**RESEARCH ARTICLE** 



# One more piece of the family firm debt puzzle: the influence of socioemotional wealth dimensions

Virginia Blanco-Mazagatos · M. Elena Romero-Merino · Marcos Santamaría-Mariscal · Juan Bautista Delgado-García

Accepted: 9 January 2024 © The Author(s) 2024

Abstract The literature on debt financing in family firms is still inconclusive. Initial studies have usually focused on the influence of family involvement on firm's debt levels by using the explanations of traditional economic theories. More recent studies have begun to focus on the role of family goals in family firm debt levels, particularly drawing on socioemotional wealth (SEW), which has helped in the development of financial theories of family business. Nevertheless, existing arguments have usually not considered SEW as a multidimensional construct that covers diverse family goals. In addition, literature has usually drawn on arguments considering SEW as a stock, but have not considered the importance given

**Supplementary Information** The online version contains supplementary material available at https://doi.org/10.1007/s11187-024-00881-8.

V. Blanco-Mazagatos (⊠) · M. E. Romero-Merino · M. Santamaría-Mariscal · J. B. Delgado-García Department of Economics and Business Administration, University of Burgos, CL Parralillos S/N, 09001 Burgos, Spain e-mail: vblanco@ubu.es URL: https://investigacion.ubu.es/investigadores/35012/ detalle

M. E. Romero-Merino e-mail: meromero@ubu.es

M. Santamaría-Mariscal e-mail: msanta@ubu.es

J. B. Delgado-García e-mail: jbdelgado@ubu.es to SEW (SEWi), which specifically acknowledges SEW as a goal. Our paper responds to recent calls to extend theoretical arguments on the effect of diverse dimensions of SEWi on family firm behavior and to focus on the role of SEWi on the family firms' debt. Specifically, we test how the CEOs' assessment of the importance that their family attaches to the continuity, prominence, and enrichment dimensions of SEWi influences the level of debt. To do so, we use a sample of 126 Spanish unlisted family businesses. Our results show that the continuity dimension of SEWi leads family businesses to increase their debt level being a key determinant of this financing decision.

Plain English Summary Drawing on the idea that family firms may have differences in their family goals, our study develops and tests theoretical arguments that help to better understand the differences in the debt financing decisions between family firms. The results show that when the family gives importance to continuity of the family in the business over the long term, the level of debt in their family firms is higher. Other family goals, in particular family prominence (i.e. family's reputation and social capital) and family enrichment (i.e. family harmony and well being) do not affect family firm debt levels. These findings extend traditional finance theories which mainly focus on economic objectives by incorporating family goals. It also provides important information to family CEOs, since those who attach importance to the continuity of the business need may set high debt ratios thus increasing firm risk. Finally, it highlights to policy makers the importance of developing mechanisms to facilitate access to bank debt for family businesses. This would reduce bankruptcy fears and facilitate medium and long-term investments.

**Keywords** Socioemotional wealth importance (SEWi) · Debt · Family goals · Family continuity · Family prominence · Family enrichment

JEL Classification L21 · M19 · G32

### 1 Introduction

The debate on debt financing in family firms, although long studied, is still open. Numerous studies have focused on the comparison of family and nonfamily firms and have mainly drawn on traditional arguments derived from trade-off, pecking order, or agency theory (McConaughy et al., 2001; Wu et al., 2007). However, literature has questioned the direct applicability of these classical arguments to the financial decisions of family firms particularly in privately held family business (Chrisman et al., 2016; Jansen et al., 2022; Michiels & Molly, 2017). One of the main limitations stressed is that these traditional theories assume that only financial motives lead financial decisions (Michiels & Molly, 2017), and do not consider that family firms differ from non-family firms in their greater propensity to assess strategic decisions in terms of both economic and family noneconomic goals. Several researchers have extended these classical arguments by arguing on diverse family goals and developed conflicting effects on family firm debt. While some authors argue that families prefer debt to finance their investments to avoid losing control of their firms (e.g., Keasey et al., 2015; Wu et al., 2007), others claim that family firms avoid borrowing to reduce potential financial distress and safeguard their reputation (e.g., McConaughy et al., 2001; Santos et al., 2014) or to limit monitoring by creditors who might restrict their use of resources toward the family (e.g., Shyu & Lee, 2009). These conflicting arguments evidence the complexity in the debt decisions by family firms (Michiels & Molly, 2017).

The conflicting arguments and findings contributed to the development of a second line of research that focuses on the sources of differences in debt levels within family firms. This line of research follows claims by researchers that heterogeneous family firms had been considered a homogeneous group (Arregle et al., 2012), which might be very misleading, as variations between family firms can be as significant as those between family and non-family firms (Chen et al., 2022). Scholars following this approach emphasize the need to combine non-traditional arguments with traditional theories to increase our understanding of family firms' financing decisions (Schickinger et al., 2022). Among these non-traditional arguments, there is the consideration of the importance of family goals, particularly socioemotional wealth (SEW)i.e. array of non-financial benefits specifically associated with the well-being and affective needs of family members (Debicki et al., 2016)-in the decision-making of family firms.

Nevertheless, most of the studies under this second line of research have not directly measured SEW but have again used SEW as a broad objective in their theoretical argumentation and analyzed whether the higher involvement of family members in the ownership, management, and/or governance of the family firm leads to different debt levels (Amore et al., 2011; Bacci et al., 2018). This approach leads to several limitations. First, as Berrone et al., (2012, p. 268) argue, "the use of ownership as a proxy of SEW requires the strong assumption that variables have an isomorphic behavioral and emotional counterpart." Therefore, literature has begun to claim on the need to directly measure family goals through measures such as SEW (Michiels & Molly, 2017). Few studies have addressed this claim. Molly et al. (2019) find that family-centered objectives affect family firms' debt rates. Baixauli-Soler et al. (2021) assess directly SEW preference and find that family firms in which SEW preservation is higher use less debt. Second, existing research has usually considered SEW an umbrella concept that incorporates the great diversity of family-centered objectives in family firms (Chua et al., 2015). However, there have been recent calls to consider whether SEW is uni- or multi-dimensional (Brigham & Payne, 2019). Recent metanalysis (Davila et al., 2023) and systematic reviews (Swab et al., 2020) argue that SEW is multidimensional so that each dimension may play a unique role in the decision-making in family firms and result in different influences in family firm behavior.

To the best of our knowledge, only research by Jansen et al. (2022) has drawn on SEW to theoretically and empirically uncover how two family-centered objectives—retention of control over the firm and the aim to pass the firm to the next generation may condition family firm financing decisions. These authors (see also Michiels & Molly, 2017) also call for new analyses on the potential opposite effects of other dimensions of SEW.

Finally, as literature on SEW has developed, different conceptualization has arisen (Chua et al., 2018), such as SEW as a stock or the importance given to SEW (SEWi) (Brigham & Payne, 2019). The conceptualization of SEWi developed by Debicki et al. (2016) specifically acknowledges SEW as a goal (Chua et al., 2018). Literature has suggested the interest of considering SEWi in the analysis of financial decisions in the family business given that the pursuit of family goals drives family firm behavior (Michiels & Molly, 2017). In particular, Debicki et al. (2016) identify three different dimensions within SEWi that cover the different types of family goals to which family members attach importance: family continuity (i.e., family preservation and sustainability in the firm), family prominence (i.e., building the family's image and reputation), and family enrichment (i.e., ensuring family happiness, and well-being). Accordingly, we follow the suggestions to focus on SEWi (Michiels & Molly, 2017) and extend traditional finance theories by developing arguments on how each of these objectives may influence debt levels by family firms.

Our research aims to develop and test theoretical arguments that help to understand the debt financing decisions of family firms. Specifically, we analyze the particular effect of each SEW importance (SEWi) dimension on the debt levels of family firms.

