RESEARCH PAPER

The effect of socioemotional wealth on the relationship between entrepreneurial orientation and family business performance

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Abstract This study examines how five key entrepreneurial orientation (EO) dimensions—risk taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy—impact family business performance, as well as the moderating effect of socioemotional wealth (SEW) on these relationships. The findings, based on a sample of 609 Spanish and Portuguese family firms, reveal that not all EO dimensions are equally important for performance, as only proactiveness, competitive aggressiveness, and autonomy were significant. However, we also find that the EO–performance relationship is affected by concern for SEW preservation, as our SEW measure moderates risk taking positively and innovativeness negatively.
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Introduction

Entrepreneurial orientation (EO) is an important driver of entrepreneurial activities and overall business performance (Rauch et al., 2009). However, the relationship between EO and performance has yet to be fully understood in the unique context of the family firm, where a family informs

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the dominant coalition of the firm (Chrisman et al., 2012). While some studies find that family businesses constitute a supportive environment for entrepreneurial initiatives (e.g., Short et al., 2009; Zahra et al., 2004), others report that the family context hampers EO (Naldi et al., 2007).

Three reasons might account for this ambiguity. First, most researchers have followed Miller's (1983) Gestalt approach instead of considering the possibility that EO dimensions may vary independently (Lumpkin and Dess, 1996). Second, the research may not have taken the heterogeneity among family businesses fully into account (Chrisman et al., 2012; Dyer and Dyer, 2009; Sciascia et al., 2014). Third, studies investigating family firm-specific variables as moderators of the EO–performance link have tended to rely on reductionist proxies that ''only partly capture'' what Chua et al. (1999) called the ''essence'' of family firms (Schepers et al., 2014, p. 40). A notable exception is Schepers et al. (2014), which finds that the positive effect of EO on financial performance decreases with the increase in the concern for socioemotional wealth (SEW) preservation, defined as ''non-financial aspects of the firm that meet the family's affective needs, such as identity, the ability to exercise family influence, and the perpetuation of the family dynasty'' (Gómez-Mejía et al., 2007, p. 106). Another exception is Kallmuenzer et al. (2018), which reports that the prioritization of family goals, measured through a selection of items from the FIBER scale (a multidimensional measure of SEW proposed by Berrone et al., 2012), negatively moderates the risk taking–performance link but does not affect the relationships between the remaining EO dimensions and family firm performance. These studies suggest that the Gestalt approach to EO (Miller, 1983; Schepers et al., 2014) might lead to biased empirical results in its identification of positive or negative effects for SEW (Kellermanns et al., 2012b).

Our study addresses these ambiguities and extends Schepers et al. (2014) in two main directions. First, we consider EO using the multidimensional approach of Lumpkin and Dess (1996), which has rarely been used in the empirical family-firm literature (Hernández-Linares and López-Fernández, 2018), to investigate how risk taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy affect family firm performance. Second, we address the implications of the finding that family businesses are willing to sacrifice the firm's economic well-being to prevent the family from losing its socioemotional endowment (Gómez-Mejía et al., 2007; Schulze and Kellermanns, 2015) and that the positive association between overall EO and family firm performance is moderated by SEW (Schepers et al., 2014). Accordingly, we investigate the role of SEW preservation as a possible moderator on the relationships between the five individual EO dimensions and firm performance using a sample of 609 Spanish and Portuguese family firms.

We make at least three important contributions to the literature on entrepreneurship and family firms. First, we examine the complexity by which EO dimensions affect firm performance by deconstructing EO along its principal dimensions, thus extending both the research on EO in family firms and the findings in Schepers et al. (2014). Second, we contribute towards a more nuanced understating of the drivers of performance heterogeneity across family firms by

confirming the moderating effect of SEW on the relationship between EO and family firm performance. Third, we contribute to the SEW literature by empirically corroborating the argument that SEW has both positive and negative effects (Kellermanns et al., 2012b; Naldi et al., 2013).

Conceptual framework and hypotheses development

The EO concept was introduced by Miller (1983), who considers a firm to be entrepreneurial if it ''engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with 'proactive' innovations, beating competitors to the punch'' (p. 771). Later scholars adopted an approach based largely on this original conceptualization, forming a consensus around three underlying dimensions of EO: innovativeness, proactiveness, and risk taking (e.g., Covin and Slevin, 1989). Later, Lumpkin and Dess (1996) proposed two additional dimensions: autonomy and competitive aggressiveness.

