 2011; Lim et al., 2010; Schulze et al., 2001; Schulze et al., 2003). As a result, this may lead to inefficiencies, as some of the available resources that might be invested in the firm's growth are diverted to these practices, and these firms will find it more difficult to properly finance the entry into new businesses (Herrero, 2011; Le Breton-Miller et al., 2011).²

We therefore contend that family involvement may increase (with lower family involvement) or decrease (with higher family involvement) the propensity to engage in diversification strategies within family firms. According to the above arguments, we postulate the following hypothesis:

Hypothesis 1. Family firms with a larger family involvement will diversify less.

Generational stage and diversification among family firms

Research into family businesses has emphasized generational differences among first-, second-, and later-generation family firms, and how the members of different generations face different challenges and differ in terms of the development of the business and the decision-making process (Björnberg and Nicholson, 2012; Essen et al., 2011; Gersick et al., 1997; Miller et al., 2007; Sonfield and Lussier, 2004). The founders in first-generation family firms typically enjoy considerable status because they have established the company, and their personality, priorities, and values will heavily influence the firm's strategic decisions (Cruz and Nordqvist, 2012). Founders are devoted to the enterprise, which constitutes one of their primary lifetime achievements (Le Breton-Miller et al., 2011, p. 709), and their identity involves a set of core values shared among family members. Consequently, decision-making in first-generation family firms is usually centralized and personalized (Cruz and Nordqvist, 2012). First-generation family members, who have probably founded and built up the business, are emotionally attached to the founder, and likely to share the same pride and legacy (Gomez-Mejia et al., 2007; Vandemaele and Vancauteren, 2015). Thus, first-generation family members may play a substantial role in shaping the firm's anti-diversification culture. As their wealth is closely related to family wealth, first-generation family members are expected to perceive a greater loss of SEW than later generations (Sciascia et al., 2014). With a view to preserving SEW—which is strongest in firms controlled and managed by first-generation family members, and decreases as the firm evolves (Gomez-Mejia et al., 2007; Strike et al., 2015)—, first-generation family members find it difficult to surrender control. They will therefore be reluctant to relinquish their tight control over the firm by, for example, creating

² These practices, seeking to preserve short-term SEW, may also help to erode long-term economic wealth, and thereby, long-term SEW.

a division to be run by a non-family member that would be responsible for diversifying into another industry. Accordingly, first-generation family members will tend to avoid strategies such as diversification, which may eventually erode the control the family exerts over the company. In contrast, later generations are expected to be less averse to the loss of control and put more emphasis on dynastic succession, whereby preserving family control and influence is not such an important goal, preferring a successful business transfer to the next generation. Accordingly, continuing the family legacy and tradition is a more central goal for family members, and they are less likely to evaluate their investment on a short-term basis. Thus, later generations will be more willing to promote a diversification decision.

Likewise, first-generation family members are constrained by the company's history and tradition, often being characterized as having a conservative outlook that is resistant to change (Chen and Hsu, 2009; Kellermanns et al., 2008; Naldi et al., 2007) in order to preserve their control and influence largely unchanged (Le Breton-Miller et al., 2011; Zahra et al., 2004). Therefore, given that diversification may involve a high degree of uncertainty and complexity, as well as far-reaching changes in the business, if a family firm is in the first generation the likelihood of extensively engaging in diversification will diminish. In contrast, the involvement of later generations in the business may involve a shift in policies, as they care more about expanding the business they have inherited (Cruz and Nordqvist, 2012). While preserving SEW also remains the key point of reference for family businesses in second and later generations, the dimensions on which the SEW is based may vary over time (Chrisman and Patel, 2012; Strike et al., 2015). Specifically, for later-generation family firms the goal of maintaining control may fade, with an increasing need to guarantee the long-term survival of a healthy business to uphold the family dynasty and preserve its legacy. In this sense, diversification offers the potential for growth by entering new markets. Later generations may therefore perceive this strategic decision as a way of extending the family dynasty (Gomez-Mejia et al., 2011; Le Breton-Miller et al., 2011). As such, it may seem more plausible to engage in diversification decisions by considering the presence of later-generation family firms, because without business growth future generations are very unlikely to have a legacy to inherit.