Our study has implications for five lines of research within the family business literature. First, it extends previous literature by directly linking family firm debt level with the importance that the family attributes to different SEW dimensions (SEWi). Therefore, our research broadens the literature on the impact of SEW and its dimensions on family firms' strategic decisions (Gast et al., 2018). Indeed, following the call to explore the SEW dimensions in greater depth (Brigham & Payne, 2019; Miller & Le Breton-Miller, 2014; Swab et al., 2020), this is the first study to examine the separate effect of each SEW dimension on family firms' debt. Second, from a theoretical point of view, we contribute to the creation of a theoretical framework to explain financing decisions in the family firms by incorporating the different family objectives embodied in SEWi. This allows to integrate and extend previous arguments employed by existing literature on debt financing in family firms. More broadly, our study allows to complement arguments posed by economic theories regarding family firms. As suggested by Shukla et al. (2014), although family firms have simultaneous positive and negative qualities, each economic theory has emphasized one side and neglected the other. Our arguments help to uncover which SEWi dimensions positively or negatively affects debt levels. In addition, our analysis of the effect of SEWi on the family business financing also helps to deepen our knowledge on the theoretical underpinnings of SEW, which still need further attention and development (Michiels & Molly, 2017). Third, we contribute to research on debt in family firms, particularly to the literature focused on the heterogeneity of family firm debt financing decisions. In particular, we respond to concerns regarding the use of measures of family involvement as proxies of SEW (Chua et al., 2018). Fourth, our study responds to recent calls for a microfoundations approach to family firm research. Specifically, we address a macro-level phenomenon of family firm debt by focusing on the CEOs' assessment of the importance that their family attaches to the SEW dimensions (De Massis & Foss, 2018). Finally, we also contribute to the development of an economic theory of family business. As argued by De Massis et al., (2014: 354)-see also Chrisman et al. (2003)—a separate theory of the family firm is justified "on the basis that firms with family involvement develop distinctive resources, display particularistic behaviors, or produce dissimilar performances." Therefore, family business research needs to show (i) that there is a particular behavior among family firms, a behavior that does not exist or is less common in non-family firms; and (ii) that the behavior is due to family involvement. Economic theories of the firm draw on economic agents with specific preferences, contracts, controls, and incentives (Shukla et al., 2014). Our study shows that specific and diverse goals of the family motivate a particular behavior in family firms, such as debt levels, which may condition their scale and scope (e.g., Chandler, 1990; O'Brien et al., 2014). These results are in line with arguments that, to understand how organizations function, research has to take into account that individuals are not only influenced by money, income, or wealth (Jensen & Meckling, 1994). This may help extend the analysis of control and incentive systems that traditional economic theories use to explain the scale and scope of firms (Alchian & Woodward, 1987; Demsetz, 1988). Furthermore, SEW has traditionally drawn on Behavioral Agency Model (Berrone et al., 2012; Gomez-Mejia et al., 2014). Our study extends these arguments by suggesting that SEW involves diverse goals with diverse effects on family firm behavior.

The remainder of the paper is structured as follows. In the next sections, we provide our theoretical framework and develop our hypotheses. We then describe the sample, variables, and methodology. Finally, we present the main results and conclusions.

# 2 Literature review

For decades, literature has analyzed the determinants of debt financing in family firms. Two broad research topics emerge: debt financing in family vs non-family firms, and heterogeneity in debt financing among family firms.

2.1 Debt financing in family firms versus non-family firms

The comparison of debt-financing between family firms and non-family firms is an important line of research. However, as argued by Michiels and Molly (2017), findings remain inconclusive. This line of research has usually drawn on traditional capital structure theoretical approaches, such as pecking order, trade-off, and agency theories.

According to the pecking order theory, firms rank the different sources of financing based on information asymmetries and costs. To minimize these costs, firms primarily use internal funds, but when additional funds are needed to finance their activity, they tend to borrow before issuing capital (Myers & Majluf, 1984). The trade-off theory assumes a target debt ratio that maximizes the firm's value. This model proposes the search for a balance between the debt benefits derived from the interest payments and shield from transaction and the debt costs related to the probability and costs of financial bankruptcy (Modigliani & Miller, 1958). According to the agency approach, debt serves as a governance mechanism that enables creditors to monitor managers' behavior and decision-making (Jensen & Meckling, 1976).

To justify higher levels of debt in family businesses compared to non-family ones, some studies rely on the pecking order theory, but also on arguments regarding the family's concern about preserving the control of the business (e.g., Blanco-Mazagatos et al., 2007). Similarly, previous studies that support a lower level of debt in family businesses draw on the trade-off theory and the search of a balanced capital structure (e.g., Serrasqueiro et al., 2016), but also use arguments related to family risk aversion and their conservative financing decisions (e.g., McConaughy et al., 2001). Finally, research using agency arguments explain that debt in family firms has a monitoring role that can interfere with families' appropriation of private benefits. Therefore, family firms demand less debt (e.g., Santos et al., 2014).

This overview shows that traditional finance theories do not fully capture the behavior of family firms because beyond the economic objectives that underlie these theories (Michiels & Molly, 2017) a key difference of family firms is the presence of family noneconomic objectives (Chrisman et al., 2012). Although literature comparing debt levels between family and non-family firms have complemented traditional finance theories with arguments regarding the presence of family noneconomic objectives, they have either developed arguments on a broad family objective (e.g., socioemotional wealth), or considered a single specific objective such as the maintenance of the control of their firms (e.g., Keasey et al., 2015; Wu et al., 2007), or the lowering of potential financial distress to safeguard family reputation (e.g., McConaughy et al., 2001; Santos et al., 2014). Therefore, they have not taken into account that family noneconomic objectives may be diverse and that they may even have opposite influences in the debt level decisions of family firms (Michiels & Molly, 2017).

# 2.2 Heterogeneity in debt financing among family firms

Heterogeneity among family firms has been traditionally neglected when studying financing decision (Michiels & Molly, 2017). However, the conflicting findings by literature comparing family and non-family firms as well as the argument that heterogeneity among family firms may be even larger than the heterogeneity between family and non-family firms (Chua et al., 2012) led to literature exploring this phenomenon (e.g., Amore et al., 2011; Bacci et al., 2018). Initial research followed a similar line of reasoning to those studies comparing family and non-family firms by focusing on the effect of the degree of family involvement in the governance of family firms through variables such as the level of dispersion in family ownership, the type of CEO (family CEO, non-family CEO), or board control.

However, behavior may differ between family businesses even with the same level of family involvement depending on their family goals because goals are stronger predictors of firm behavior (Chua et al., 2012). A more recent literature, which follows a microfoundations view (De Massis & Foss, 2018), has begun to directly explore family objectives in family business financial decisions. Romano et al. (2001) first evidences about the importance that family members attach to different family goals on debt decisions of family firms. Koropp et al. (2014) shows that owner-managers perception of family norms and attitudes toward external debt affect their intentions to use of external debt. In turn, it affects the proportion of funding for family firm's last investment project. Molly et al. (2019) show that family goals have an indirect effect on total debt rate through family board representation. They also suggest that SEW perspective and particularly SEWi could help to open this black box because it reflects the family goals of family managers when making financial decisions (see also Michiels & Molly, 2017).

Two studies have focused on the role of SEW. Baixauli-Soler et al. (2021) find that those family firms more concerned with SEW preservation have lower debt levels. However, in their analyses, they do not disentangle the effect on family firm debt of the various objectives that are covered under the SEW construct. Jansen et al. (2022) focuses on the effect of two dimensions of SEW—retention of control over the firm and the aim to pass the firm to the next generation—on the heterogeneity of financing decisions among family firms. They find that both objectives favor that family firms avoid extra capital, but, when it is needed, they favor family capital over external capital.

The advancement in the measurement of family goals and particularly of SEW (Chua et al, 2012) has led to different conceptualizations (Brigham & Payne, 2019). Mainly, research has conceptualized SEW as a stock (i.e., an accumulation of affective and social family benefits) which usually has been measured with the FIBER (Berrone et al., 2012) scale, or SEW as an intention (SEWi) developed by Debicki et al. (2016). Both conceptualizations consider SEW as a superordinate construct because the dimensions are interrelated but, at the same time, each dimension retains idiosyncratic independence. Hence, literature has recently called to explore whether each dimension may play a unique role in family firm's decisions and behaviors (Davila et al., 2022), an issue that has not yet been totally explored in the case of the financial behavior of family firms (Michiels & Molly, 2017). Although literature conceptualizing SEW as a stock often treat it more like a goal that influences behavior (Chrisman & Patel, 2012; Chua et al., 2012), socioemotional wealth importance (SEWi) more specifically acknowledges SEW as a goal (Chua et al., 2018). In fact, SEWi has been suggested an appropriate conceptualization for the analysis of financial decisions in the family business (Jansen et al., 2022; Michiels & Molly, 2017) given that the pursuit of family goals that create SEW for family members is an important factor that drives family firm behavior. Families vary greatly in their goals and aspirations (Gerken et al., 2022). Consequently, there should be differences among family firms in the importance placed on different family goals and the subsequent strategic decisions (Debicki et al., 2016; Jansen et al., 2022), e.g., debt level decisions. Moreover, diverse family goals may lead to opposite effects on debt decisions.

### 3 Hypothesis development

The importance attributed to specific SEW dimensions reflects the preference of family members for some non-financial outcomes over others. In turn, the importance on each of the three SEWi dimensions (continuity, enrichment, and prominence) is likely to differently affect the debt levels. 3.1 The continuity dimension of SEWi and the level of debt

The continuity dimension of SEW refers to the satisfaction that family members obtain from contributing to the transgenerational sustainability of the family in the business over the long term; that is, the importance family members attribute to preserving the family dynasty in the business across generations, ensuring the family's unity, and maintaining the family values in business operations (Debicki et al., 2016).

When family members attach importance to preserving the family dynasty in the business, they evidence their concern for the firm beyond their own expected tenure or life (James, 1999). To ensure this transgenerational transfer of the firm, they will use their power to influence the capital structure to maximize their control over the business. Only when the firm remains in the family will business decisions be guided to encourage future generations to assume control of the firm (Debicki et al., 2016). Thus, family members will use debt, not only because it is a "noncontrol-diluting security" (Croci et al., 2011), but also because debt is s a reversible decision. In sum, when family control is at stake, we expect family firms to become positive toward debt (Koropp et al., 2014; Romano et al., 2001). These arguments are in line with the hierarchization of financing sources described in the family firm pecking order proposed by Jansen et al. (2022).