While most studies have found that EO positively impacts firm performance (Rauch et al., 2009), EO has been explored in the family business context only recently (Kellermanns and Eddleston, 2006; Zahra et al., 2004). This is surprising, given that family businesses constitute a unique setting in which to analyze EO and its relationship with performance due to their distinctive set of ownership, management, and governance conditions *vis a vis* nonfamily firms (Hernández-Linares and López-Fernández, 2018). The literature on EO in family businesses has produced ambiguous findings. Whereas some scholars have found that EO is enhanced among family firms (e.g., Zahra et al., 2004), others have reported a negative effect (e.g., Naldi et al., 2007). This lack of consensus justifies calls for a more extensive study of EO in the family business context (e.g., Cruz and Nordqvist, 2012; Dess et al., 2011; Lumpkin et al., 2010; Zellweger and Sieger, 2012).

To address this research gap, we first complement and extend the extant research on the independence of all five EO dimensions in family firms (Casillas and Moreno, 2010; Kallmuenzer et al., 2018). The approaches to EO measurement in both Miller (1983) and Lumpkin and Dess (1996) have benefits and limitations; neither is inherently superior. Hence, scholars have employed measures that best align with their theories and research designs (Covin and Wales, 2012). Consistent with recent studies (e.g., Casillas and Moreno, 2010; Hernández-Linares et al., 2018a; Lumpkin et al., 2010), we adopt the Lumpkin and Dess (1996) perspective, for three reasons. First, Miller's (1983) Gestalt approach neglects the individual influence of each dimension, whereas Lumpkin and Dess (1996) recognize that each dimension may vary independently and may be beneficial or desirable depending on the context. Indeed, high levels of the five EO dimensions have not been shown to constitute a necessary condition for neither long-term success of family businesses (Zellweger and Sieger, 2012), firm growth (Casillas and Moreno, 2010), or firm performance (Kallmuenzer et al., 2018). Second, few studies (e.g., Casillas and Moreno, 2010; Kallmuenzer et al., 2018; Zellweger and Sieger, 2012) have investigated competitive aggressiveness and autonomy as distinct elements of EO in family businesses. This is a noteworthy omission, as the fam-

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ily firm setting provides a context in which autonomy, for instance, has been considered to be even more important than risk taking (Nordqvist et al., 2008).

The SEW paradigm, conceived as an extension of behavioral agency theory (Wiseman and Gómez-Mejía, 1998), considers the preservation of SEW to represent the value a family enterprise places on non-financial considerations in the business environment (Gómez-Mejía et al., 2007). Thus, firms make choices depending upon the reference point of their dominant principals to preserve accumulated endowment in the business (Berrone et al., 2012; Gómez-Mejía et al., 2007). The homogeneity of the role played by SEW within the family business group (Naldi et al., 2013) is implicit in these arguments. However, the management of family firms calls for a differentiated strategy due to the inherent heterogeneity of families (Dyer and Dyer, 2009; Sciascia et al., 2014). While some firms are strongly driven to preserve their SEW, others attach much less importance to the preservation of these non-economic factors (Gómez-Mejía et al., 2011; Naldi et al., 2013; Schepers et al., 2014). Moreover, preserving SEW may have both positive and negative effects on firm performance (e.g., Kellermanns et al., 2012a,b; Naldi et al., 2013).

Therefore, considering that SEW may explain why family firms behave in distinct ways (Jiang et al., 2018), we both extend as well as complement Schepers et al. (2014) by investigating the influence of SEW on the association between each EO dimension (risk taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy) and family business performance. However, while Schepers et al. (2014) proposed a negative moderating effect of SEW preservation on the EO–performance link, we hypothesize that concern for SEW preservation can have either positive or negative impacts on how firms obtain beneficial outcomes from the EO dimensions. In what follows below, we discuss each of the hypotheses.

Risk taking and SEW

Risk taking is the willingness to commit resources to projects with unknown outcomes (Miller and Friesen, 1982; Wiklund and Shepherd, 2005). Risk taking tolerance orients the firm toward action, induces it to break away from the tried-and-true, and motivates it to venture into the unknown (Hughes and Morgan, 2007; Wiklund and Shepherd, 2005) ''in the interest of obtaining high returns by seizing opportunities in the marketplace'' (Lumpkin and Dess, 1996, p. 144). Given that risk-aversion hinders firms from undertaking explorative activities and developing new market opportunities, firms need a degree of risk taking to challenge the existing order of business and ensure performance (Hughes and Morgan, 2007), as has been corroborated by the meta-analysis of Rauch et al. (2009).