Undertaking a diversification decision may involve non-family members in the firm in order to apply a more professional style of control and management. However, family members at the earlier stages are highly oriented toward family goals, and tend to have a strong emotional attachment (Le Breton-Miller et al., 2011; Sciascia et al., 2014). In this sense, first-generation family firms are usually characterized as having a more "paternalistic" approach to the decision-making process compared to family firms at later generational stages. Founders typically enjoy considerable status, and so the overriding purpose at this first stage is to ensure they maintain their control, authority, and direct supervision (Sonfield and Lussier, 2004), with external members being perceived as a threat. Thus, first-generation family firms are expected to be less accommodating toward non-family executives, thereby reducing any aspirations to embark upon diversification activities. By contrast, and as

mentioned previously, the presence of later generations in family firms involves a change of direction in the decision-making process because later generations care more about dynastic succession (Strike et al., 2015). This presence may be more likely to view professionalism as a way of achieving business growth and securing the firm's long-term continuity, while posing no threat to family control. In this scenario, the outside human resources required to manage a larger family firm as a result of diversification may be an opportunity to generate new capabilities, skills, or knowledge that may cement career opportunities for future generations. The firm will need to grow to adjust to the increasing ownership and management responsibilities of a larger family.³ Consequently, subsequent generations are more capable of helping the firm to expand through diversification guided by this greater concern for family legacy (Strike et al., 2015).

The above ideas lead us to formulate the following hypothesis:

Hypothesis 2. Second- and later-generation family firms will diversify more than first-generation ones.

Methodology

Sample

This study uses extensive firm-level panel data from the OSIRIS database. OSIRIS is a comprehensive dataset of publicly listed companies worldwide provided by Bureau van Dijk Electronic Publishing (BvDEP) (2007). In addition to income statements, balance sheets, cashflow statements, and ratios, it contains a wide range of complementary information, such as ownership, subsidiaries, and so on. This information is provided by World'Vest Base and five regionally specialized providers, and is supplemented with data from additional sources to check reliability and validity. From the original sample, and apart from discarding firms with one or more missing variables, we selected companies from the 27 countries belonging to the European Union: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, the United Kingdom, Bulgaria, Romania, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Czech Republic, Slovakia and Slovenia. Moreover, our sample contains only family firms. A business is considered a family firm if the largest shareholder is a family (Luo and Chung, 2013; Hautz et al., 2013; Thomsen and Pedersen, 2000). According to Thomsen and Pedersen (2000), focusing on the largest owner is especially appropriate in a European setting, where a very high level of ownership concentration can generally be observed. We opt for a definition of family firm based on a broad approach because our main objective is to determine the heterogeneity among family firms. We first use family involvement in ownership (majority of equity owned by the family) as a key criterion for building

³ This diversification-based growth for favoring the career opportunities of more family members may also lead to practices for expropriating the wealth of minority (non-family) shareholders, such as tunneling (Bertrand et al., 2002; Johnson et al., 2000; Lins and Servaes, 2002).

our measurement. However, we also consider (as independent variables) the most common measurement categories for classifying family firms: (1) family control, and (2) family management (Anderson and Reeb, 2003; Carney et al., 2017; Chua et al., 1999).

The resulting dataset is an unbalanced data panel of 1,644 (firm-year) observations for the 2005–2009 period, amounting to a total of 610 family firms.

Variables

Dependent variable

Following previous studies (Gomez-Mejia et al., 2010; Jones et al., 2008), we have used the entropy index to measure the product diversification strategy. The entropy measurement of total diversification is defined as $\sum_{i=1}^N P_i \ln(1/P_i)$, where N is the number of industry segments in which the firm operates, and P_i is the share of the i th segment in total firm sales. This measurement takes into account both the number of segments in which a firm operates and the relative importance of each segment over a firm's total sales.⁴

Independent variables

We have included several variables to explore how the different dimensions of family involvement analyzed in the theoretical framework and the generational stage may impact on the diversification decision.