The same argumentation can be applied to ensure the family values are maintained in the firm. Preserving family equity provides the family an excellent position to influence the firm (Fama & Jensen, 1983), since only when family members maintain control of business operation will they be able to preserve and promote the family values to younger generations. Hence, family firms that seek to preserve family values prefer to assume greater financial risks (in terms of bankruptcy) to avoid risking control (Gómez-Mejía et al., 2007; Jones et al., 2008). Finally, although debt holders can influence a firm's decision-making process, it is the shareholders who have the authority to make decisions (Triantis, 1996). Family members concerned about maintaining family unity will try to avoid the entry of external shareholders, since they may interfere the decision-making processes (Serrasqueiro et al., 2016). This would prevent family members from working as a unit and making decisions together to reach agreement (Debicki et al., 2016). Therefore, as the presence of non-family members may challenge the family's sense of control (Jones et al., 2008), family firms that attach importance to family unity would use debt when running out of internal sources of funding. Thus, we hypothesize:

**H1:** The importance that family attaches to continuity is positively related to the family firm's level of debt financing.

# 3.2 The prominence dimension of SEWi and the level of debt

The prominence dimension concerns building and maintaining the family's image (Debicki et al., 2016). Family prominence refers to the family's reputation, the accumulation and preservation of social capital, and the family's local recognition and appreciation for generous actions.

First, regarding family reputation, research shows that family members develop a close and enduring connection with the firm that sometimes even carries their name (Dyer & Whetten, 2006). Hence, they tend to be concerned about the external image to stakeholders (Craig & Dibrell, 2006), and avoid actions that may damage their image or reputation (Deephouse & Jaskiewicz, 2013). According to the tradeoff theory, a higher level of debt implies an increase in bankruptcy costs. So, family members especially interested in preserving their good reputation may maintain low levels of indebtedness to prevent the family firms' reputation from being damaged if it defaults on a loan (Bopaiah, 1998). Second, the family firm's social capital largely depends on the focal family's social capital (Arregle et al., 2007). Strong family ties result in frequent, and close relationships within the family group (Hoffman et al., 2006) which make it difficult to create new relationships with external stakeholders. Thus, the social capital of family firms will consist in relations with the extended family and intense relations with a reduced group of external stakeholders. Social capital is based on trust and reciprocity (Adler & Kwon, 2002; Bubolz, 2001). Thus, family members concerned with preserving social capital will establish with creditors long-term relationships based on trust (Naldi et al., 2013), and will have low incentives to use high levels of debt, or expropriating debt providers by transferring the investment risk to them (Schmid, 2013). Finally, those family firms that seek to gain recognition by engaging in generous actions to benefit their community (Debicki et al., 2016) will require free cash flows. According to Jensen (1986), debt is used to mitigate the agency costs of free cash flows, since it reduces the cash flow available for discretionary spending by managers. As such, firms that want to finance social actions will prefer to avoid the use of debt and have at their disposal enough free cash flow. Hence, we propose:

**H2:** The importance that family attaches to prominence is negatively related to the family firm's level of debt financing.

# 3.3 The enrichment dimension of SEWi and the level of debt

The enrichment dimension refers to the guarantee of family happiness and the satisfaction of needs in the short run, i.e., those favoring harmony and enhancing the family's well-being (Debicki et al., 2016). This dimension includes altruism, not only toward the family members involved in the business, but toward the whole family. Enrichment also entails improving family harmony by facilitating family life and strengthening the relationships among family members. Finally, families that highly value this dimension make business decisions with a concern for meeting family needs, i.e., increasing the family members' sense of belonging, providing employment for family members, ensuring their financial stability, affording general assistance to family members (to increase their happiness and well-being).

When the family attributes importance to the enrichment dimension, they may use the firm's resources to provide personal benefits and privileges for their relatives (Pérez-González, 2006; Schulze et al., 2003). However, when the firm is financed through external funds, a link is created to new actors, i.e., creditors, that tend to value more tangible and objective criteria (Jones et al., 2008). In line with agency theory arguments, that debt is a monitoring mechanism, creditors would supervise the firm's decisions to avoid expropriation of resources,

safeguard the achievement of economic objectives, and, ultimately, ensure the repayment of the loan granted (Jensen, 1986). Thus, creditors may erode the family firms' ability to exercise unrestricted authority and power (Schmid, 2013). Additionally, external and non-family actors may damage the sense of intimacy and belonging with family members. Hence, family members especially concerned for family enrichment would avoid external funding, since the involvement of outside actors could threaten the family's ability to care for its members (Jones et al., 2008).

In addition, meeting the needs of family members and thus family enrichment requires free cash flows in the firm. This makes debt an undesirable financing instrument, since it reduces the available cash flows due to the pre-commitment of interest payments (Jensen, 1986), which could interfere with the ability to meet the family's needs and thus maintaining family harmony (Santos et al., 2014).

Finally, as this dimension focuses on meeting both the needs of family members in the short term and those of family members outside the firm, there may be a preference to avoid or reduce the risk of bankruptcy arising from debt. In the first case, according to the myopic loss aversion logic,<sup>1</sup> when the evaluation period for decisions is short, risk aversion is greater (Benartzi & Thaler, 1995). Thus, when family members are concerned about short-term needs, they will be especially attentive to the risk of bankruptcy due to debt. In the second case, since family members outside the firm are not involved in day-to-day operations, they may prefer a stable income while avoiding the financial risks associated with indebtedness. Thus, we posit:

**H3**: The importance that family attaches to enrichment is negatively related to the family firm's level of debt financing.

<sup>&</sup>lt;sup>1</sup> According to the myopic loss aversion perspective, investors are assumed to be loss averse, as they are more sensitive to losses than gains, and this concern is amplified with short-term goals (Benartzi & Thaler, 1995).

# 4 Data and method

#### 4.1 Sample

We tested our hypotheses on a sample of private Spanish family firms. We used Bureau van Dijk's SABI database as the basis for selecting our sample. Following prior literature (e.g., Baixauli-Soler et al., 2021; Diéguez-Soto et al., 2015), we included public and private limited companies excluding listed companies. We focus exclusively on unlisted companies because in these companies the classical arguments on asymmetric information employed by the traditional finance theories cannot fully explain why financial decisions are made. Thus, this type of companies may be appropriate for the analysis of the effect of family goals on the debt decision (Jansen et al., 2022). We also excluded firms from the financial, insurance, and public industries; firms affected by special situations (i.e., bankruptcy proceedings, dissolution, liquidation, or periods without activity); and firms without information available (i.e., name, address, or sector). Finally, we excluded those firms with less than 10 employees (Diéguez-Soto et al., 2015). We used this requirement to exclude "lifestyle firms" that are created as a form of family survival, but with no intention of passing them on to future generations (Blanco-Mazagatos et al., 2007).

In line with prior studies, we characterize a firm as a family business when meeting the following criteria: the family holds more than 50% ownership (Amore et al., 2011; Molly et al., 2019), and is involved in the firm's management and governance (Blanco-Mazagatos et al., 2007; Rojo Ramírez et al., 2011).

A total population of 47,426 firms meet these criteria. Among these, we selected a stratified random sample of 1000 family firms, a representative sample of Spanish private family firms (sampling error $\pm 3.06\%$  with a confidence level of 95%). We used firm age (a proxy of firm generation) and firm size as stratification criteria.

Having selected the sample, in February 2019, we sent an online questionnaire to the family CEOs asking them to rate the importance they attach to the different SEW dimensions. We focused on family CEOs given their significant influence on strategic choices (Hambrick & Mason, 1984). The questionnaire allowed us to ensure that the firms in our sample met the criteria regarding family ownership, management, and governance.

To increase the response rate, we sent the questionnaire in two rounds, receiving 155 responses. The response rate (15.5%) is considered acceptable for this type of online survey (Schulze et al., 2003). We found no differences in any of our variables between early and late respondents, suggesting no response bias. Since we measured the criteria variables with objective data, common method bias is limited (Podsakoff et al., 2003). Nevertheless, we also ran a factor analysis (Harman's single-factor test) by introducing all variables, and no method factor emerged. We dropped 22 responses due to incomplete data in the questionnaire, four due to the lack of financial information in the SABI database, and three because they reported negative values of debt. Therefore, our final sample comprises 126 family firms. The t-test confirmed no significant differences between the sample and the population in relation to total assets and operating revenue.

#### 4.2 Variables and methodology

# 4.2.1 Dependent variables

The firm's debt rate (DEBT) is calculated as total financial debt to book value of assets (Baixauli-Soler et al., 2021; Molly et al., 2019). This variable includes only interest-bearing debt instruments (e.g., bank loans, bonds, and leasing) that can be considered in financing decisions.