Beyond the evidence pointing to the lower level of risk taking among family firms (e.g., Naldi et al., 2007; Short et al., 2009), the effect of risk taking on family firm performance remains controversial, despite being the most-researched among the EO dimensions (Hernández-Linares and López-Fernández, 2018). Some researchers (e.g., Casillas and Moreno, 2010; Casillas et al., 2010; Kallmuenzer et al., 2018; Stenholm et al., 2016) have found

only a non-significant effect of risk taking on family firm performance. However, Naldi et al. (2007) argued that the alignment of interests between owners and managers in family firms leads to a low level of formal control and monitoring systems, which allows family firm managers greater decision-making latitude via more intuitive and less calculative approaches, ultimately harming firm performance. Stenholm et al. (2016) also suggested that the preference for low-risk strategies may harm the ability of the family firm to deal with dynamic and uncertain environments, and may even jeopardize firm survival. In line with such theoretical arguments, and consistent with Naldi et al. (2007), who empirically confirmed a negative effect of risk taking on family firm performance, we propose the following:

Hypothesis 1a. Risk taking is negatively associated with family business performance.

Despite our prediction of a negative relationship between risk taking and family firm performance, and notwithstanding that the pursuit of family-related goals negatively moderates the relationship between risk taking and financial performance (Kallmuenzer et al., 2018), we expect that concern for preserving SEW endowments improves the transformation of risk taking into performance among family firms. Aversion to any loss of SEW stock seems to be family firms' main reference point, even at the cost of assuming greater performance risk (Gómez-Mejía et al., 2007). However, a more finely grained view suggests that the decisions of family firms tend to consider ''both the current SEW endowment and future financial wealth'' (Gómez-Mejía et al., 2018, p. 5), given the typical trade-off relationship between SEW and financial wealth (Gómez-Mejía et al., 2018). Moreover, a minimum level of financial performance is needed for firm survival; the alternative entails the total loss of the firm's SEW (Gómez-Mejía et al., 2018). Therefore, we expect that family firms deeply concerned with preserving their SEW endowment will seek to minimize the damage to performance. Thus, higher levels of SEW will strongly motivate a family to mitigate potential downsides (Jiang et al., 2018). Such a motivational focus will likely lead a family firm to focus on ''higher-quality'' risks and better opportunities, as their time horizon is relatively long term and is not driven by quarterly results. Furthermore, the desire to maintain SEW will lead to a long-term orientation regarding that factor as well (see Yang et al., 2018), which will likely reinforce the abovementioned effect. We thus propose the following hypothesis:

Hypothesis 1b. The relationship between risk taking and family firm performance is moderated by SEW. Specifically, risk taking will have a stronger influence on family firm performance when the concern to maintain SEW is higher.

Innovativeness and SEW

Innovativeness reflects a firm's orientation toward creativity and experimentation, technological leadership, novelty, and R&D for new products and/or processes (Hughes and Morgan, 2007; Lumpkin and Dess, 1996). It has been aptly noted that that ''organizations without the capacity to innovate may invest time and resources in studying markets but

are unable to translate this knowledge into practice'' (Hult et al., 2004, p. 430). Thus, ''innovativeness is a chief means to create differentiation and develop solutions that undermine those of competitors'' (Hughes and Morgan, 2007, p. 653). Hence, innovativeness is an important determinant of firm performance (Hult et al., 2004; Rauch et al., 2009).

Though innovativeness is apparently lower among family firms (Hernández-Linares and López-Fernández, 2018), both theoretical arguments and the empirical evidence confirm its positive effect on family firm performance. Innovativeness is thus expected to be positively related to family firm performance given that it fits well with family firms' long-term orientation and their desire to transfer a healthy firm to the next generation (Hatak et al., 2016; Stenholm et al., 2016). Indeed, with the exception of the non-significance found by Kallmuenzer et al. (2018), the empirical research confirms the positive association between innovativeness and family business performance (Casillas and Moreno, 2010; Casillas et al., 2010; Craig et al., 2014; Hatak et al., 2016; Kellermanns et al., 2012a; Naldi et al., 2007; Stenholm et al., 2016). Accordingly, we propose the following:

Hypothesis 2a. Innovativeness is positively associated with family business performance.

