

Socioemotional wealth's implications in the calculus of the minimum rate of return required by family businesses' owners

ABSTRACT

This paper demonstrates that the minimum rate of return (k_e) required by family business shareholders is inversely related to the emotional endowment presented in these firms. After reviewing the socioemotional wealth (SEW) literature, we find empirical support to justify that different SEW dimensions influence k_e . Findings from a population of 207 family firms show that the identification of family members with the firm and the renewal of family bonds with the firm through dynastic succession have consistently negative impacts on k_e , while family control and influence have significantly positive impacts on k_e .

Key words: SEW, Minimum Rate of Return, Total Value, Emotional Value, Financial Value

1 Introduction

Privately held firms face financial decisions that are measured in terms of financial wealth. Privately held family firms must also know whether they create value. Nevertheless, recent research (Berrone et al. 2012; Vandekerckhof et al. 2014) has suggested that these types of firms have other nonfinancial objectives that might distort this analysis (Chrisman and Patel 2012). Thus, the current theoretical perspectives do not provide consistent predictions regarding the effect of family management on performance (Sciascia et al. 2014).

Within the family business field, a research stream that has acquired special relevance after the seminal research of Gómez-Mejía et al. (2007) is that concerning socioemotional wealth (SEW) (Berrone et al. 2010; 2012; Cruz et al. 2012; Zellweger and Dehlen 2011). This relatively new approach suggests that family firms might be willing to lose some financial wealth to maintain nonfinancial wealth (e.g., family control, influence, succession, blood ties, etc.).

Different research has been developed according to this new, salient paradigm (Berrone et al. 2012), but few articles have been written from a financial perspective (Mensching et al. 2014). Therefore, it would be interesting to analyse the SEW-performance relationship from a financial perspective through an empirical study that links the socioemotional component with the minimum rate of return required by family business shareholders (k_e). Moreover, it could be challenging and encouraging to examine this issue, particularly when emotional value in family firms (Zellweger and Astrachan 2008; Astrachan and Jaskiewicz 2008) has become a key element to consider in business valuation (Zellweger and Dehlen 2011).

The need to intensify the SEW approach was recently indicated by Xi et al. (2015) in a study that analysed and clarified the fragmented state of family business research,

emphasizing the most important contributions made until now in the family business field and identifying avenues for future research. In this sense, these authors noted the necessity of developing direct measurements of SEW.

The aim of this paper is to deepen our understanding of SEW and the k_e relationship to address a twofold research question. Firstly, how does SEW help to explain financial decisions in family firms (Zellweger and Dehlen 2011)? That is, how are financial goals measured by wealth creation affected by non-economic factors? Secondly, what specific SEW dimensions (Berrone et al. 2012) affect the minimum rate of return required by family businesses' shareholders (k_e), i.e., what is the importance of SEW dimensions to financial measurements that serve as benchmarks for family businesses' decisions?

After reviewing the SEW and k_e literature, we connect these two concepts and postulate that k_e is inversely related to the socioemotional wealth presented in this type of firm. Moreover, we analyse further the SEW dimensions, namely family control and influence, identification of family members with the firm, binding social ties, emotional attachment and renewal of family bonds through dynastic succession, that have impacts on k_e .

Different reasons were given by Berrone et al. (2012) to emphasize the importance of SEW dimensions. From our point of view, family control and influence are important because, without majority control, some decisions cannot be made. Identification of family members with the firm is significant because close identification indicates major family members' concern about the business's interests. Binding social ties are relevant because a corporate image is essential today; in fact, all activities related to corporate social responsibility are well regarded by stakeholders. Emotional attachment between family members is a key element

because there is strength in unity, so family firms with very close members will be able to face economic challenges more successfully than firms with members that are dispersed and with each one pursuing different aims. Renewal of family bonds through dynastic succession is also important because, when founders must leave businesses, they usually want to transmit them to the next generation.

Therefore, following the socioemotional wealth literature, which is firmly rooted in behavioural theory (Gómez-Mejía et al. 2007; Wiseman and Gómez-Mejía 1998), we tested our hypotheses using the SABI database for economic and financial data and questionnaires for emotional data. In this vein, our study provides empirical evidence that some emotional firms' aspects affect the minimum rate of return required by family shareholders. Specifically, the identification of family members with the firm and the renewal of family bonds to the firm through dynastic succession have consistently negative impacts on this rate, while family control and influence have significantly positive impacts on it.

This article contributes to the current literature in several ways. Firstly, it emphasizes the importance of taking emotional considerations into account when financial data are being analysed; that is, the extent to which emotional considerations are expressed through management decisions could have an impact on the minimum return required by family shareholders. Secondly, it facilitates understanding of the specific SEW dimensions that affect the hurdle rate. Thirdly, we used a direct measurement of SEW, while most papers have used family ownership as a proxy to measure SEW (Berrone et al. 2010; Gómez-Mejía et al. 2007). This method provides a greater volume of more accurate information about the emotional endowment of family firms. Finally, we also contribute to the family business field by providing new ideas about the conceptualization of emotional value (Zellweger and Astrachan

2008; Astrachan and Jaskiewicz 2008) and its consequences for financial valuation, what might have strong implications for future research in this knowledge area.

The remainder of this article is structured as follows. Firstly, we review the SEW antecedents and their reference frameworks, as well as the k_e literature in the family business context. The third section connects emotional and financial aspects and states the hypotheses. Subsequently, the methodology used is explained. We also dedicate a section to explaining the data and the obtained results. Finally, the last section offers the discussion and conclusions.

2 Theoretical background

Socioemotional wealth. Lately, some scholars have focused on the emotional aspects of firms that represent a new approach in the family business literature, known as socioemotional wealth (SEW) (Berrone et al. 2010; 2012; Gómez-Mejía et al. 2007; Zellweger and Dehlen 2011). The SEW approach is currently considered one of the most potential and dominant paradigms in the family business field (Berrone et al. 2012).

SEW is an unique characteristic of family firms because, although nonfamily principals and managers might experience some of its features, *“the value of socioemotional wealth to the family is more intrinsic, its preservation becomes an end in itself, and it is anchored at a deep psychological level among family owners whose identity is inextricably tied to the organization”* (Berrone et al. 2010:87).