#### 4.2.2 Independent variables

We used Debicki et al.'s (2016) scale to measure the three distinct dimensions of SEWi—family continuity, family prominence, and family enrichment. To measure family prominence (PROMINENCE), we used the original scale that includes three items: family recognition in the community due to the firm's generous actions, accumulation and conservation of social capital, and maintaining the family's reputation through the business. We measured family continuity (CONTINUITY) using the three items from the original scale: maintaining family unity, preserving the family dynasty in the business, and maintaining family values through business operations. Finally, we also used three items from the original scale to measure family enrichment (ENRICHMENT): the importance the family CEO attaches to family members' happiness outside the business (i.e., family members who are not owners, workers, or executives in the firm), the importance the CEO attaches to improving family harmony through business operations, and considering family needs in business decisions. Specifically, the authors use three questions with a 5-point Likert-type scale to measure each of the three dimensions that form the construct.

Following Debicki et al. (2017), as we use an established scale for our variables, we conducted a confirmatory factor analysis (CFA). We used PLS to handle both reflective and formative constructs (Chin & Newsted, 1999). Results for the CFA as well as item reliability and internal consistency, as well as convergent and discriminant validity, are shown in the electronic supplementary document.

# 4.2.3 Control variables

To control for the family involvement in the firm, we included several variables generally used in studies that analyze the ability of the family to influence the financial decisions of the family firm (e.g., Keasey et al., 2015). FAMILY\_OWNERSHIP measures the level of family control through ownership, calculated as the percentage of firm ownership in the hands of the family. FAMILY\_MANAGEMENT measures the level of family involvement in management, calculated as the proportion of family members (including the CEO) with management positions. DBOARD measures whether the family firm has a board of directors calculated as a dummy variable that takes value 1 if the firm has a board of directors, and 0 otherwise. This measure allows controlling for the board of directors' monitoring function.<sup>2</sup>

Also, literature has shown that firm's current level of debt is determined by its debt in previous years (De Miguel & Pindado, 2001). Not including this variable in the model may lead to misspecification problems (Lemmon et al., 2008). Since using the dependent variable with a 1-year lag could cause residual autocorrelation problems in a cross-sectional estimation (Keele & Kelly, 2006), it is recommendable to include a variable lagged more years. According to Lemmon et al. (2008), there is no much difference between using a lagged variable of 4 or 10 years. However, they use the first available non-lagged value for the sample. Following these guidelines, we used the 10-year lagged debt, which is the first non-missing value of debt that allowed us to keep all the observations in the sample (DEBTLAG).

Finally, we also controlled for other factors frequently used in analyses of the determinants of debt (e.g., Rajan & Zingales, 1995; Titman & Wessels, 1988): GROWTH approximates growth opportunities calculated as the change in total sales compared with previous years; TANGIBILITY is calculated as tangible assets divided by total assets; company AGE is calculated as the log of the number of years since founding; firm SIZE is calculated as the log of total assets; LIQUIDITY is calculated as the ratio of current assets divided by current liabilities; firm PROF-ITABILITY is calculated as the ratio of earnings before taxes and interest divided by total assets; and finally, dummy industry variables. Following Molly et al. (2010), we identified the following sectors: manufacturing, construction, trade, and services.

Table 1 shows the main descriptive data and the correlations for the variables described.

# 4.3 Methodology

We estimated the models using a linear regression analysis-ordinary least squares (OLS). Following Sasaki and Wang (2023), we execute diagnostic testing of outliers finding that all the estimated coefficients and the standard errors are reliable. Variance inflation factor (VIF) (with values below 3 in all cases) showed the absence of multicollinearity. We also checked the absence of heteroscedasticity by conducting the Breusch-Pagan and the White test. Nevertheless, we used the robust standard errors to estimate all the models. Finally, as Zhang et al., (2022: 99) point out, "unique independent variables in the family business literature may bring in some endogeneity issues that do not exist in non-family business studies." Specifically, the authors identify the omitted variables and the simultaneous causality as the two most common sources of endogeneity in the studies of family business heterogeneity. On the one

 $<sup>\</sup>frac{1}{2}$  Since only 66.7% of firms in the sample have a board of directors, we were unable to create a variable measuring family involvement in the board.

Table 1 Main descriptive statis	stics and correla	tion matrix										
Variable	Mean	Std. dev	-	2		4	5	9	7	~	6	10
1. DEBT	0.2136	0.1881	1.00	-								
2. CONTINUITY	0.0000	1.0000	$0.16^{*}$	1.00								
3. PROMINENCE	0.0000	1.0000	0.12	$0.62^{***}$	1.00							
4. ENRICHMENT	0.0000	1.0000	0.10	$0.59^{***}$	$0.48^{***}$	1.00						
5. FAMILY_OWNERSHIP	0.9707	0.0971	$0.16^{*}$	0.06	0.03	-0.01	1.00					
6. FAMILY_MANAGEMENT	0.6861	0.2683	0.05	0.09	0.09	- 0.04	0.02	1.00				
7. DBOARD	0.6667	0.4733	$-0.16^{*}$	-0.02	0.04	-0.02	-0.02	-0.09	1.00			
8. DEBTLAG	0.2085	0.2002	$0.41^{***}$	-0.02	0.00	0.02	0.05	0.00	-0.08	1.00		
9. GROWTH	7.6110	17.6071	0.03	0.00	- 0.04	-0.01	-0.07	-0.13	0.12	-0.01	1.00	
10. TANGIBILITY	0.3627	0.2073	$0.31^{***}$	0.10	$0.20^{**}$	0.13	0.02	-0.12	0.01	$0.23^{***}$	-0.05	1.00
11. AGE <sup>1</sup>	35.0476	16.5982	-0.03	-0.02	- 0.06	00.0	-0.01	0.09	-0.11	-0.11	$0.20^{**}$	0.11
12. SIZE <sup>1</sup>	11,612.0000	9,148.0520	0.13	$0.23^{***}$	0.14	$0.25^{***}$	-0.03	$-0.27^{***}$	0.15*	0.09	0.01	$0.32^{***}$
13. LIQUIDITY	3.1545	3.8500	-0.45**	0.05	-0.02	0.02	$-0.25^{***}$	-0.04	0.05	$-0.26^{***}$	-0.11	-0.17*
14. PROFITABILITY	0.0662	0.0640	$-0.19^{**}$	-0.02	0.01	0.02	-0.13	-0.12	- 0.09	0.08	0.04	0.00
15. CONSTRUCTION	0.0635	0.2448	-0.13	0.13	0.01	0.05	-0.09	0.09	0.12	-0.10	$0.40^{***}$	-0.12
16. MANUFACTURING	0.4127	0.4943	-0.04	-0.08	- 0.09	0.03	-0.13	-0.13	- 0.06	0.14	-0.05	0.09
17. SERVICE	0.1984	0.4004	$0.16^{*}$	-0.10	0.02	-0.11	$0.15^{*}$	-0.08	0.06	-0.07	0.00	0.13
18. TRADE	0.2937	0.4573	-0.08	0.08	0.05	0.06	0.04	0.10	-0.06	- 0.06	-0.09	-0.15*
p < 0.1; **p < 0.05; ***p < 0.00]	_											
<sup>1</sup> In the estimation of the models	; we use the log	arithm of these	e variables (a	ge and size)								

hand, the relationship between SEWi and family business debt may stem from the omitted variable of family involvement in business. To address this problem, we included as control variables usual measures of family involvement (i.e., family ownership, family management, and family governance) (see De Massis et al., 2014). On the other hand, to ensure that SEWi and its dimensions are not affected by debt financing, i.e., to rule out simultaneous or reverse causality, we performed the procedure that Davidson and MacKinnon (1993) suggest and hence applied the Durbin Wu-Hausman test. Specifically, we estimated three different models using the SEWi dimensions as dependent variables and another one with SEWi as dependent variable. In each of these models we used as exogenous variable a new variable that measures the level of CEO identification with the family group. This exogenous variable was built following Smith et al. (2007). Then, we included the residuals of these estimations as independent variables in the original model of debt financing. The nonsignificant results of the residual variable coefficients indicated that reverse causality was not a concern.

# **5** Empirical results

Results of the model's estimations using the three SEW dimensions (CONTINUITY, PROMINENCE, and ENRICHMENT) and the global SEW variable are shown in Table 2. We estimated the models using hierarchical regression: the first model (column 1) only includes the control variables, the second model (columns 2 to 4) includes each of the three dimensions of SEWi. Finally, we include all the dimensions at the same time (columns 5). As columns 2 and 5 show, CONTINUITY has a significant positive effect on DEBT. The  $R^2$  change is also statistically significant when including this variable in the model. Thus, the greater the importance attributed to CONTINUITY, the greater the company's debt. This finding supports H1. Columns 3 and 4 show the estimations for PROMINENCE and ENRICHMENT. Neither of these variables show statistically significant coefficients, and therefore do not provide support for H2 and H3.