An innovative strategy entails large investments, long-term payoffs, and a high risk of failure, while needing highly qualified human and managerial resources (Block et al., 2013; Chrisman and Patel, 2012). Socioemotional wealth strongly affects how resources are employed and the degree to which strategies are pursued (Yang et al., 2018). Regarding financial resources, concern for preserving family control of the company, a critical element of family SEW (Gómez-Mejía et al., 2007, 2011), leads to a reluctance to draw upon external investors or bank indebtedness, which may undermine such control (Gómez-Mejía et al., 2011), despite any potential risk to the firm's R&D investment or performance (Block et al., 2013; Chrisman and Patel, 2012). Accordingly, a family firm that wants to maintain high levels of SEW will try to dampen the disruptive effects of innovation; this will hinder performance by limiting the resource deployment required for innovativeness to come to full fruition. Regarding human talent resources, family control allows organizations to be a source of good job opportunities and managerial positions for family members, another main source of SEW for the controlling family (Gómez-Mejía et al., 2007, 2011). However, a successful innovative strategy usually requires that talent be sought outside the family, which in turn can erode the SEW endowment (Gómez-Mejía et al., 2010). Indeed, family firms impose a glass ceiling for non-family firm employees when it tries to maintain high levels of SEW (Yu et al., in press), which may mean that the firm will lack the human resources required to fully benefit from its innovativeness. Therefore, we suggest that a strong commitment to SEW preservation will impose a limit on the talent and financial resources employed in innovative strategies, harming firms' ability to successfully transform innovativeness into performance. We thus propose the following:

Hypothesis 2b. The relationship between innovativeness and family firm performance is moderated by SEW. Specifically, innovativeness will have a weaker influence on family

firm performance when the concern to maintain SEW is higher.

Proactiveness and SEW

Proactiveness reflects the foresight needed to act in anticipation of future demand and to shape the environment (Lumpkin and Dess, 2001). Thus, while ''innovativeness refers to a company's efforts to discover potential opportunities, proactiveness refers to a company's efforts to recognize and seize them'' (Lumpkin et al., 2010, p. 248). Proactiveness fosters the organizational ability to anticipate change and evolving needs in the marketplace, to be among the first to act upon them, and to capitalize on emerging opportunities. Proactiveness seems to operate as an enabler of competitive advantage (Covin and Slevin, 1989; Hughes and Morgan, 2007; Miller, 1983; Wiklund and Shepherd, 2005). Empirical evidence confirms the key role played by proactiveness in augmenting business performance (Hughes and Morgan, 2007; Lumpkin and Dess, 2001; Rauch et al., 2009).

In the family business context, proactiveness is regarded as one of the most important dimensions of EO (Nordqvist et al., 2008), since family firms are often less bureaucratic and more flexible than their nonfamily counterparts, and thus capable of making decisions more quickly (Kets de Vries, 1993). This enables them to respond quickly to new opportunities (Irava and Moores, 2010; Kellermanns et al., 2011), which has consequences for their performance. Therefore, we join Stenholm et al. (2016) in suggesting that the long-term orientation of family firms boosts proactiveness (Lumpkin et al., 2010) and thus firm performance. Indeed, most of the empirical literature finds that firm proactiveness is a key source of sustained growth and performance for family firms (Casillas and Moreno, 2010; Casillas et al., 2010; Kallmuenzer et al., 2018; Stenholm et al., 2016). Accordingly, we propose the following:

Hypothesis 3a. Proactiveness is positively associated with family business performance.

The role played by proactiveness in family firms is subject to debate (Casillas et al., 2010; Nordqvist et al., 2008; Short et al., 2009). We argue that these conflicting findings are largely due to interactions with the pursuit of SEW. Proactivity is associated with a first-mover strategy oriented toward the exploitation of new opportunities, which can imply the elimination of current declining operations (Venkatraman, 1989). The exploitation of new opportunities necessitates financial investments and business intelligence with which to scan and seize opportunities and to implement those determined to be most valuable (Pérez-Luño et al., 2011). As argued above, firms strongly concerned with preserving their SEW will be reluctant to devote the necessary (external) financial resources and will be unlikely to bring in the necessary talent for fear of limiting their control over firm decisions (Gómez-Mejía et al., 2010, 2011; Yu et al., in press). Moreover, proactiveness implies that current operations would have to be eliminated or changed to facilitate performance. However, higher levels of SEW and firms' desire to maintain it are associated with strong

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affective commitment to producing more traditional products/services (Gómez-Mejía et al., 2011), which is likely to dampen proactive inclinations. Accordingly, we propose that a strong concern to preserve family SEW may harm a firm's ability to transform proactiveness into performance. We thus propose the following:

Hypothesis 3b. The relationship between proactiveness and family firm performance is moderated by SEW. Specifically, proactiveness will have a weaker influence on family firm performance when the concern to maintain SEW is higher.