- Family Involvement Index: defined to check the role of family involvement in diversification. The Index uses a single measure to combine the involvement of the family in the firm's ownership structure, as well as on its board of directors and in its management. It may therefore provide a more nuanced assessment of the concept of family involvement in governance. Indeed, these three business characteristics (i.e., equity ownership, board of directors, and management) are among the most important governance mechanisms (Denis and McConnell, 2003), and so the Index captures family involvement in governance. The values of the Index, which has three components, vary between 0 and 3, with higher values indicating greater family involvement in the business. The first component measures family involvement in ownership, being operationalized as a dummy variable that equals 1 if the family ownership stake exceeds the median in the sample, and zero otherwise. The second component is related to family involvement on the board of directors (Chang and Shim, 2015; Le Breton-Miller et al., 2011; Minichilli et al., 2014), being defined as a dummy variable that equals 1 if the proportion of family members on the board exceeds the median in our sample, and zero otherwise. The third component is related to family involvement in management, being defined as a dummy variable that equals 1 if a family member holds the title of CEO, and zero otherwise

⁴ Osiris includes each company's various business lines, as mentioned in the annual report, with sale figures for each one (Bureau van Dijk, 2007).

(Le Breton-Miller et al., 2011; Strike et al., 2015; Vandemaele and Vancauteren, 2015). The Family Involvement Index is the sum of the three components.⁵

- Family equity: family equity was measured as the percentage of the firm's equity owned by the owner family (Zahra, 2003). A shareholder was considered related to the owner family if they shared the same last name with the largest family shareholder—i.e., two individuals were considered related if they were members of the same descendant group (Daily and Dollinger, 1993; Gomez-Mejia et al., 2003). The rationale for this procedure is based on definitions of the family business that rely on family relationships within and across generations (Daily and Dollinger, 1993; Handler, 1989).⁶ The percentage of the firm's equity owned by the largest family owner has been used in prior literature (Maury, 2006; Miller et al., 2007; Sacristan-Navarro et al., 2011).
- Generation stage: following recent studies on family firms, our identification of a first-generation family firm is based on two conditions. First, we require the founder to be the firm's largest shareholder and be involved in its management (i.e., serving as the firm's CEO or occupying other similar top management positions) (Davis and Harveston, 1999, 2001). Second, we use a 30-year cutoff point to capture generational effects, following prior family business research (i.e., Fernandez and Nieto, 2005; Fiss and Zajac, 2004; Pindado et al., 2015). If the firm is less than 30 years old, we consider it to be in the hands of the first-generation. Thus, a dummy variable with value 1 was created when both the aforementioned conditions were met, while those firms that did not meet either of these criteria were not considered first-generation family firms, being coded as 0.⁷ The information about the founder was gathered from several internet sources, such as company histories and annual reports.
- Proportion of family directors: this variable specifies the proportion of family members serving on the board of directors (Chang and Shim, 2015; Le Breton-Miller et al., 2011; Minichilli et al., 2014). Following previous studies on family firms, an individual is listed as a family director when sharing the same last name with the largest family shareholder (Gomez-Mejia et al., 2003).⁸

⁵ In order to check the robustness of our results, the use of an alternative measure to capture family involvement in the business (specifically, a dummy variable that equals 1 if the Family Involvement Index is above or equal to the sample median, and zero otherwise) yielded qualitatively similar results, and our conclusions remain unchanged.

⁶ We acknowledge that our definition may create problems of under-identification (surnames of relatives may not be identical, especially as second and third generations enter the firm). In addition, this limitation is imposed by the decision to compile a relatively large sample by using the dataset.

⁷ We acknowledge that our definition of the generation stage variable may not truly reflect the generation to which the family firm actually belongs. Second-generation members may be incorporated within less than 30 years.

⁸ Alternative definitions for family directors, in which we require the latter to control at least a minimum threshold of voting stock (5% ownership, 10% ownership, 25% ownership), led to similar results

- Family CEO: this is a dichotomous variable that takes the value 1 if a family member holds the title of CEO, and 0 otherwise (Le Breton-Miller et al., 2011; Strike et al., 2015; Vandemaele and Vancauteren, 2015).