### 5.1 Robustness analysis

We used OLS because its estimates have the advantage that the coefficients can be easily interpreted and compared across models, and their use is admissible if the analysis is more oriented to estimate (rather than predict) the effects of the explanatory variables (see Barge-Gil & López, 2014). However, we conducted two additional analyses to test the robustness of our results. First, as our dependent variable can accumulate some zero values (i.e., those firms that do not use debt as a means of financing), we also estimated the models using the Tobit methodology (see column 1 in Table 3). Second, although we checked that there were no outliers (using the test of Sasaki & Wang, 2023), we also estimated the models with GLM, as it allows variables that are not normally distributed (see column 2 in Table 3). Regardless of the methodology employed, the results do not change.

Finally, we conducted an additional robustness analysis based on the level of debt (high or low) held by the analyzed firms. Since the CEOs' concerns might be different when the company has a high level of debt, i.e., prioritizing the survival and continuity of the business, we tested the model separately for high and low-debt firms. To do so, we split the sample into two subsamples (using median debt) and tested the overall model for each subsample. Table 4 shows that CONTINUITY is significant and negative in both subsamples, which indicates, robustly, that regardless of the level of debt of the firm, the importance attributed to the continuity dimension positively influences the debt held by the firm. We find, however, a difference compared to the results for the overall model, since, in the subsample of companies with low levels of debt, PROMINENCE also has a significant influence on the firm's level of debt. The greater the importance attached to prominence, the lower the level of debt held, always referring to companies with low levels of debt. This finding would go in line with our H2.

# 6 Discussion and conclusions

For years, the literature has employed traditional finance theories to compare the debt used by family and non-family firms and more recently to explore the heterogeneity in debt levels among family firms.

**Table 2**Testing of hypotheses 1 to 3

	DEBT	DEBT	DEBT	DEBT	DEBT
	(1)	(2)	(3)	(4)	(5)
CONTINUITY	_	0.0282**	-	-	0.0313*
		(0.0116)			(0.0185)
PROMINENCE	_	_	0.0145	_	-0.0007
			(0.0147)		(0.0175)
ENRICHMENT	_	_	_	0.0138	-0.0044
				(0.0156)	(0.0208)
FAMILY_OWNERSHIP	0.0271	0.0010	0.0258	0.0222	-0.0003
	(0.1328)	(0.1229)	(0.1305)	(0.1294)	(0.1238)
FAMILY_MANAGEMENT	0.0564	0.0417	0.0557	0.0492	0.0424
	(0.0528)	(0.0522)	(0.0530)	(0.0553)	(0.0531)
DBOARD	-0.0726**	-0.0673**	-0.0709**	-0.0731**	-0.0667**
	(0.0309)	(0.0299)	(0.0308)	(0.0308)	(0.0313)
DEBTLAG	0.3272***	0.3368***	0.3290***	0.3326***	0.3361***
	(0.0969)	(0.0942)	(0.0964)	(0.0941)	(0.0951)
GROWTH	0.0010	0.0010	0.0011	0.0010	0.0010
	(0.0011)	(0.0010)	(0.0010)	(0.0010)	(0.0010)
TANGIBILITY	0.0912	0.0763	0.0844	0.0758	0.0799
	(0.0745)	(0.0719)	(0.0741)	(0.0798)	(0.0784)
AGE	-0.0057	0.0001	-0.0046	-0.0025	-0.0003
	(0.0291)	(0.0298)	(0.0301)	(0.0312)	(0.0307)
SIZE	0.0458***	0.0374**	0.0419**	0.0440***	0.0372**
	(0.0162)	(0.0164)	(0.0170)	(0.0163)	(0.0170)
LIQUIDITY	-0.0158***	-0.0165***	-0.0159***	-0.0160***	-0.0165***
	(0.0044)	(0.0044)	(0.0043)	(0.0043)	(0.0045)
PROFITABILITY	-0.7065***	-0.6899***	-0.6990***	-0.7140***	-0.6860***
	(0.1754)	(0.1748)	(0.1788)	(0.1771)	(0.1817)
CONSTRUCTION	-0.1884*	-0.1872*	-0.1951*	-0.1836*	-0.1883*
	(0.1005)	(0.0999)	(0.0994)	(0.1029)	(0.1000)
MANUFACTURY	-0.1119	-0.0961	-0.1154	-0.1047	-0.0965
	(0.0831)	(0.0839)	(0.0817)	(0.0859)	(0.0848)
SERVICE	-0.0538	-0.0351	-0.0538	-0.0481	-0.0349
	(0.0853)	(0.0875)	(0.0840)	(0.0889)	(0.0880)
TRADE	-0.1411*	-0.1325	-0.1463*	-0.1376	-0.1324
	(0.0817)	(0.0827)	(0.0804)	(0.0853)	(0.0835)
Constant	-0.0727	0.0088	-0.0354	-0.0563	0.0108
	(0.1948)	(0.1873)	(0.1979)	(0.1919)	(0.1941)
Number of obs	126	126	126	126	126
Method for estimating	OLS	OLS	OLS	OLS	OLS
Test F	9.32	9.17	8.69	8.84	7.98
Prob F	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
R-squared	0.4501	0.4697	0.4555	0.4550	0.4700
VIF	2.81	2.72	2.70	2.71	2.69
Sasaki and Wang test outliers					
<i>P</i> -value consistency	0.90	0.67	0.68	0.72	0.47
<i>P</i> -value normality	0.75	0.50	0.50	0.56	0.33

	DEBT	DEBT	DEBT	DEBT	DEBT
$R^2$ change		0.020	0.005	0.005	0.020
<i>F</i> (df) change		5.870	0.97	0.780	2.01
Prob F		(0.017)	(0.327)	(0.379)	(0.117)

Table 2 (continued)

Standard errors in parentheses. p < 0.1; p < 0.05; p < 0.01

The former line of research assumes uniformity in the debt behavior of family firms and the latter usually does not consider the variety of family goals to analyze whether and how each may affect this financial decision. This may have led to the contradictory findings by previous literature. To extend this literature, we focus on the heterogeneous group of family firms to study the effect the CEOs' assessment of the importance that their family attaches to SEW to measure the family's potential to influence the debt decision. Furthermore, since families have several objectives, we analyze the separate effects of the three dimensions of SEWi (Debicki et al., 2016) that allows us to explore the diverse family goals that SEWi encompasses.

Our results show that continuity is the dimension of SEWi that conditions the levels of debt in the family businesses. Specifically, the importance given to continuity has a positive effect on the level of debt in their family firms. The continuity of the family in the business requires both the preservation of family control and the continuity of the business. Thus, a higher level of debt can be used to drive growth strategies that enable the continuity of the business without diminishing family control in the company.

Results for the full sample show no significant effect for the prominence and enrichment dimensions. However, our findings also indicate that in the subsample of family firms with low levels of debt, higher importance given to the prominence dimension of SEWi has a negative influence on firm debt. This result suggests that in the case of family firms that follow zero debt or almost zero debt levels, the debt decision may be highly conditioned by the perceived risk of defaulting on a loan. As Romano et al. (2001) argue, family firms with low levels of debt may take financing decisions trying to avoid a loan failure and the consequent damage to the family's reputation and personal guarantees. These findings also allow extending the explanations on the "low leverage puzzle" (Caban, 2018). Therefore, we are responding the call by Saona et al. (2023) to extend theoretical models to understand the change from debt to zero debt.

#### 6.1 Theoretical contributions

Our results add knowledge to the family firm literature in multiple ways. First, given that literature has recently argued on the need to consider SEW a multidimensional concept (Brigham & Payne, 2019; Chua et al., 2018), we analyze for the first time how the CEOs' assessment of the importance that the family attributes to the different SEWi dimensions affects family firm debt financing decisions. Particularly, our results support the argument that SEWi is a complex umbrella construct, suggesting the need to explore separately the effects of different SEWi dimensions to understand the influence of family essence-family goals-more fully on family firm behavior. Second, our work contributes to the development of a theoretical framework of financing decisions as we extend traditional finance theories focused on economic objectives by incorporating the main particularity of the family business: family goals. Our findings do indeed show that the family firm's debt decision is affected by the importance that the family attaches to certain family goals; specifically, it is the family's concern for business continuity which seems to be influencing the debt financing decision. The use of debt by those family firms that are especially interested in the business continuity (and the maintenance of family control avoiding the dispersion of ownership) can be a constraint when it is necessary to raise financial resources. This shortage of financial resources could endanger the company's expansion and limit its scale (Chandler, 1990; Mackie, 2001; O'Brien et al., 2014). The family firms' dependence on debt financing could also affect their scope because certain industries are more difficult