Competitive aggressiveness and SEW

Competitive aggressiveness is the intensity of a firm's effort to compete with and surpass competitors by adopting assertive behaviors (Hughes and Morgan, 2007; Lumpkin and Dess, 1996, 2001). A strong and aggressive stance gives a business the ability to be a decisive competitor and to act forcefully to secure or improve its position (Lumpkin and Dess, 2001). While proactiveness describes how a firm seizes initiative and acts opportunistically to influence trends and create demand, competitive aggressiveness describes how firms relate to their competitors. In other words, proactiveness focuses on meeting demand, whereas competitive aggressiveness concentrates on competing for demand (Lumpkin and Dess, 1996, 2001). With some exceptions (Hughes and Morgan, 2007; Lumpkin and Dess, 2001), the empirical evidence finds a positive and significant relationship between competitive aggressiveness and performance (Giachetti, 2016; Nadkarni et al., 2016).

Competitive aggressiveness is largely neglected by the family firm literature (Hernández-Linares and López-Fernández, 2018). The scant research on this issue reports that this EO dimension is associated with neither family firm growth (Casillas and Moreno, 2010) nor performance (Kallmuenzer et al., 2018), thus confirming the low relevance of competitive aggressiveness in the family firm context (Zellweger and Sieger, 2012). In addition, family firms aim for a positive family reputation and image (Deephouse and Jaskiewicz, 2013; Zellweger and Sieger, 2012), which will lead them to avoid any aggressive action towards competitors that may entail negative consequences, such as financial losses (Deephouse and Jaskiewicz, 2013; Kallmuenzer et al., 2018). Moreover, family firms seem to be oriented toward a defensive way of competing that focuses on survival rather than an offensive way focused on increasing financial returns (Short et al., 2009). Therefore, we propose the following:

Hypothesis 4a. Competitive aggressiveness is negatively associated with family business performance.

The relationship between competitive aggressiveness and firm performance (and consequently its possible moderators) has been given scant attention in the family business context. However, the competitive aggressiveness–performance link seems to depend on the emphasis placed on SEW preservation. Socioemotional wealth has a strong psychological impact on the families (Jiang et al., 2018), but the way they are perceived in the

market will also likely guide their behavior. Being engaged in competitive aggressiveness could harm a family firm's reputation, affecting family members' self-esteem (Deephouse and Jaskiewicz, 2013). The greater the concern to preserve the SEW stock, the greater the need to build a strong and positive reputation. Hence, firms that aspire to protect and build their SEW are less likely to execute aggressive strategies, as these could harm their reputation. Indeed, SEW purists tend to limit their aggressive activity, including strategies of diversification (Gómez-Mejía et al., 2010; Muñoz-Bullón et al., 2018), acquisition (Gómez-Mejía et al., 2018), and internationalization (Yang et al., 2018) to prevent SEW loss, despite the risk of negative consequences for firm performance. Accordingly, we argue that a higher concern to preserve SEW may dampen the relationship between competitive aggressiveness and family firm performance. Thus, we propose the following:

Hypothesis 4b. The relationship between competitive aggressiveness and family firm performance is moderated by SEW. Specifically, competitive aggressiveness will have a weaker influence on family firm performance when the concern to maintain SEW is higher.

Autonomy and SEW
Autonomy, understood as the ''independent action of an individual or a team in bringing forth an idea or a vision and carrying it through to completion'' (Lumpkin and Dess, 1996, p. 140), is not simply a way to design or structure a team but is a strategic orientation that promotes an entrepreneurial climate. Autonomy affords organizational members the freedom and flexibility to develop and perform entrepreneurial initiatives (Lumpkin et al., 2009). Of the five EO dimensions (Lumpkin and Dess, 1996), the aspect of autonomy (and, specifically, its relationship to firm performance) has received the least attention, both theoretically and empirically (Rauch et al., 2009), and of the little that exists, there does not emerge any consensus on the role of the autonomy dimension of EO. Some scholars report no association between autonomy and firm performance (Hughes and Morgan, 2007), while others report that autonomy influences firm differentiation, with effects on firm performance (Lechner and Gudmundsson, 2014).