According to the seminal research of Gómez-Mejía et al. (2007), family firms can be both risk willing and risk averse at the same time, depending on two types of risk: performance hazard risk and venturing risk. These authors postulated that family firms might be willing to take risks that incur performance hazards but not be willing

to take venturing risks. In this sense, the authors provided empirical evidence that family firms make risky decisions to preserve SEW and showed that family firms prefer to maintain family business control although it involves a major performance risk. Their study also demonstrated that the possibility of forfeiting family control is lower in the first stages of family firms (family firms in the first generation) because family influence is strongest, and SEW is highest. The main argument of Le Breton-Miller and Miller (2013) is in agreement with this last postulation.

To measure SEW, the prior literature used as the most common proxy the stock of family ownership (Berrone et al. 2010; Gómez-Mejía et al. 2007). More ownership in the family's hands results in the family having a greater influence on the firm's decisions. Nevertheless, Berrone et al. (2012) emphasized that, although ownership is an important criterion for determining SEW, not all family firms are equal, and each of them has different behaviours and organizational characteristics. For these reasons, they addressed the question of how to measure this construct and offered several alternatives to operationalize this process. They identified five major dimensions of SEW based on the prior literature and proposed a set of items for measuring these dimensions, which they labelled FIBER, standing for Family control and influence, Identification of family members with the firm, Binding social ties, Emotional attachment of family members, and Renewal of family bonds to the firm through dynastic succession.

Nevertheless, until now, measuring SEW in economic terms has remained a challenge. Different authors have empirically assessed the influence of SEW on performance measurements. In fact, several studies that linked the SEW approach to financial aspects of family businesses have been published recently. For example, Naldi et al. (2013) showed that SEW could have both positive and negative

consequences for firm performance depending on the environment in which the business operates. Leitterstorf and Rau (2014) confirmed that family firms are willing to choose higher initial public offering (IPO) underpricing than their nonfamily counterparts when underpricing helps them to maintain their SEW. Sciascia et al. (2014) argued that family management is positively related to profitability at later generational stages because family managers, although having multiple objectives, prioritize financial wealth to preserve SEW. Schepers et al. (2014) showed that the positive effect of entrepreneurial orientation on financial performance decreases as the level of SEW preservation increases. Pazzaglia et al. (2013) postulated that firms acquired by families exhibit lower earnings quality than firms created or inherited by families. Kotlar et al. (2014) suggested that firm managers are generally expected to pay utmost the attention to profitability as a reference point in decision-making (Greve 2008).

Minimum rate of return required by shareholders. Valuing a firm depends on how much free cash flows it can obtain in the future and discounting them at a rate that considering their associated risk. The Discounting Cash-flow Model (DCF) is the most widely used model in financial valuation that meets these goals (Bruner et al. 1998; Demirakos et al. 2004; Graham and Harvey 2001; Rojo-Ramírez and García-Pérez de Lema 2006; Welch 2000).

Although there has been much debate over the DCF formula, particularly related to perpetual forecasting and terminal value (Blasco and Ribal 2013; Cruise 2012; Jennergren 2008; Penman 2007), the main challenge that it poses has concerned the discount rate (Heaton 1998). Because this paper is based on family shareholders' attitudes towards their businesses, we will focus on the owners' minimum required

rate of return (k_e), which could be considered the cornerstone of financial valuation, value creation or the viability analysis of inversions and businesses projects.

There are different methods for assessing k_e (McConaughy 1999; Heaton 1998). One of the most extended forms is to use the Capital Asset Pricing Model (CAPM) (Sharpe 1964; Black 1972). The CAPM formula states that a company's cost of capital is equal to the risk-free rate of return plus a premium, which reflects the additional risk of the investment itself. The risk premium is calculated as the difference between the risk-free rate and the rate of return on the stock market, multiplied by an adjusting number, called the stock's beta. Thus, k_e can be calculated by the following expression:

$$k_e = R_f + (R_M - R_f)\beta_i \quad [\text{Expression 1}]$$

where R_f is the risk-free interest rate, β_i is the market beta, which represents the risk of a security as part of a well-diversified portfolio, and R_M is the expected profitability of the portfolio on the market.

The CAPM model has been used for more than four decades considering the existence of a positive linear relationship between the expected return of securities and their market betas (Fama and French 2004), explained by their mean-variance. Although it has been very useful over time, a growing number of professional do not agree with applying the CAPM for small firms (Tatum 2010) because of its limitations, including conflicts between volatility and correlation, reliance on historical data and indifference to the holding period (McNulty et al. 2002). Furthermore, Rojo-Ramírez (2014) added that the CAPM model only considers “systematic” risk in a well-diversified investment portfolio, but owners and managers

in privately held family firms do not usually view their organizations as being a part of a diversified portfolio.

Because of the problems that have been detected in the CAPM model, new alternatives have been sought (Adams et al. 2004; Cotner and Fletcher 2000; Kerins et al. 2004; McNulty et al. 2002; Rojo-Ramírez 2014; Visscher et al. 2011) to calculate an appropriate discount rate that applies to family firms.

Thus, Adams et al. (2004), under the hypothesis that family members want to, at a minimum, maintain their wealth, considered k_e to be a theoretical construct that is equal to long-term financial profitability and that is ready for use in the goal-setting process. Cotner and Fletcher (2000) proposed the Analytical Hierarchy Process (AHP) to estimate the equity risk premium. They argued that the process for determining an appropriate risk premium involves identifying quantifiable and nonquantifiable risk factors that are relevant to the firm and assessing these factors' impacts on the firm's risk. Kerins et al. (2004) in the context of venture capital and entrepreneurship, developed the opportunity cost of capital's estimates for both well-diversified limited partners of venture capital funds and undiversified entrepreneurs. McNulty et al. (2002) introduced the Market-derived Capital Pricing Model (MCPM), which is based on the premise that investors required compensation for three types of risk: national confiscation risk, corporate default risk and equity returns risk. Visscher et al. (2011) proposed considering illiquidity and the family effect in the calculus of the cost of capital. They postulated the following expression:

$$k_e = \{R_f + \beta_i \cdot (R_M - R_f)\} \cdot (1 - IP) \cdot (1 - FE) \quad [\text{Expression 2}]$$

where the bracketed expression is the same as the CAPM, IP is the "Illiquidity premium", and FE denotes "Family Effect".