Table 3 Robustness analysis with Tobit and GLM

Table 4 Robustness analysis for high- and low-debt firms

	DEBT	DEBT		HIGH DEBT	LOW DEBT
CONTINUITY	0.0488**	0.0313*	CONTINUITY	0.0441*	0.0153*
	(0.0201)	(0.0172)		(0.0224)	(0.0090)
PROMINENCE	-0.0114	-0.0007	PROMINENCE	-0.0067	-0.0231***
	(0.0171)	(0.0163)		(0.0259)	(0.0079)
ENRICHMENT	-0.0093	-0.0044	ENRICHMENT	-0.0146	0.0102
	(0.0183)	(0.0194)		(0.0242)	(0.0083)
FAMILY_OWNERSHIP	0.0709	-0.0003	FAMILY_OWNERSHIP	0.1896	-0.0068
	(0.1573)	(0.1150)		(0.1671)	(0.0652)
FAMILY_MANAGEMENT	0.0375	0.0424	FAMILY_MANAGEMENT	0.0733	-0.0271
	(0.0562)	(0.0494)		(0.0664)	(0.0275)
DBOARD	-0.0520*	-0.0667**	DBOARD	-0.0466	-0.0092
	(0.0305)	(0.0291)		(0.0335)	(0.0147)
DEBTLAG	0.2823***	0.3361***	DEBTLAG	0.0809	0.0119
	(0.0921)	(0.0884)		(0.0999)	(0.0603)
GROWTH	0.0007	0.0010	GROWTH	0.0009	-0.0002
	(0.0009)	(0.0009)		(0.0011)	(0.0004)
TANGIBILITY	0.0340	0.0799	TANGIBILITY	0.0886	-0.0253
	(0.0754)	(0.0728)		(0.0853)	(0.0420)
AGE	0.0046	-0.0003	AGE	-0.0114	0.0003
	(0.0287)	(0.0286)		(0.0368)	(0.0131)
SIZE	0.0452**	0.0372**	SIZE	0.0220	0.0042
	(0.0181)	(0.0158)		(0.0195)	(0.0100)
LIQUIDITY	-0.0527***	-0.0165***	LIQUIDITY	-0.0418***	-0.0056***
-	(0.0083)	(0.0042)	-	(0.0143)	(0.0015)
PROFITABILITY	-0.4040*	-0.6860***	PROFITABILITY	0.0764	-0.1756*
	(0.2433)	(0.1689)		(0.3806)	(0.0919)
CONSTRUCTION	-0.2136**	-0.1883**	CONSTRUCTION	-0.2361	0.0263
	(0.1022)	(0.0929)		(0.1439)	(0.0624)
MANUFACTURY	-0.0538	-0.0965	MANUFACTURY	-0.0124	-0.0134
	(0.0795)	(0.0788)		(0.1169)	(0.0571)
SERVICE	0.0138	-0.0349	SERVICE	0.0159	-0.0282
	(0.0822)	(0.0818)		(0.1200)	(0.0573)
TRADE	-0.1088	-0.1324*	TRADE	-0.0411	-0.0246
	(0.0789)	(0.0776)		(0.1191)	(0.0558)
Constant	-0.1048	0.0108	Constant	0.0266	0.1121
	(0.2545)	(0.1804)		(0.2494)	(0.1296)
Number of obs	126	126	Number of obs	63	63
Method for estimating	Tobit	GLM	Method for estimating	OLS	OLS
LR $\gamma^2$ (prob $\gamma^2$ )	105.75***	_	F(prob F)	5.20***	2.04**
Log pseudo-likelihood	_	72.14	R-squared	0.4942	0.4295

Standard errors in parentheses. p < 0.1; p < 0.05; p < 0.01

to finance with debt. In particular, as bond holders seek protection from ex post contractual exploitation (Smith & Warner, 1979), in industries with more plastic resources and where the moral hazard is severe, it is less likely that investments are financed with debt (Alchian & Woodward, 1987).

Third, we examine family heterogeneity measuring the diverse family goals to explain differences in debt levels among family firms. Thus, we provide a more detailed analysis of the indebtedness behavior of family firms and their heterogeneity. Fourth, our study addresses a macro-level phenomenon of family firm debt by focusing on choices at the individual level. Most studies address a macro-level phenomenon, such as family firm debt, without specifying the mechanisms of choices and actions at the lower level of analysis of the phenomenon itself, namely the individual level (De Massis & Foss, 2018). We tackle this phenomenon at the macro level of the family business by focusing on the individual assessments and decisions of the CEO, which allows us to respond to the call by De Massis and Foss (2018) to use a microfoundations approach to analyzing family firm behavior. Finally, our findings contribute to an economic theory of family business by showing that their particularistic behavior is based on family goals. To understand firm behavior, economic theories of the firm draw on economic agents with specific preferences, the design of contracts, controls, and incentive systems (Shukla et al., 2014). Our study suggests that economic theories of family business need to consider the broader and diverse preferences of the family in the analyses of contractual arrangements, controls, and incentive systems. Furthermore, our findings that family objectives are diverse and that they may have different effects on specific behaviors of the family firm is in line with the arguments of Chrisman et al. (2012) that, to understand the specific behavior of family firms, theories need to focus on their essence.

### 6.2 Managerial implications

Our findings in support of the influence of SEWi on family firm's financing decisions suggest that family managers should be aware that the debt level in family firms is also determined by family goals. Moreover, in family businesses where the family has the ability to take decision in the firm, family goals are the key determinants of family firm's debt levels. More specifically, family CEOs who attach great importance to the family's continuity in the business need to be aware of the risks they take when they set high debt ratios in their firms. Our results also point to the importance of debt in the financing of family firms, especially in those concerned with transgenerational continuity. Therefore, following Molly et al. (2019), we suggest policymakers develop mechanisms that facilitate family firms' access to bank debt. This would reduce their bankruptcy fears and facilitate medium- and long-term investments.

Furthermore, this study can offer managers a partial explanation for the low leverage puzzle. In assessing debt use/avoidance, the importance given to family prominence should be considered, i.e., those CEOs who assess that their family members value highly issues such as reputation or charitable development may decide to avoid debt at all.

Finally, the results of our study suggest that it is the fear of losing control of the firm by the access to non-family owners that leads to the use of debt. In line with Schmid (2013), we would advise capital market regulators to look for ways to increase the attractive-ness of stock markets for unlisted family firms, so that alternative forms of financing can be offered to encourage the growth of family firms concerned with the continuity of their businesses.

### 6.3 Limitations and future research directions

Our work is not exempt from limitations. One limitation is the sample size. However, our response rate is similar to other studies analyzing non-listed firms (e.g., Schulze et al., 2003; Sciascia & Mazzola, 2008). Second, our empirical analysis is based on a single country, Spain, which might have implications for the generalizability of our findings. For instance, literature suggests that families in Spain usually maintain close relationships and strong emotional bonds. Therefore, future studies could explore whether our results are generalizable to firms based in other countries in which the family and their goals do not play such an important cultural role. Third, this paper focuses on private family firms because in these companies the arguments on asymmetric information by traditional finance theories cannot fully explain why financial decisions are made. Thus, these companies may be appropriate for the analysis of the effect of family goals on the debt decision (Jansen et al., 2022). However, future research may repeat our analyses on a sample of listed family firms. Fourth, we focused on family firm CEOs to measure the importance attached to the different family goals since CEOs have been shown to significantly influence family firms' strategic choices (Kraiczy et al., 2015). Although family goals are shared by family members, circumstances such as the position held in the family or in the company may affect the goals perceived by different family members. Therefore, future research may explore the assessment of the importance given to SEWi by other family members such as those in the top management team. Finally, although we have partially addressed the omitted variables problem (i.e. family ownership, management, and governance variables) to measure family involvement in business, there may be other family-related variables that may condition SEWi, and also motivate the family to reduce debt financing that might otherwise increase the agency costs. To deal with this issue, future studies could use alternative methods to correct this source of endogeneity (e.g., matching, difference-in-difference analysis or fixed effects) (see Zhang et al., 2022). Finally, as studies show that banks have positive feelings about family firms (Michiels & Molly, 2017), further analyses could explore the influence of family goals from the supply side of debt by creditors. Specifically, whether the easy access to credit is linked to specific dimensions of SEW.

**Funding** Open Access funding provided thanks to the CRUE-CSIC agreement with Springer Nature. This work received financial support from Spanish Ministerio of Ciencia e Innovación (Grants PID2020-120288 GB-100).