Control variables

The following were used as the control variables likely to influence our dependent variable:

- Non-family second largest shareholder: this is a dummy variable that equals 1 if the second largest shareholder is not a family owner (and 0 otherwise). According to SEW arguments (Berrone et al., 2012; Gomez-Mejia et al., 2007), diversification levels may be higher if the second largest shareholder is not a family owner.
- Corporate risk: we defined corporate risk as the variance in return on assets (ROA) between the previous and current year (Chang and Thomas, 1989), divided by one thousand.
- Firm size: firm size was computed as the logarithm of total assets (Jones et al., 2008; Martinez et al., 2007; Vandemaele and Vancauteren, 2015).
- Financial slack: we controlled for this variable by taking the current ratio, which is defined as the ratio of current assets to current liabilities (Schmid et al., 2008).
- Leverage: this control variable was operationalized as the percentage of long-term debt over total assets (Anderson and Reeb, 2003; Martinez et al., 2007), divided by one thousand.
- Firm age: the age of the company is calculated as the number of years since the firm's incorporation. Diversification levels tend to be higher as a firm's age increases (Jones et al., 2008; Martinez et al., 2007).

Method

Our dependent variable—product diversification—is censored at zero. Hence, failing to explicitly recognize the censored or truncated distribution of diversification leads to biased and inconsistent estimates. In order to account for the censored nature of the dependent variable, we use a random-effects Tobit model.⁹ As we have a longitudinal dataset, this model allows us to measure not only the effects that observable variables have on the dependent variable,

(e.g., Gomez-Mejia et al., 2010; Jones et al., 2008; Sacristan-Navarro et al., 2011).

⁹ The model has a random-effects specification based on the assumption that the distribution function of the errors is independent of the explanatory variables (i.e., the unobservable factors are not correlated with the explanatory variables). Likelihood-ratio tests for the pooled estimator against the random-effects panel estimator indicate that the panel-level variance component is important, and hence the pooled estimations are different to the panel estimations. The reported coefficient of ρ , which is the panel-level variance component, provides a similar test. It represents the proportion of the total variance contributed by the panel-level variance component. As Table 3 shows, the estimated value of ρ is significant in all regressions.

but also the effects of relevant unobservable variables. Our model has the following analytical expression:

$$y_{it} = \begin{cases} \beta' x_{it-1} + u_{it} & i = 1, 2, \dots, N; \text{ if } y_{it}^* > 0 \\ t = 1, 2, \dots, T_L \\ 0 & \text{otherwise} \end{cases} \quad (1)$$

where y_{it} is a latent variable representing firm i 's product diversification degree at time t , y_{it}^* is the unobserved (latent) variable that measures each company's effective product diversification, x_{it-1} is a vector of firm characteristics of relevance for explaining the extent of diversification, β is a corresponding vector of parameters to be estimated, and u_{it} is the error term. This model has two types of unobserved factors affecting the dependent variable (those that are constant and those that vary over time). The error term is specifically defined as the sum of the following components:

$$u_{it} = v_i + e_{it} \quad (2)$$

The first component (v_i) is a firm-specific unobservable effect capturing all unobserved, time-constant characteristics that affect product diversification. The error e_{it} is often called the idiosyncratic error, or time-varying error, because it represents unobserved factors that change over time and affect product diversification.¹⁰ This model will therefore estimate β to clearly reflect the influence of regressors on product diversification.

Results

Descriptive analysis

Panels A and B in Table 1 provide the summary statistics and the correlation coefficients of the main variables used. The correlation data suggest that the entropy index is negatively associated with family involvement in the company, the proportion of family directors on the board, and equity in the hands of family members. In contrast, the degree of diversification is not significantly associated with whether or not the CEO belongs to the owner family or with first-generation family firms.

Regression results

Table 2 shows the estimation results from the random-effects Tobit model for testing the proposed relationships. To assess any multicollinearity problems, we computed the variance inflation factor (VIF) in each one of the estimated models. The VIFs are consistently below the cut-off value of 10.0 in all the models, which indicates that multicollinearity is not a major problem in our analysis (Cohen et al., 2003). We first test whether family firms with higher family involvement in governance are indeed more reluctant to diversify. Column 1 in Table 2 shows that higher

¹⁰ It is assumed that both components are independent and distributed according to a normal distribution of mean zero, so that $\text{Var}[u_{ij}] = \sigma_v^2 + \sigma_e^2$, where the parameter σ_v^2 is the variance of the error term related to unobserved corporate heterogeneity, and the parameter σ_e^2 is the variance of the sampling error e_{it} .