Finally, Rojo-Ramírez (2014), following previous studies and focusing on the nature of the investor (Alonso-Cañadas and Rojo-Ramírez 2011; Rojo-Ramírez et al. 2011), suggested and proved that the minimum rate of return required by “Economic Risk Investors”¹ (ERIs) is greater than that required by “Purely Financial Investors”² (PFIs), in agreement with Kerins et al. (2004). Rojo-Ramírez (2014) stated that CAPM is not the most appropriate model for ERIs that would require an additional premium (P_e) for their investment compared to diversified and liquid financial investors due to the lack of diversification and marketability. He proposed the following model and called it the “Three Components Model”:

$$k_e = R_f + P_M + P_e \quad \text{[Expression 3]}$$

where R_f is the risk-free interest rate, P_M is the premium to invest in the market as a financial investor (with diversification and liquidity), and P_e is the specific or idiosyncratic premium for being an economic risk investor or someone who is non-diversified and has no liquidity investments.

The development of the previous expression leads to:

$$k_e = R_f + P_M + P_M * (\sigma_e / \sigma_M) \quad \text{[Expression 4]}$$

where σ_e and σ_M are the standard deviations of the company financial profitability for the analysed period and the market profitability for the same period, respectively.

Therefore, after reviewing the existing literature on the subject, it is noted that, although the CAPM is fairly widespread both in theory and practice, it has certain

¹ Economic Risk Investors (ERIs) are defined as undiversified investors who risk all or most of their resources in a company that is the essence of their business, without a well-known diversification policy and, simultaneously, lacking liquidity.

² Purely Financial Investors are investors who use the market as a means of diversification and liquidity for their portfolios and who will seek to cover the range of all securities proportionate to their market participation.

limitations for family businesses. In fact, the CAPM should not be used to calculate the cost of equity for unquoted family firms. Thus, in this article, we have calculated k_e using the *Three Components Model (3CM)* (Rojo-Ramírez 2009; Alonso-Cañadas and Rojo-Ramírez 2011) because we believe that it fits the specific characteristics of the companies in our sample. Furthermore, as mentioned above, the model is consistent with financial principles and fundamentals, and its viability has been empirically proved (Rojo-Ramírez 2014).

3 Hypothesis development

Zellweger and Astrachan (2008:350) introduced the concept of emotional value (EV) as “*capturing that part of Willingness to Accept (WTA)³ unexplained by the financial value of the ownership stake, which is captured in the present value of the firm’s cash flows, and by the private benefits of control, captured in the present value of the amount of financial benefits that controlling shareholders extract from companies they run*”. They defined the concept of EV to examine how firm owners subjectively value their ownership stake in monetary terms, utilizing possession attachment and endowment literature as theoretical foundations.

Astrachan and Jaskiewicz (2008), based on arguments from agency theory, identified the total value of a company as the sum of the financial value plus the EV. They assumed that the total value could be greater or less than the financial value, depending on the value of the emotional component which is the difference between emotional returns (long-term investments that generate employment opportunities for future generations or investments in brands or sectors to increase the family’s

³ This concept was defined by Knetsch and Sinden (1984) and by Knez et al. (1985) as the “minimum selling price” at which an individual would be willing to sell an endowed good.

reputation) and emotional costs (family conflicts, rivalry and stress), so it can also be positive or negative.

Zellweger and Astrachan (2008) assumed that business owners are willing to accept selling prices for their firms that are higher than the financial value plus the private benefits of control. In fact, they postulated that, if business owners refuse to sell at the market price, any transaction will be held. However, can this statement truly be assumed? It is true that family owners could be willing to accept selling prices for their businesses that are less than the market value, if there is no buyer willing to pay the equivalent price to the market value. They might even be willing to accept selling prices for their businesses that are less than the financial value, if there is no buyer willing to pay the equivalent price to that financial value. They could adopt this point of view, believing they have already enjoyed their business sufficiently and that it is preferable to sell it and receive some money rather than not receiving anything.

These findings do not mean that EV does not exist. Emotional value exists in all companies because companies are run by people, and all people have feelings. Nevertheless, in family firms, emotional endowment reaches levels that have nothing to do with the levels in nonfamily firms because of the affective and emotional ties between members of the business family. What is necessary to be reconsidered is that EV could be both positive and negative depending on the value given to WTA. According to Zellweger and Astrachan (2008), the concept of WTA (Knetsch and Sinden 1984; Knez et al. 1985) depends on family involvement along the firm (emotional affection for the acquisition, duration of ownership and affective commitment) and environmental factors (community culture and demographic effects).

Although Zellweger and Astrachan (2008) and Astrachan and Jaskiewicz (2008) postulated that the family firm total value (or WTA) is equal to the sum of its financial value plus its EV, we argue that the emotional endowment of a firm should be reflected in its financial value, as long as this value has been calculated using a minimum rate of return that reflects all of the aspects of the company's risk (economic, financial and emotional). Such a calculation is possible if the hurdle rate or minimum rate of return includes both financial and emotional considerations. Therefore, the financial value reflects the total value of a business if it was calculated using an adequate minimum rate of return that reflects the real economic and financial situations, internal and external, of a business. Thus, to calculate an adequate minimum rate of return, we must consider risky internal aspects, such as financial and emotional factors, as well as external aspects such as the risk-free rate, which must be considered, or the standard deviation of market returns (Kerins et al. 2002; Rojo-Ramírez 2014). In this sense, family business owners can only control the company's internal aspects because external aspects are beyond their scope. Therefore, in this study, we focus on internal aspects.

Thus, it seems reasonable to postulate that the minimum rate of return (k_e) required by family firm shareholders is influenced by SEW. Specifically, family business owners with high socioemotional endowments might be willing to demand lower expected returns for their firms to preserve their SEW. Therefore, the k_e required by family business shareholders could be inversely related to the SEW that this type of businesses presents; that is, the higher the SEW is, the lower the k_e is. Moreover, we delve further into this issue by considering the specific SEW dimensions (Berrone et al. 2012) that influence k_e , and we postulate the following hypotheses.