**Data Availability** Data are available upon request to the authors.

### Declarations

Conflict of interest The authors declare no competing interests.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

# References

- Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, 27(1), 17–40.
- Alchian, A. A., & Woodward, S. (1987). Reflections on the theory of the firm. *Journal of Institutional and Theoretical Economics.*, 143(1), 110–136.
- Amore, M. D., Minichilli, A., & Corbetta, G. (2011). How do managerial successions shape corporate financial policies in family firms? *Journal of Corporate Finance*, 17(4), 1016–1027. https://doi.org/10.1016/j.jcorpfin.2011.05.002
- Arregle, J. L., Hitt, M. A., Sirmon, D. G., & Very, P. (2007). The development of organizational social capital: Attributes of family firms. *Journal of Management Studies*, 44(1), 73–95. https://doi.org/10.1111/j.1467-6486. 2007.00665.x
- Arregle, J. L., Naldi, L., Nordqvist, M., & Hitt, M. A. (2012). Internationalization of family-controlled firms: A study of the effects of external involvement in governance. *Entrepreneurship Theory and Practice*, 36, 1115–1143. https://doi.org/10.1111/j.1540-6520.2012.00541.x
- Bacci, S., Cirillo, A., Mussolino, D., & Terzani, S. (2018). The influence of family ownership dispersion on debt level in privately held firms. *Small Business Economics*, 51(3), 557–576. https://doi.org/10.1007/ s11187-017-9930-2
- Baixauli-Soler, J. S., Belda-Ruiz, M., & Sánchez-Marín, G. (2021). Socioemotional wealth and financial decisions in private family SMEs. *Journal of Business Research*, 123, 657–668. https://doi.org/10.1016/j.jbusres.2020.10.022
- Barge-Gil, A., & López, A. (2014). R&D determinants: Accounting for the differences between research and development. *Research Policy*, 43(9), 1634–1648. https:// doi.org/10.1016/j.respol.2014.04.017
- Benartzi, S., & Thaler, R. H. (1995). Myopic loss aversion and the equity premium puzzle. *Quarterly Journal of Econom*ics, 110, 73–92. https://doi.org/10.3386/w4369
- Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, 25(3), 258–279. https://doi.org/10.1177/0894486511435355
- Blanco-Mazagatos, V., de Quevedo-Puente, E., & Castrillo, L. A. (2007). The trade-off between financial resources and agency costs in the family business: An exploratory study. *Family Business Review*, 20(3), 199–213. https://doi.org/ 10.1111/j.17416248.2007.00095.x
- Bopaiah, C. (1998). Availability of credit to family businesses. Small Business Economics, 11(1), 75–86. https://doi.org/ 10.1023/A:1007944811224
- Brigham, K. H., & Payne, G. T. (2019). Socioemotional wealth (SEW): Questions on construct validity. *Family Business Review*, 32(4), 326–329. https://doi.org/10.1177/08944 86519889402
- Bubolz, M. M. (2001). Family as source, user, and builder of social capital. *The Journal of Socio-Economics*, 30(2), 129–131. https://doi.org/10.1016/S1053-5357(00)00091-3
- Caban, D. (2018). The motivational heterogeneity of an all-equity capital structure. *Review of Accounting and*

*Finance,* 17(2), 215–237. https://doi.org/10.1108/ RAF-12-2016-0196

- Chandler, A. D., Jr. (1990). Scale and scope: The dynamics of industrial capitalism. Belknap Press.
- Chen, J., Chen, N. Y., He, L., & Patel, C. (2022). The effect of ownership structure on disclosure quality and credit ratings in family firms: The moderating role of auditor choice. *Family Business Review*, 35(2), 140–158. https:// doi.org/10.1177/08944865211057854
- Chin, W. W., & Newsted, P. R. (1999). Structural equation modeling analysis with small samples using partial least squares. *Statistical Strategies for Small Sample Research*, *1*(1), 307–341.
- Chrisman, J. J., & Patel, P. C. (2012). Variations in R&D investments of family and nonfamily firms: Behavioral agency and myopic loss aversion perspectives. Academy of Management Journal, 55(4), 976–997. https://doi.org/ 10.5465/amj.2011.0211
- Chrisman, J. J., Chua, J. H., & Sharma, P. (2003). Current trends and future directions in family business management studies: Toward a theory of the family firm. *Coleman White Paper Series*, 4(1), 1–63.
- Chrisman, J. J., Chua, J. H., Pearson, A. W., & Barnett, T. (2012). Family involvement, family influence, and family–centered non–economic goals in small firms. *Entrepreneurship Theory and Practice*, 36(2), 267–293. https:// doi.org/10.1111/j.1540-6520.2010.00407.x
- Chrisman, J. J., Chua, J. H., De Massis, A., Minola, T., & Vismara, S. (2016). Management processes and strategy execution in family firms: from "what" to "how." *Small Business Economics*, 47, 719–734. https://doi.org/10.1007/ s11187-016-9772-3. ISSN: 0921-898X.
- Chua, J. H., Chrisman, J. J., Steier, L. P., & Rau, S. B. (2012). Sources of heterogeneity in family firms: An introduction. *Entrepreneurship Theory and Practices*, 36(6), 11031113. https://doi.org/10.1111/j.1540-6520.2012.00540.x
- Chua, J. H., Chrisman, J. J., & De Massis, A. (2015). A closer look at socioemotional wealth: Its flows, stocks, and prospects for moving forward. *Entrepreneurship Theory and Practice*, 39(2), 173–182. https://doi.org/10.1111/etap. 12155
- Chua, J. H., Chrisman, J. J., De Massis, A., & Wang, H. (2018). Reflections on family firm goals and the assessment of performance. *Journal of Family Business Strategy*, 9(2), 107–113. https://doi.org/10.1016/j.jfbs.2018.02.001
- Craig, J., & Dibrell, C. (2006). The natural environment, innovation, and firm performance: A comparative study. *Family Business Review*, 19(4), 275–288. https://doi.org/10. 1111/j.1741-6248.2006.00075.x
- Croci, E., Doukas, J. A., & Gonenc, H. (2011). Family control and financing decisions. *European Financial Management*, 17(5), 860–897. https://doi.org/10.1111/j.1468-036X.2011.00631.x
- Davidson, R., & MacKinnon, J. G. (1993). Estimation and inference in econometrics. Oxford University Press.
- Davila, J., Duran, P., Gómez-Mejía, L., & Sanchez-Bueno, M.J. (2023). Socioemotional wealth and family firm performance: A meta-analytic integration. *Journal of Family Business Strategy*, 14(2), 100536.
- De Massis, A., & Foss, N. J. (2018). Advancing family business research: The promise of microfoundations. *Family*

Business Review, 31(4), 386–396. https://doi.org/10.1177/0894486518803422

- De Miguel, A., & Pindado, J. (2001). Determinants of capital structure: New evidence from Spanish panel data. *Journal of Corporate Finance*, 7(1), 77–99. https://doi.org/10. 1016/S0929-1199(00)00020-1
- De Massis, A., Kotlar, J., Chua, J. H., & Chrisman, J. J. (2014). Ability and willingness as sufficiency conditions for family-oriented particularistic behavior: Implications for theory and empirical studies. *Journal of Small Business Management*, 52(2), 344–364. https://doi.org/10.1111/ jsbm.12102
- Debicki, B. J., Kellermanns, F. W., Chrisman, J. J., Pearson, A. W., & Spencer, B. A. (2016). Development of a socioemotional wealth importance (SEWi) scale for family firm research. *Journal of Family Business Strategy*, 7(1), 47–57. https://doi.org/10.1016/j.jfbs.2016.01.002
- Debicki, B. J., Van de Graaff Randolph, R., & Sobczak, M. (2017). Socioemotional wealth and family firm performance: A stakeholder approach. *Journal of Managerial Issues*, 29(1), 82–111. https://www.jstor.org/stable/45176 535.
- Deephouse, D. L., & Jaskiewicz, P. (2013). Do family firms have better reputations than nonfamily firms? An integration of socioemotional wealth and social identity theories. *Journal of Management Studies*, 50(3), 337–360. https:// doi.org/10.1111/joms.12015
- Demsetz, H. (1988). The theory of the firm revisited. *Journal* of Law, Economics & Organization., 4(1), 141.
- Diéguez-Soto, J., López-Delgado, P., & Rojo-Ramírez, A. (2015). Identifying and classifying family businesses. *Review of Managerial Science*, 9(3), 603–634. https://doi. org/10.1007/s11846-014-0128-6
- Dyer, W. G., & Whetten, D. A. (2006). Family firms and social responsibility: Preliminary evidence from the S&P 500. *Entrepreneurship Theory and Practice*, 30(6), 785–802. https://doi.org/10.1111/j.1540-6520.2006.00151.x
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), 301–325. https://doi.org/10.1086/467037
- Gast, J., Filser, M., Rigtering, J. C., Harms, R., Kraus, S., & Chang, M. L. (2018). Socioemotional wealth and innovativeness in small- and medium- sized family enterprises: A configuration approach. *Journal of Small Business Management*, 56(1), 53–67. https://doi.org/10.1111/jsbm. 12389
- Gerken, M., Hülsbeck, M., Ostermann, T., & Hack, A. (2022). Validating the FIBER scale to measure family firm heterogeneity–A replication study with extensions. *Journal of Family Business Strategy*, 13(4), 100497. https://doi.org/ 10.1016/j.jfbs.2022.100497
- Gómez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, 52(1), 106–137. https://doi.org/10.2189/asqu. 52.1.106
- Gomez-Mejia, L. R., Campbell, J. T., Martin, G., Hoskisson, R. E., Makri, M., & Sirmon, D. G. (2014). Socioemotional wealth as a mixed gamble: Revisiting family firm R&D investments with the behavioral agency model.