Table 1 Summary statistics, descriptive analysis, and correlation matrix.

Panel A: Summary statistics													
Variable	Mean	Std. Dev.			Min.			Max.					
Diversification	0.300		0.460		0.000			2.422					
Family Involvement Index	1.250		0.677		0.000			3.000					
First generation	0.476		0.500		0.000			1.000					
Family equity	21.265		32.285		1.000			100.000					
Stake of largest shareholder	10.510		17.274		1.000			90.000					
Family CEO	0.234		0.423		0.000			1.000					
Proportion family directors	41.495		28.580		1.000			100.000					
Non-family second largest shareholder	0.763		0.426		0.000			1.000					
Corporate risk	0.550		5.648		0.000			191.062					
Size	4.541		1.870		0.008			10.861					
Financial slack	1.543		3.002		0.000			53.000					
Leverage	0.157		0.194		0.000			3.347					
Age	30.774		35.431		0.000			226.000					
Panel B: Correlation matrix													
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Diversification	(1) 1.000												
Family Involvement Index	(2) -0.071***	1.000											
First generation	(3) -0.003	-0.115***	1.000										
Family equity	(4) -0.058**	0.447***	-0.042*	1.000									
Stake of largest shareholder	(5) -0.049**	0.554***	-0.106***	0.775***	1.000								
Family CEO	(6) 0.032	0.719***	-0.178***	0.114***	0.149***	1.000							
Proportion family directors	(7) -0.099***	0.323***	-0.041*	-0.003	0.037*	0.155***	1.000						
Non-family second largest shareholder	(8) 0.065***	-0.098***	-0.021	-0.369***	-0.094***	-0.031	-0.033	1.000					
Corporate risk	(9) -0.047**	0.011	0.051**	-0.003	-0.005	0.011	0.025	-0.029	1.000				
Size	(10) 0.266***	-0.057**	-0.213***	-0.132***	-0.009	0.057**	-0.070***	0.219***	-0.090***	1.000			
Financial slack	(11) -0.090***	-0.042*	0.114***	-0.050**	-0.048**	-0.022	0.018	0.036	0.015	-0.075***	1.000		
Leverage	(12) -0.026	-0.012	-0.050*	-0.037	-0.009	0.002	-0.051*	0.025	0.012	0.185***	-0.039	1.000	
Age	(13) 0.122***	0.038	-0.558***	0.075***	0.103***	0.117***	0.027	0.017	-0.051**	0.269***	-0.108***	0.065***	1.000

Notes: (i) Standard errors in parentheses; (ii) ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively; (iii) number of observations: 1644; and (iv) number of firms: 610.

Table 2 Random-effects Tobit analysis of family firms' diversification strategy.

Dep. Var.: Entropy index	(1)	(2)
Family Involvement Index (H1)	-0.112** (0.060)	-
First-generation family firm (H2)	- (0.067)	-0.157** (0.067)
Non-family second largest shareholder	0.030 (0.097)	0.043 (0.094)
Corporate risk	-0.015 (0.017)	-0.018 (0.017)
Size	0.181*** (0.021)	0.180*** (0.020)
Financial slack	-0.026** (0.010)	-0.029*** (0.010)
Leverage	-0.183 (0.133)	-0.171 (0.129)
Age	0.002 (0.001)	0.003** (0.001)
Constant	-0.894*** (0.150)	-0.940*** (0.122)
σ_u	0.832*** (0.041)	0.820*** (0.039)
σ_v	0.335*** (0.013)	0.335*** (0.012)
ρ	0.8560 (0.014)	0.857 (0.014)
Wald Chi ² (Prob > Wald Chi ²)	107.83 (0.000)	110.89 (0.000)
N. observations	1567	1644

Notes: (i) Standard errors in parentheses; (ii) ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

family involvement in governance is negatively associated with the entropy measure of diversification ($\beta_1 = -0.112$, $p < 0.05$). This result supports [Hypothesis 1](#), and shows that family firms are heterogeneous in their diversification decisions. Specifically, when the family is more involved in the business, family firms experience significantly less product diversification. In line with expectations, our findings suggest that concerns over potential SEW losses derived from diversification increase when the family is involved in the company ([Anderson and Reeb, 2003](#); [Gomez-Mejia et al., 2010](#)).