H1: *There is a negative relationship between family control and influence and k_e .*

Gómez-Mejía et al. (2007) postulated that family firm members might be willing to make riskier decisions to maintain their family control of the firm. In fact, family firms will avoid any relinquishing of control to nonfamily members to avoid losing their SEW (Stockmans et al. 2010). Gómez-Mejía et al. (2010) showed that family firms tend to diversify less than non-family firms, although this fact involves increasing business risk, and they justified this behaviour by arguing that diversification reduces SEW. Furthermore, Gómez-Mejía et al. (2011) showed that family firms refuse to reduce their SEW to keep the family influence in the company. They proved that family firms are less likely to undertake technological diversification processes, although they could reduce business risk because of their desire to maintain family influence. Moreover, Mitter et al. (2014) empirically demonstrated that firms with a medium level of family influence are more likely to be internationally active, while high levels of family influence are related with slightly less international diversification. They argued that the fear of losing control makes family businesses rather forgo international activities to maintain their influence.

Thus, major family control and influence would indicate a major emotional endowment and therefore a major SEW. Thus, if the emotional endowment is supposed to be greater, the minimum rate of return is supposed to be lower because family owners are willing to sacrifice economic returns to maintain their SEW.

H2: There is a negative relationship between the identification of family members with the firm and k_e .

Different business scholars have argued that the intermeshing of family and business leads to a unique identity within family firms (Berrone et al. 2010; 2012). These authors have added that *the identity of a family firm's owner is inextricably tied to*

the organization. Zellweger et al. (2010) identified organizational identity as the third dimension of familiness, in addition to family involvement and family essence. Deephouse and Jaskiewicz (2013) postulated that heightened identification motivates family members to pursue a favourable reputation because it allows them to feel good about themselves. Moreover, they proposed that, when the family's name is part of the firm's name, the firm's reputation is better because family members are more concerned on their firm's reputation. In agreement, Zellweger and Dehlen (2011) used the illustrative case of *Ingvar Kamprad From IKEA* to emphasize the owner's sense of identification with his firm.

Therefore, a major identification of family members with the firm indicates that family members care more about the company's interests, so the emotional endowment is assumed to be greater and the minimum rate of return therefore lower.

H3: *There is a negative relationship between binding social ties and k_e.*

Family firms are supposed to be very thoughtful about the society in which they develop their activities and about the individuals who work in them. Berrone et al. (2010) demonstrated that family firms tend to pollute less to enhance their image, thus preserving their SEW. They do so even when there are no obvious economic rewards arising from this type of behaviour. Such actions are more readily observable if the factories are geographically gathered in a particular region or community. Cruz et al. (2014) empirically showed that family firms, due to their SEW, have a positive effect on social dimensions linked to external stakeholders. Cruz et al. (2010) also argued that family firm CEOs' perceptions of Top Management Team (TMT) benevolence and the effect of these perceptions must be taken considered in contracts with TMT members because they, in turn, influence the protective features of TMT contracts.

Therefore, the stronger the relationship is between a business and the community in which is located, the higher the emotional endowment is of that business and therefore, the lower the minimum required rate of return is.

H4: There is a negative relationship between the emotional attachment of family members and k_e .

Different studies have revealed that emotional considerations outweigh financial considerations in family firms. Zellweger et al. (2011) proved that family firms made riskier decisions based on emotional criteria instead of economic and financial reasons. Furthermore Vandekerckhof et al. (2014) considered SEW and emotional objectives more important than financial aspects. They proved that emotional considerations outweigh rational considerations in the decision-making process in family organizations. Thus, decision-making within the family business is highly influenced by the emotional endowment of this type of firm, driving family members towards the achievement of affective necessities, rather than acting under the effectiveness principles. In contrast, Cruz et al. (2012) also demonstrated that family firms employ family members, although family labour decreases profitability, as measured by ROA.

Therefore, the greater the emotional attachment is between family members, the greater the firm's emotional endowment is, and as we said before, a major emotional endowment is linked to willingness to obtain lower profitability, which is reflected in a lower minimum rate of return.

H5: There is a negative relationship between renewal of family bonds to the firm through dynastic succession and k_e .

Family firms are created with a continuity vocation over the long term (Casillas et al. 2011; Gómez-Mejía and Cruz 2011; Rojo-Ramírez 2009; Vallejo-Martos 2005). The desire to transfer business control to subsequent generations is one of the key factors that separate family firms from nonfamily firms (Gómez-Mejía et al. 2011). Le Breton-Miller and Miller (2013) added that one priority of many family firm founders is to ensure that the business survives to be passed on to later generations. Moreover, Distelberg and Sorenson (2009) postulated that adequate succession planning has been a primary indicator of success. Zellweger et al. (2011) demonstrated that intentions for transgenerational control have a consistently positive impact on the perceived owner firm's value. They emphasized the importance of transgenerational control because this type of control is directly tied to the vision of how the firm and the family intend to create socioemotional value over the long term.

Thus, one of the family firm's founder's main goals is to transmit his or her business to subsequent generations. Therefore, shareholders can accept lower minimum rates of return to leave major wealth to their successors. In this sense, a higher emotional endowment would indicate a lower minimum rate of return.