*Entrepreneurship Theory and Practice, 38*(6), 1351–1374. https://doi.org/10.1111/etap.12083

- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy* of Management Review, 9(2), 193–206. https://doi.org/10. 5465/amr.1984.4277628
- Hoffman, J., Hoelscher, M., & Sorenson, R. (2006). Achieving sustained competitive advantage: A family capital theory. *Family Business Review*, 19(2), 135–145. https://doi.org/ 10.1111/j.1741-6248.2006.00065.x
- James, H. S. (1999). Owner as manager, extended horizons and the family firm. *International Journal of the Economics* of Business, 6(1), 41–55. https://doi.org/10.1080/13571 519984304
- Jansen, K., Michiels, A., Voordeckers, W., & Steijvers, T. (2022). Financing decisions in private family firms: A family firm pecking order. *Small Business Economics*, 1–21. https://doi.org/10.1007/s11187-022-00711-9
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323–329. https://doi.org/10.2139/ssrn. 99580
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X
- Jensen, M. C., & Meckling, W. H. (1994). The nature of man. Journal of Applied Corporate Finance, 7(2), 4–19.
- Jones, C. D., Makri, M., & Gomez-Mejia, L. R. (2008). Affiliate directors and perceived risk bearing in publicly traded, family–controlled firms: The case of diversification. *Entrepreneurship Theory and Practice*, 32(6), 1007–1026. https://doi.org/10.1111/j.1540-6520.2008.00269.x
- Keasey, K., Martinez, B., & Pindado, J. (2015). Young family firms: Financing decisions and the willingness to dilute control. *Journal of Corporate Finance*, 34, 47–63. https:// doi.org/10.1016/j.jcorpfin.2015.07.014
- Keele, L., & Kelly, N.J. (2006). Dynamic models for dynamic theories: The ins and outs of lagged dependent variables. *Political Analysis*, 186–205. https://doi.org/10.1093/pan/ 2Fmpj006
- Koropp, C., Kellermanns, F. W., Grichnik, D., & Stanley, L. (2014). Financial decision making in family firms: An adaptation of the theory of planned behavior. *Family Business Review*, 27(4), 307–327. https://doi.org/10.1177/ 2F0894486514522483
- Kraiczy, N. D., Hack, A., & Kellermanns, F. W. (2015). What makes a family firm innovative? CEO risk-taking propensity and the organizational context of family firms. *Journal of Product Innovation Management*, 32(3), 334–348. https://doi.org/10.1111/jpim.12203
- Lemmon, M. L., Roberts, M. R., & Zender, J. F. (2008). Back to the beginning: Persistence and the cross-section of corporate capital structure. *The Journal of Finance*, 63(4), 1575–1608. https://doi.org/10.1111/j.1540-6261.2008. 01369.x
- Mackie, R. (2001). Family ownership and business survival: Kirkcaldy, 1870–1970. Business History, 43, 1–32.
- McConaughy, D. L., Matthews, C. H., & Fialko, A. S. (2001). Founding family controlled firms: Performance, risk, and

value. Journal of Small Business Management, 39(1), 31–49. https://doi.org/10.1111/0447-2778.00004

- Michiels, A., & Molly, V. (2017). Financing decisions in family businesses: A review and suggestions for developing the field. *Family Business Review*, 30(4), 369–399. https://doi. org/10.1177/0894486517736958
- Miller, D., & Le Breton-Miller, I. (2014). Deconstructing socioemotional wealth. *Entrepreneurship Theory and Practice*, 38(49), 713–720. https://doi.org/10.1111/etap.12111
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American Economic Review*, 48(3), 261–297. https:// www.jstor.org/stable/1809766.
- Molly, V., Laveren, E., & Deloof, M. (2010). Family business succession and its impact on financial structure and performance. *Family Business Review*, 23(2), 131–147. https://doi.org/10.1177/0894486510365062
- Molly, V., Uhlaner, L. M., De Massis, A., & Laveren, E. (2019). Family-centered goals, family board representation, and debt financing. *Small Business Economics*, 53(1), 269286. https://doi.org/10.1007/s11187-018-0058-9
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221. https://doi.org/10.3386/w1396
- Naldi, L., Cennamo, C., Corbetta, G., & Gomez-Mejia, L. (2013). Preserving socioemotional wealth in family firms: Asset or liability? The moderating role of business context. *Entrepreneurship Theory and Practice*, 37(6), 1341– 1360. https://doi.org/10.1111/etap.12069
- O'Brien, J. P., David, P., Yoshikawa, T., & Delios, A. (2014). How capital structure influences diversification performance: A transaction cost perspective. *Strategic Management Journal*, 35(7), 1013–1031. https://doi.org/10.1002/ smj.2144
- Pérez-González, F. (2006). Inherited control and firm performance. American Economic Review, 96(5), 1559–1588. https://doi.org/10.1257/aer.96.5.1559
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. https://doi.org/10.1037/00219010.88.5.879
- Rajan, R. G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *The Journal of Finance*, 50(5), 1421–1460. https://doi. org/10.1111/j.1540-6261.1995.tb05184.x
- RojoRamírez, A. A., Diéguez Soto, J., & López Delgado, P. (2011). Importancia del concepto de Empresa Familiar en investigación: Utilización de la base de datos SABI para su clasificación. *Revista de Empresa Familiar*, 1(1), 53–67. https://doi.org/10.24310/ejfbejfb.v1i1.5034
- Romano, C. A., Tanewski, G. A., & Smyrnios, K. X. (2001). Capital structure decision making: A model for family business. *Journal of Business Venturing*, 16(3), 285–310. https://doi.org/10.1016/S0883-9026(99)00053-1
- Santos, M. S., Moreira, A. C., & Vieira, E. S. (2014). Ownership concentration, contestability, family firms, and capital structure. *Journal of Management & Governance*, 18(4), 1063–1107. https://doi.org/10.1007/s10997-013-9272-7

- Saona, P., Muro, L., & Gregoriou, A. (2023). The phenomenon of Zero-Leverage Policy: Literature review. *Research in International Business and Finance*, 102012. https://doi. org/10.1016/j.ribaf.2023.102012
- Sasaki, Y., & Wang, Y. (2023). Diagnostic testing of finite moment conditions for the consistency and Root-N asymptotic normality of the GMM and M estimators. *Journal of Business & Economic Statistics*, 41(2), 339– 348. https://doi.org/10.1080/07350015.2021.2019047
- Schickinger, A., Bertschi-Michel, A., Leitterstorf, M. P., & Kammerlander, N. (2022). Same same, but different: Capital structures in single family offices compared with private equity firms. *Small Business Economics*, 58, 1407– 1425. https://doi.org/10.1007/s11187-021-00448-x
- Schmid, T. (2013). Control considerations, creditor monitoring, and the capital structure of family firms. *Journal of Banking & Finance*, 37(2), 257–272. https://doi.org/10.1016/j. jbankfin.2012.08.026
- Schulze, W. S., Lubatkin, M. H., & Dino, R. N. (2003). Exploring the agency consequences of ownership dispersion among the directors of private family firms. Academy of Management Journal, 46(2), 179–194. https://doi.org/10. 5465/30040613
- Sciascia, S., & Mazzola, P. (2008). Family involvement in ownership and management: Exploring nonlinear effects on performance. *Family Business Review*, 21(4), 331–345. https://doi.org/10.1177/08944865080210040105
- Serrasqueiro, Z., Nunes, P. M., & Da Silva, J. V. (2016). The influence of age and size on family-owned firms' financing decisions: Empirical evidence using panel data. *Long Range Planning*, 49(6), 723–745. https://doi.org/10.1016/j.lrp.2015.12.012
- Shukla, P. P., Carney, M., & Gedajlovic, E. (2014). Economic theories of family firms (pp. 100–118). The Sage handbook of family business.
- Shyu, Y. W., & Lee, C. I. (2009). Excess control rights and debt maturity structure in family-controlled firms. *Corporate*

*Governance: An International Review, 17*(5), 611628. https://doi.org/10.1111/j.1467-8683.2009.00755.x

- Smith, C. W., Jr., & Warner, J. B. (1979). On financial contracting: An analysis of bond covenants. *Journal of Financial Economics*, 7(2), 117–161.
- Smith, E. R., Seger, C. R., & Mackie, D. M. (2007). Can emotions be truly group level? Evidence regarding four conceptual criteria. *Journal of Personality and Social Psychology*, 93(3), 431. https://doi.org/10.1037/0022-3514. 93.3.431
- Swab, R. G., Sherlock, C., Markin, E., & Dibrell, C. (2020). "SEW" what do we know and where do we go? A review of socioemotional wealth and a way forward. *Family Business Review*, 33(4), 424–445. https://doi.org/10.1177/ 0894486520961938
- Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. *The Journal of Finance*, 43(1), 1–19. https://doi.org/10.1111/j.1540-6261.1988.tb02585.x
- Triantis, G. G. (1996). Debt financing, corporate decision making, and security design. *Canadian Business Law Journal*, 26(1), 93–105. https://doi.org/10.2307/3480898
- Wu, Z., Chua, J. H., & Chrisman, J. J. (2007). Effects of family ownership and management on small business equity financing. *Journal of Business Venturing*, 22(6), 875–895. https://doi.org/10.1016/j.jbusvent.2006.07.002
- Zhang, X., Fang, H., Dou, J., & Chrisman, J. J. (2022). Endogeneity issues in family business research: Current status and future recommendations. *Family Business Review*, 35(1), 91–116. https://doi.org/10.1177/089448652110490 92

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.