We also consider whether the generation in charge of the business is a dimension of the family firm that explains its tendency toward diversification. The results provided in [Table 2](#) (column 2) show that when the first generation is involved in the firm, the family firm is found to implement significantly lower levels of diversification ($\beta_3 = -0.157$, $p < 0.05$). These results suggest that diversification decisions in family firms differ from each other depending on the generation at stake in the business. In line with [Hypothesis 2](#), we conclude that family firms run by later generations

experience significantly higher degrees of diversification than first-generation ones.

The estimated coefficients of the control variables show that firm size has a positive impact on diversification, whichever model is considered. In contrast, our results reveal that financial slack has a significantly negative influence on diversification levels. The remaining control variables are non-significantly related to diversification, although they have the expected signs. For instance, although the presence of a large second non-family shareholder may provide the family firm with professionalism and experience and contribute to the promotion of diversification, its estimated coefficient is non-significant, albeit positive. The only exception is the coefficient of the age variable, which has a significant and positive impact on diversification in Model 2.

Robustness tests: alternative operationalization of independent variables

To test whether family firms with higher family involvement in governance are indeed more reluctant to engage in diversification, the empirical analysis has so far been performed with the Family Involvement Index described in "Independent variables" section. We now propose four alternative measures to capture family involvement in governance, and thereby check the robustness of our initial results.

The first two measures reflect alternative ways of measuring family ownership in the company: on the one hand, the percentage of the firm's equity held by the owner family—as defined in "Independent variables" section (Family equity); on the other hand, the percentage of ownership in the hands of the largest shareholder (stake of largest shareholder), in line with prior research ([Maury, 2006](#); [Miller et al., 2007](#); [Sacristan-Navarro et al., 2011](#)). The new regression results with these two alternative measures of family ownership are presented in columns 1 and 2 in [Table 3](#). The estimated coefficients show that the larger these two measures of family ownership, the lower the degree of diversification. This suggests that the preference for diversification among family firms is weaker in companies that have family shareholders with high equity ownership. These results therefore confirm our arguments on the negative relationship between family ownership in the company and its impact on diversification decisions explained in "SEW concerns and diversification in family firms" section.

The third measure capturing family involvement in governance includes the percentage of family members on the board. The results presented in column 3 in [Table 3](#) show that the entropy measure is negatively related to the proportion of family members on the board. Therefore, family firms in which the family has more members on the board of directors are more averse to diversification, as expected.

Finally, the model in column 4 ([Table 3](#)) includes our last alternative measure of family involvement in governance. This model includes the variable that identifies whether or not the CEO is a family member. Our results show that this variable is non-significant.

Table 3 Robustness tests of the propensity of family firms to diversify: Using alternative measures.

Dep. Var.: Entropy index	(1)	(2)	(3)	(4)
Stake of largest shareholder	-0.007*** (0.002)	-	-	-
Family equity	- Percentage family directors	-0.003** (0.001)	-	-
Family CEO	- Non-family second largest shareholder	- -0.016 (0.099)	-0.093*** (0.031)	- 0.016 (0.092)
Corporate risk	-0.019 (0.019)	-0.019 (0.019)	-0.017 (0.017)	-0.016 (0.017)
Size	0.176*** (0.020)	0.174*** (0.021)	0.169*** (0.021)	0.184*** (0.021)
Financial slack	-0.028*** (0.129)	-0.028*** (0.010)	-0.027*** (0.010)	-0.026*** (0.010)
Leverage	-0.180 (0.129)	-0.180 (0.129)	-0.175 (0.129)	-0.187 (0.134)
Age	0.002 (0.001)	0.002 (0.001)	0.001 (0.001)	0.002 (0.001)
Constant	-0.901*** (0.213)	-0.870*** (0.133)	-0.633** (0.163)	-1.056*** (0.127)
σ_u	0.819*** (0.039)	0.823*** (0.039)	0.816*** (0.039)	0.837*** (0.041)
σ_v	0.336*** (0.012)	0.336*** (0.012)	0.336** (0.012)	0.335*** (0.013)
ρ	0.856 (0.014)	0.857 (0.014)	0.855 (0.014)	0.862 (0.014)
Wald Chi ² (Prob > Wald Chi ²)	113.31 (0.000)	109.28 (0.000)	114.29 (0.000)	104.20 (0.000)
N. observations	1644	1644	1644	1567