4 Methods

The empirical data presented in this article come from two different sources. On the one hand, the financial and economic data were derived from a wider study analysing the general characteristics (performance, efficiency, profitability and leverage) of a representative sample of Spanish family firms. Based on the SABI⁴ (Sistema de Análisis de Balances Ibéricos) database and for an eight year period (2004-2011), privately held businesses located in the region of Andalusia and employing at least 3

⁴ SABI is an economic and financial dataset, the data from which were compiled by Informa D&B in collaboration with Bureau Van Dijk, including financial statements, ratios, activities, shareholders of more than 1.080.000 Spanish and 320.000 Portuguese companies (March 2011).

full-time employees were selected. In addition, to test our hypotheses, the sample needed to be constituted by companies of sufficient size, which is why we also restricted the sample by demanding minimum incomes of 100.000 euros per year for the analysed period. Because we finally want a sample of family businesses, we included all NACE 2009 codes with the following exceptions: 64⁵, 65⁶, 66⁷, 94⁸, 96⁹ and 99¹⁰ (Rojo-Ramírez et al. 2011). As a result, our initial sample consisted of 1,899 potential family firms. Firms from SABI were classified according to the legal nature of the firm: lone-founder or family involvement in ownership, management or governance; and the ownership concentration. Nevertheless, the SABI dataset does not include information regarding whether the firm is a family firm or not, so we follow the proposal of Diéguez-Soto et al. (2014) to identify and classify family businesses. These authors, to distinguish between family and nonfamily businesses, took as their reference the involvement approach (Chrisman et al. 2005) that considers family control and family involvement sufficient to make a firm a family business. Additionally, Diéguez-Soto et al. (2014) took advantage of the Spanish custom of giving children two surnames, one from each parent. They compared the surnames of all of the internal stakeholders involved in the management and governance of the business (shareholders, CEO and directors of the firm), and depending on the match between the surnames, businesses were classified as family firms or not. This methodology to identify family firms has also been used by Gómez-Mejía et al. (2001) and by Rojo Ramírez et al. (2011), among others. Thus, after this selection, our final sample consisted of 1,441 family firms.

⁵ Financial services except for insurance and pension funding

⁶ Insurance, reinsurance and pension funding, except for compulsory social security

⁷ Auxiliary activities for financial services and insurance

⁸ Partnership activities

⁹ Other personal services

¹⁰ Extraterritorial organizations' activities

On the other hand, emotional data were collected by a two-step process. Firstly, a questionnaire was mailed to the CEOs of these 1,441 firms. Then, telephone calls were made to talk directly to the firms' CEOs. We decided to employ this method due to the scarcity of data obtained when the questionnaires were sent via e-mail. Employing this technique, we obtained completed responses of 224 family firms (15.54% response rate), of which 7 cases were excluded because of missing data, and 10 were excluded because of their accounting data. Thus, our final sample included the remaining 207 family firms, of which 153 (73.91%) were managed by family CEOs, and 54 (26.09%) were managed by nonfamily CEOs.

In common with other family firm studies (Kellermanns et al. 2008; Zellweger et al. 2011), a key informant approach was employed, with the family firm CEO the contact person in the business. We ensured that the respondents of the questions provided were CEOs because they are among the most important decision makers in this type of firms. To analyse family firm heterogeneity, we asked the CEO whether he or she is a family member or not to determine whether the firm is family owned and managed or family owned but not family managed.

It is important to emphasize that to ensure that the firms in the sample were family firms, we verified this question by asking them directly whether they identify themselves as family firms (Westhead and Cowling 1998). Moreover, we also confirmed that the family exercised a controlling interest (Vallejo-Martos 2005).

The study was undertaken in Spanish, so a translation was performed of some of the English language items proposed by Berrone et al. (2012) to measure socioemotional endowment. An independent person then back-translated the Spanish items into English to ensure consistency with the original format. No inconsistency was discovered.

We tested for non-response bias by a follow-up process of some of the firm characteristics in this study (firm size and firm age). No significant differences were found for these variables. We used different techniques to analyse the possibility of multicollinearity, heteroscedasticity and common method bias for our sample. First, based on the values of the correlation table, we found no indications of multicollinearity. Moreover, we found that the variance inflation factor (VIF) did not exceed 1.34. Thus, multicollinearity did not appear to be a concern (Belsley et al. 1980). Second, the plot of standardized residuals against predicted values (Field 2013) showed that the assumptions of linearity and homoscedasticity were met. Thus, we found no indications of heteroscedasticity. Moreover, we performed Levene's test between our independent variables and the regression residuals, and none of the tests was significant ($F \leq 1.74$). Finally, we performed Harman's single-factor test (Podsakoff et al. 2003) for common bias, which showed no concerns.

Model. Because our final goal was to determine the extent to which the SEW dimensions influence the minimum rate of return required by family business owners (k_e), we developed the following regression analysis, the variables of which are explained below:

$$k_e = \beta_0 + \beta_1 FAge + \beta_2 FSize + \beta_3 CON + \beta_4 WHO + \beta_5 ROIC + \beta_6 DTE + \beta_7 F + \beta_8 I + \beta_9 B + \beta_{10} E + \beta_{11} R + \epsilon \quad [\text{Expression 5}]$$

Dependent Variable. To measure the minimum rate of return required by the shareholders (k_e) of each family firm, we used the Three Components Model shown in expression 4 (Alonso-Cañadas and Rojo-Ramírez 2011; Rojo-Ramírez et al. 2012; Rojo-Ramírez 2014).

The risk-free rate was obtained from the Spanish Public Treasury Web site. Its value for 2011 was 4.65%. The market premium of 4.5% was obtained from the Spanish

national study of Garrido and García (2010). For the standard deviation of market profitability (σ_M), we used data from the Madrid Stock Exchange Web site for the period of 2004-2011. The term σ_e was calculated as the standard deviation of financial profitability for the same period as σ_M , using financial data from the SABI database.

To achieve a more normal distribution, we used the logarithm of k_e (Tabachnick and Fidell 1996).

Independent Variables. According to Berrone et al. (2012), the socioemotional endowment of a business could be measured on five main dimensions, labelled *FIBER*. Each dimension was considered an independent variable because we wanted to analyse their individual effects on k_e . For their measurement, we used a five-point Likert-type scale. We asked the businesses' CEOs to rate from 1 to 5 the following items for each SEW dimension: For *Family control and influence* (F): "The majority of the shares in my family business are owned by family members" and "In my family business, most executive positions are occupied by family members". With a Cronbach's alpha of 0.82, the scale demonstrated an acceptable level of internal consistency. For *Identification of Family Members With the Firm* (I): "Family members have a strong sense of belonging to my family business" and "Customers often associate the family name with the family business's products and services" ($\alpha = 0.79$). For *Binding Social Ties* (B): "In my family business, nonfamily employees are treated as part of the family" and "Contracts with suppliers are based on enduring long-term relationships in my family business" ($\alpha = 0.8$). For *Emotional Attachment of Family Members*: (E): "In my family business, the emotional bonds between family members are very strong" and "In my family business, affective considerations are often as important as economic considerations" ($\alpha = 0.85$). For

Renewal of Family Bonds Through Dynastic Succession (R): “Family members would be unlikely to consider selling the family business” and “A successful transfer of the business to the next generation is an important goal for family members” ($\alpha = 0.83$).