Notes: (i) Standard errors in parentheses; (ii) ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Discussion and conclusions

This paper has explored the impact on the level of diversification among family firms of several dimensions linked to family influence, such as the percentage of family ownership, the proportion of family members on the board, and the presence of a family CEO, as well as which generation is at stake. Our main purpose has been to analyze the effects that family involvement in the company and the generational stage have on diversification decisions among family firms. In order to achieve this goal, we have used a panel of firms from the OSIRIS database with data from the 27 countries belonging to the European Union over the 2005–2009 period.

Research into the relationship between family firms and diversification constitutes a theoretically and empirically important topic in the strategic decision-making process. However, studies on this issue are still scarce, producing mixed empirical findings (e.g., [Ducassy and Prevot, 2010](#); [Gomez-Mejia et al., 2010](#); [Hernandez-Trasobares and Galvez-Gorri, 2016](#); [Miller et al., 2010](#); [Schmid et al., 2015](#)). This

study seeks to further the state-of-the-art by focusing on several distinctive characteristics of family firms that are likely to have an influence on, among other factors, strategic choices.

In particular, we posit that the differences in terms of the importance family firms attach to non-economic goals such as the preservation of SEW ([Vardaman and Gondo, 2014](#); [Vandemaele and Vancauteren, 2015](#)) mean that different family businesses have a different propensity to diversify their activities. Our analysis strengthens the hypothesis of a negative relationship between family firm and diversification. Specifically, the greater the family's involvement in the firm, the more important the objective of preserving SEW will be, and the more reluctant the company will be to diversify. We therefore agree with Gomez-Mejia and colleagues when we suggest that family firms avoid strategic choices such as diversification that entail a threat of losses in SEW, because an important feature of family firms is their desire to preserve their affective endowment over financial concerns ([Berrone et al., 2012](#); [Gomez-Mejia et al., 2007](#)). Our results are thus consistent with the extant empirical

evidence showing that on average family firms diversify less than non-family ones ([Gomez-Mejia et al., 2010](#)).

Although families generally wish to maintain ownership and keep tight control of their companies, the various dimensions of family involvement imply different preferences toward strategic decisions. Family firms with greater levels of family influence and in the first generation are less prone to diversify. These features hamper, for example, family firms' ability to attract external financial resources, as they want to protect the family's SEW. Thus, the lack of equity may block costly activities requiring major funding allocations, such as diversification. Likewise, family firms with a high family influence are generally more reluctant to carry out diversification so as to avoid the professionalization of the board of directors, which would lead to a decrease in family control. In addition, large ownership stakes in the hands of the family may also lead to new agency problems, such as the expropriation of the wealth of minority shareholders or preferential treatment for family members, with the ensuing negative consequences on diversification.

Furthermore, beyond family involvement, our study contributes to the literature on family firm heterogeneity by identifying the generational stage as a powerful source of variability in family firm behavior. Guided by their fear of losing control, first-generation family firms are not expected to promote diversification. However, the concern for family legacy will be stronger in second and later generations, shifting the priority from controlling the company to securing its continuity for family owners, with diversification strategies becoming a way to ensure the firm's viability and growth and favor the career opportunities of a larger group of relatives. Like the research by [Strike et al. \(2015\)](#), our study supports a dynamic view of SEW that underscores how several of its different dimensions take priority in different stages of an organization's life.