For each dimension, the items were added and the sum divided by the number of items to obtain the final variable used. The questions asked of the CEOs were similar to those used by Goel et al. (2013) and by Vandekerckhof et al. (2014) to measure SEW. These authors examined SEW using questions from the Strategic Orientations of Small and Medium-Sized Enterprises (STRATOS) questionnaire (Bamberger 1994) as proxies for family influence, family control and perpetuation of family dynasty. Namely, they asked the CEO of the firm to rate on a scale from 1 to 5 the extent to which the objective of the firm is: (a) to maintain family traditions and the family character of the business; (b) to create and maintain jobs for the family; (c) to maintain independence in ownership; and (d) to maintain independence in management. Nevertheless, because we wanted to distinguish between the different SEW dimensions (Berrone et al. 2012) we selected some of the items proposed in their article, which could be considered equivalent to those used in recent research (Goel et al. 2013; Vandekerckhof et al. 2014).

Control Variables. We also controlled for several owner and business characteristics that might affect k_e . First, firm age was used as a control variable. The previous literature suggests that it is necessary to distinguish the ownership and management stages of family firms. Schulze et al. (2003) distinguished between controlling family-owned firms, sibling partnerships and cousin consortiums to explain that family influence and identity decreases once the firm transitions from founding-family-firm status to other ownership configurations. Gómez-Mejía et al. (2007) and

Le Breton-Miller and Miller (2013) made similar assumptions. $Lnage$ was computed by the natural logarithm of firm age measured in years. Next, firm size was measured by the number of employees. Risk tends to decrease with firm size (Zellweger 2007; Zellweger et al. 2011), so according to financial rules, a major risk will indicate major returns, and vice versa. Moreover, we controlled for firm performance because family business CEOs might require lower minimum return when profitability increases and higher return when profitability decreases. Thus, we analysed the investment returns using the averaged return on investment capital ($ROIC$) of the analysed period (2004-2011) with the data reported in the annual accounts. Furthermore, we used the debt to equity ratio (DTE) because of its influence on k_e , and financial leverage has a positive effect on equity returns. Finally, because firm returns will be different depending on the industry in which the firm operates, we also included two dummy variables (CON , WHO) to control for the effect of industry affiliation on k_e , allowing us to classify firms by whether they competed in construction, wholesale and retail, or other sectors of the economy.

5 Data analysis and results

Means, standard deviations, and correlations among the variables are shown in table 1. A family firm in our sample has, on average, 26 employees and is 18 years old. Moreover, firm size varies between 3 and 680 employees, and firm age varies between 3 and 81 years old. The mean minimum rate of return required by family businesses in the total sample is 14.85%. This rate ranges from 9.40% to 51.79%. The economic profitability measured by $ROIC$ is, on average, 6.34%. The average value of the debt to equity ratio is 4.99, ranging from 0.01 to 26.64. Regarding our independent variables, all of the items used for measuring SEW dimensions had close to 4, indicating that emotional considerations are relevant in these firms, with family

control and influence having the highest item value (4.60) and binding social ties having the lowest value (4.01).

(Insert table 1 about here)

The correlation matrix shows the significant effects (univariate) of the features that are considered to influence the minimum rate of return required by family firm shareholders. Family control and influence and binding social ties are positively related to k_e , while the identification of family members with the firm, emotional attachment and renewal of family bonds through dynastic succession are negatively related to the dependent variable. As stated previously, Table 1 shows no indications of multicollinearity, and its magnitudes are modest with the highest being 0.237.

The hypotheses proposed in the research model were tested using hierarchical regression analysis. The results are shown in Table 2, with measures of k_e as the dependent variable. Here again, the estimations were free of multicollinearity bias because all of the VIF values were less than 1.34. Model 1 is the baseline model that includes only control variables. The independent variables were entered into Model 2.

(Insert table 2 about here)

Model 1 shows that family firm owners' minimum rate of return is positively and significantly related to the debt to equity ratio ($p < 0.001$) and negatively and significantly related to the wholesale and retail industry variable ($p < 0.05$). Moreover, the adjusted R^2 is 0.36, and the model is significant ($p < 0.001$).

In Model 2, which is also significant ($p < 0.001$), the adjusted R^2 increases to 0.385 with the inclusion of the independent variables. The minimum rate of return is positively and significantly related to family control and influence ($p < 0.05$).

Furthermore, k_e is negatively and significantly related to the identification of family members with the firm ($p < 0.05$) and to the renewal of family bonds through dynastic succession ($p < 0.1$). Thus, these results support H1, H2 and H5. Nevertheless, neither binding social ties nor emotional attachment are significantly related to the dependent variable, so H3 and H4 are not supported.

Robustness Test. We also executed an additional robustness test. First, we ran another hierarchical regression model, but using Weigh Average Cost of Capital (WACC or k_0) instead of k_e as the dependent variable. The cost of capital could be a proxy for the cost of equity capital. They are not exactly the same, but both of them refer to minimum expected returns. The behaviour of independent variables coefficients is the same in both cases. Moreover, the identification of family members with the firm ($\beta = -1.938, p < 0.05$) and renewal of family bonds through dynastic succession ($\beta = -1.307, p < 0.05$) remained significant, providing further support for the results of our study. Nevertheless, family control and influence are not significant in this case, which was justified by k_0 measuring minimum returns from the investment's perspective, while k_e measures it from the shareholders' perspective. In addition, maintaining k_e as the dependent variable, the results did not change after two additional items assessing growth in sales and return on equity after tax were added to our control variables.