Managerial relevance

Our results also have important managerial implications. Given that the primary goal of any family firm is to uphold its affective endowment ([Gomez-Mejia et al., 2007](#)), firms with high levels of family influence and with first-generation family members will be more concerned about preserving SEW. Accordingly, they will be less likely to engage in strategic decisions (such as diversification) that involve a high risk of losing SEW, and which may weaken their influence over the decision-making process ([Strike et al., 2015](#)). Our study therefore helps us to understand that there is not a single profile of family firms regarding the link between nonfinancial concerns and major strategic decisions.

In particular, we have found major differences in diversification decisions among family firms. These differences may be explained in terms of family involvement and the generation in charge. Consequently, it is important to consider that family firms will be less willing to make strategic choices such as diversification in the following cases: (a) the family is highly involved in the firm's governance: family members will be loss-averse in order to preserve the family's ability to generate SEW benefits from the business, and (b) the presence of the first generation: first-generation

family members tend to show a sense of loyalty and emotional attachment, and will therefore be more reluctant to diversify.

In the first of these two cases, large family involvement does not demand major changes. Instead, because family members are concerned about emotional goals, they will tend to behave conservatively. Likewise, high family involvement will reduce the possibility of attracting qualified directors from outside the firm, who are usually more adept at incorporating the new knowledge and skills required to promote diversification. This means that in order to preserve their SEW, family members may place an inexperienced family member in charge of a division, instead of an experienced outsider. Although such a decision may enable the family to retain control over the business, it may become detrimental to diversification decisions.

In the second case, when acting altruistically toward another family member, the founder may decide to diversify, which may cause intra-family conflict (e.g., lateral conflict between siblings). To avoid this, the founder and first-generation family members may decide not to promote diversification. In contrast, second- and later-generation family firms will behave differently, being more prone to diversification strategies. Diversification may offer these family members the potential to enhance long-term value by increasing a firm's viability through entry into new product markets and by promoting growth (and therefore increasing long-term SEW).

In sum, given that family firms are heterogeneous in their choices and that the priority of SEW may vary among family firms ([Cennamo et al., 2012; Strike et al., 2015](#)), family members need to know the contingency factors (such as the degree of family involvement, or the generation in charge) that may shape the effects of their preferences in terms of SEW on their inclination to pursue diversification.

Limitations and directions for future research

We cannot conclude our paper without considering some of its main limitations, which provide opportunities for sundry lines of future research. First, we should recognize that we are unable to measure SEW directly. Instead, we propose a measure that summarizes three characteristics (e.g., ownership, control, and management) that have frequently been associated with the family's SEW attachment to the business ([Berrone et al., 2012; Gomez-Mejia et al., 2007](#)). Like some prior research on family firms, our definition of family firm and our measure of family involvement are based on archival data (e.g., [Miller et al., 2010; Strike et al., 2015](#)). We therefore call for future studies that use more fine-grained proxies of SEW. For instance, it could be interesting to use the validated measures proposed by [Berrone et al. \(2012\)](#), for example, and examine variations in this business characteristic across different institutional environments.

Second, our sample is restricted to publicly traded firms. Almost all existing studies on this issue have focused exclusively on listed firms (e.g., [Gomez-Mejia et al., 2010](#)). Future research including both publicly listed and private firms is likely to capture the differences both between family and non-family firms and within family firms more consistently ([Carney et al., 2015](#)). Second, our study has focused only

on publicly listed European firms. Although our results for Europe are similar to those previously found for the US (Gomez-Mejia et al., 2010), the analysis of certain institutional idiosyncrasies across countries, how they differ, and how these differences might lead to different hypotheses on the relationship between family firms and diversification, may constitute a fruitful research topic. Third, due again to the nature of our database, we have only partially considered the effect of family involvement in management (presence of a family CEO). Nevertheless, analyzing the impact of family involvement in management, measured for example as the number of family managers (Chrisman et al., 2012; Kotlar et al., 2014), may be a promising avenue for an important body of work in the future. Finally, studying the differences in size across family firms, as well as other distinctive features, such as the CEO's characteristics (age, tenure, background...), and the type of major non-family shareholders (outside investors such as banks or foreign owners, etc.), might complement our analysis and broaden our knowledge of this under-researched family business phenomenon. In short, future research is required to examine diversification decisions among family firms and understand how specific factors commonly associated with this type of organization impact upon their ability to diversify their operations.

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