6. Discussion and conclusions

As explained in the introduction, our main goal with the development of this research was to study the relationship between the minimum rate of return required by family business owners (k_e), and the socioemotional wealth (SEW) presented in these types

of firms. Namely, we wanted to know the specific dimensions of SEW (Berrone et al. 2012) affect k_e .

For this purpose, we conducted a literature review of the SEW approach. We focused on the emotional aspects of family firms and their consequences for businesses' valuation. Further, being aware that company valuation is currently based on discount cash flows, we delved into the minimum rate of returned required by family firms to attempt to find a link between this rate and their emotional endowment.

Thus, we analysed the extent to which different SEW dimensions influence k_e . The previous literature has suggested that family firms might be willing to take risks to maintain their SEW (Gómez-Mejía et al. 2007; Sciascia et al. 2014). In this vein, we went further and we analysed the specific SEW dimensions that affect the minimum required returns. Therefore, we postulated five hypotheses, one for each SEW dimension (Berrone et al. 2012). We hypothesized that k_e is inversely related to family control and influence, identification of family members with the firm, binding social ties in the business, emotional attachment between family members, and renewal of family bonds through dynastic succession. The hypotheses were tested with a sample of family businesses from the south of Spain and using a hierarchical regression analysis. The results showed that family control and influence (H1) have significantly positive impacts on the minimum rate of return, while both the identification of family members with the firm (H2) and renewal of family bonds through dynastic succession (H5) have significantly negative impact on k_e . The results also show that binding social ties and emotional attachment have no significant relationships with k_e .

That family control and influence (H1) were positively correlated with k_e seemed surprising because we expected exactly the opposite outcome. Nevertheless, in our

view, different arguments can be made to explain why this variable behaves in this manner. On the one hand, we can consider that major control and influence in the business do not have to be accompanied by lower required returns. For example, it is possible that control is exercised indirectly by family members or by more distantly related family members; therefore, their interest will not be to preserve this socioemotional endowment but to obtain the business's maximum profitability. Further, these outcomes support the idea that profitability continues being a prerequisite for the viability of the firm (Chrisman and Patel 2012; Kotlar et al. 2014). In fact, our results reaffirm that family control is positively related to profitability at later generational stages (Sciascia et al. 2014), to the extent that most of the firms in our sample are in their first or second generations.

Thus, it seems important to distinguish the specific family members who exert the firm control because, depending on the firm generational stage, the results could be different. As suggested by Le Breton-Miller and Miller (2013), we might distinguish among founder firms, postfounder firms and cousin consortia. This consideration is important because, until now, several researchers have taken family ownership (control) as a proxy to measure SEW (Berrone et al. 2010; Gómez-Mejía et al. 2007), without considering generational considerations. Further, perhaps family control and influence are not always the best proxies to measure SEW because they could be conditioned by generational stage. On the other hand, we must also consider the emotional costs in family firms (Astrachan and Jaskiewicz, 2008). In this sense, a major family presence and control could imply divergences between family members, and these divergences could involve a loss of emotional endowment and thus lower SEW.

In contrast, H2 and H5 behaved as we expected. Both of them are negative and significantly correlated with k_e , indicating a major emotional endowment in family firms will imply lower required returns by family members. It is well known in the previous literature that heightened identification of family members with the firm (H2) motivates family firms to pursue goals other than financial ones (Deepphouse and Jaskiewicz 2013; Gómez-Mejía et al. 2007; Vandekerckhof et al. 2014). Therefore, if family members have a strong sense of belonging to their family business (Berrone et al. 2012), they will have high emotional endowments in their firms. Otherwise, the results for H5 are in agreement with the results obtained by Zellweger et al. (2011), who showed the importance of transgenerational control when a family entrepreneur subjectively assesses his/her own business. In fact, the determination to transfer the firm to the next generation is one of the most important characteristics for determining whether a firm is a family firm or not (Diéguez Soto et al. 2014; Gómez-Mejía and Cruz 2011; Vallejo-Martos 2005). Thus, to test H5, we asked family business CEOs whether it was unlikely that family members would consider selling their company and whether they have the intention of passing the business on to the next generation, demonstrating the desire for continuity over time.

Contributions. This study contributes to family firm research in several regards. Firstly, based on the dimensions proposed by Berrone et al. (2012), we measured SEW directly and not using a proxy, as previous research has (Berrone et al. 2010; Gómez-Mejía et al. 2007). Although it is true that recent research also used a direct measurement of SEW (Goel et al. 2013; Vandekerckhof et al. 2014), neither of the previous studies made distinctions by studying individual SEW dimensions. In our opinion, it is necessary to distinguish the specific emotional aspects that affect family firms' decisions. As observed above, different SEW dimensions behave in different manners regarding the business aspects that we are analysing (minimum expected

returns in this case). Therefore, several considerations must be accounted for when we measure the emotional endowment of a family firm. In particular, we found that family control and influence should be analysed relative to the firm generational stage.

Secondly, we combined a financial perspective with an emotional one. Recently, many researchers have related the SEW approach to performance considerations (Cruz et al. 2012; Pazzaglia et al. 2013; Sciascia et al. 2014) but not from a minimum required returns perspective. In our view, it is important to emphasize this relationship because it has never before been raised or demonstrated in the family business field that such an interconnection between emotional and financial companies' considerations exists, measured by SEW and k_e , respectively, and we found empirical support for this relationship.

Thirdly, the obtained results support the discussed idea throughout the development of this research that the total value of a company is not the sum of its financial value plus its emotional value (Astrachan and Jaskiewicz 2008; Zellweger and Astrachan 2008). Instead, a company's financial value should reflect the total value of it, as long as it has been calculated using a discount rate commensurate with the risk level and the internal and external characteristics of the business in question. This fact might have important consequences for all aspects related to firms' valuation and the different components that we must consider when valuing a business. Thus, it could open an interesting research line.

In any case, the obtained results are reassuring because they allow us to continue with this research line related to socioemotional wealth and the minimum rate of return.

Limitations. It is also important to refer to the main limitations of this work. Firstly, we studied the direct effect of SEW on k_e , while some authors (Vandekerckhof et al. 2014) have proposed analysing it from an indirect perspective, using SEW as a moderating variable and arguing that SEW is neither always beneficial nor always destructive, thus using it as a moderating variable and allowing it to identify both the bright and the dark side of the construct of SEW. Nevertheless, in this case, we thought that, to achieve the proposed goal, it was more interesting to analyse the direct effects of SEW dimensions on k_e . Secondly, due to the characteristics of the family businesses in our sample, we could only provide empirical evidence for small firms (the average number of employees per firm in our sample was 26). Nevertheless, most of the firms around the world are micro- and small enterprises (MSEs). It would be interesting to develop more studies that consider medium and large businesses to determine whether we can extrapolate these results. Thirdly, we calculated the dependent variable (k_e) through using Three Components Model (Rojo-Ramírez 2014), but this is not the only method for calculating it. Several methods were considered when we performed the k_e literature review (Adams et al. 2004; Cotner and Fletcher 2000; Kerins et al. 2004; McNulty et al. 2002; Visscher et al. 2011). However, according to the characteristics of the firms in our sample, we considered this process to be the most appropriate for calculating k_e . Fourthly, it is important to mention that the minimum returns required by family firms' CEOs might be influenced by market forces or by environmental factors. Although we controlled for industry effects and also consider market conditions in the calculus of k_e (namely through the market premium), we encourage future research to improve our comprehension of the environmental effects on k_e . Fifthly, our study is based on a cross-sectional design. Although cross-sectional designs in this type of research are currently the standard practice, we cannot demonstrate causality. A final limitation

of our research is that the analysis was performed for family businesses located in the South of Spain, so we must determine whether similar results are obtained in other regions or whether they will be very different. Thus, it would be interesting to perform a wider geographical study.

Future research. There are different lines that future research might take concerning the SEW approach. As mentioned above, we are facing an incipient study field, which is still in its infancy, so many contributions can be made in this area. Thus, researchers might continue working on both theoretical and empirical issues referring to family businesses' socioemotional endowment because this approach presents a wide range of possibilities. For example, a study that analyses the issues we have addressed here, but nationally or even internationally, could be performed. This science's scope is international, providing the opportunity to perform comparative studies between different regions or countries. It also could be interesting to investigate the socioemotional endowment in distinguishing between different types of family businesses. Moreover, all of the family business processes that depend on the minimum rate of return (value creation, viability analysis) could be analysed from an emotional perspective. This could be very novel in the family business field because it mixes traditional financial questions with management decisions.

Implications for practice. Our results could also be useful for practitioners. As we have shown, the minimum required returns by family shareholders depend on different emotional considerations. If it is true that we have calculated k_e by an indirect process using financial data, we must consider that these financial data are the result of business management in family firms, indicating that family business results concerning profitability, performance or indebtedness are the consequences of how family businesses are managed. Our results show how each SEW dimension,

measured by specific items, affects k_e . Therefore, it is possible to determine the aspects of family firms' SEW that might lead to changes in performance. Thus, it is important for practitioners to be aware of all of these emotional considerations when they calculate minimum expected returns, particularly when k_e is used for valuing a firm or for analysing the viability of projects or investments.

In conclusion, the results of our study suggest that family control and influence, the identification of family members with the firm and the renewal of family bonds through dynastic succession have impacts on the minimum rate of return required by family business owners. These results could help us to understand how economic and financial results can also be affected by management decisions made in family businesses.

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Tables.

Table 1. Correlation Matrix, Means and Standard Deviations

Variable	M	S D	1	2	3	4	5	6	7	8	9	10	11	12
k_e^b	14.85	8.01	1.00											
Firm age ^b	19.55	7.53	-.097 [†]	1.00										
Firm Size ^b	26.24	62.71	-.197**	.222***	1.00									
Construction ^a	0.19	0.40	.075	.003	.039	1.00								
Wholesale and Retail ^a	0.42	0.49	-.106 [†]	-.11 [†]	-.088	-.413***	1.00							
6. ROIC	6.34	7.74	-.183**	.19**	-.013	-.013	-.116*	1.00						
7. Debt ratio	5	5.53	.585***	-.167**	-.256***	-.027	.075	-.184**	1.00					
8. Family control and Influence	4.60	0.76	.051	-.153*	-.047	-.017	-.048	.017	-.078	1.00				
9. Identification of family members	4.19	0.91	-.122*	-.059	.008	.037	-.082	-.099 [†]	-.043	.233***	1.00			
10. Binding social ties	4.02	0.93	-.075	.004	-.001	.110 [†]	.053	.029	-.092 [†]	-.032	.113 [†]	1.00		
11. Emotional attachment	4.06	1	-.11 [†]	-.145*	-.091 [†]	.155*	-.007	.03	-.086	.198**	.226***	.380***	1.00	
12. Renewal of family bonds	4.19	1.05	-.152*	-.009	.042	-.061	-.029	.066	-.066	-.006	.181**	.142*	.176**	1.00

Note. N=207. a. Dummy variable. b. Natural logarithm used in the regression model. ROIC: return on investment capital.

[†] $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 2. The Effect of SEW Dimensions on the Minimum Rate of Return Required by Family Shareholders

Variables	Model 1	Model 2
Constant	2.710 (0.20)	2.779 (0.280)
Firm size	0.005 (0.021)	0.006 (0.021)
Firm age	-0.079 (0.065)	-0.077 (0.064)
Construction ^a	0.027 (0.058)	0.032 (0.059)
Wholesale and Retail	-0.116* (0.047)	-0.122** (0.047)
ROIC	-0.005 [†] (0.003)	-0.005 [†] (0.003)
Debt ratio	0.038*** (0.004)	0.038*** (0.004)
Family control and influence		0.066* (0.029)
Identification of family members		-0.053* (0.024)
Binding social ties		0.016 (0.024)
Emotional attachment		-0.025 (0.024)
Renewal of family bonds		-0.027 [†] (0.020)
R ²	0.379	0.418
Adjusted R ²	0.36	0.385
ΔR ²		0.039*
F statistic	20.333***	12.745***

Note. N=207. ROIC: return on investment capital. Dependent variable = minimum rate of return required by family shareholders (k_e). Robust standard errors in parentheses.

a. Other sectors is the suppressed category

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