The research in the family business context is even more limited (Hernández-Linares and López-Fernández, 2018). As far as we are aware, only two studies have investigated the autonomy dimension of EO. Casillas and Moreno (2010) cannot confirm a positive association between autonomy and family firm growth, while Kallmuenzer et al. (2018) report a marginally significant and positive relationship. Zellweger and Sieger (2012) analyze the EO of long-surviving family firms and confirm the relevance of what they call ''internal autonomy'' (the autonomy of employees or teams), following Nordqvist et al. (2008). Considering all the above arguments, we hypothesize the following:

Hypothesis 5a. Autonomy is positively associated with family business performance.

The scant research on autonomy and family firms has provided no significant evidence that family involvement (Casillas and Moreno, 2010) or family goals

(Kallmuenzer et al., 2018) have significant impacts on the autonomy–performance link. This lack of empirical support may occur due to contingent family-specific variables. We propose that SEW is such a variable. The need to maintain control over the firm is a core element of SEW (Berrone et al., 2012; Cruz et al., 2014), and a significant amount of emotional wealth is derived from keeping the firm's control in family hands (Berrone et al., 2012; Gómez-Mejía et al., 2007). The pursuit of SEW and autonomy are likely to be self-reinforcing. The desire to act particularistically (Carney, 2005) can be maintained only at high levels of autonomy. At the same time, SEW can be obtained only if the family feels that they have the freedom and autonomy needed to allocate resources in a way that leads to non-economic benefits. Accordingly, these variables likely have a strong joint effect on outcomes. We thus propose the following:

Hypothesis 5b. The relationship between autonomy and family firm performance is moderated by SEW. Specifically, autonomy will have a stronger influence on family firm performance when the concern to maintain SEW is higher.

Fig. 1 summarizes our hypotheses, indicating the direction of the main effects of the EO dimensions on performance as well as the nature of the moderation with SEW.

Method

Sample

The data used for this study were collected as part of a wider research project using a survey instrument applied in the first half of 2015. Small and medium-sized enterprises (SMEs) are defined as non-listed private companies with 10 to 249 employees (e.g., Hernández-Linares et al., 2018a). We focus on the Iberian Peninsula because of the fundamental similarities between Portugal and Spain, which are both late-comers to the democratic process (Linz, 1979), with shared boundaries and an economic and cultural proximity.

Our target firms are drawn from the SABI database (*Sistema de Análisis de Balances Ibéricos*-System of Iberian Balance Sheets), which has been used in previous family firm research (Hernández-Linares et al., 2018a) and includes information on 1,366,768 Spanish and 536,014 Portuguese firms (March, 2015). Overall, the sample of this study consisted of 125,901 SMEs across all sectors.

Our questionnaire was developed in English, then translated into Spanish and Portuguese, and then back-translated into English to check for consistency. Both versions were pretested in the respective countries. Personalized invitations to complete an online, telephone, and hard-copy (mailed) survey were sent, including an offer to share summary reports as an incentive. Of the 27,176 companies randomly selected from the database, 1484 surveys were completed, yielding an initial response rate of 5.46%. Only 1066 surveys were usable, however, resulting in a final response rate of 3.92%, a figure comparable to similar family business studies involving top management teams in Europe (e.g., De Massis et al., 2018). The sampling error was 2.99% within 95% confidence limits ($z = 1.96$; $p = q = 0.5$). We used

the Kruskall–Wallis test to assess potential bias in determining the differences between online, telephone, and paper responses and found no statistically significant differences (p-value > 0.05).

Of the large number of definitions and criteria for delimiting the ''family business'' concept (Hernández-Linares et al., 2017, 2018b), we used two criteria, objective (ownership) and subjective (self-definition), following several previous studies (e.g., Casillas et al., 2010). All firms that self-defined as family businesses and in which the family held 50% or more of ownership were considered family businesses. Thus, 609 SMEs (57.13%) were considered family businesses and were included in our final sample. This implies that 56.01% of Portuguese SMEs and 58.35% of the Spanish SMEs surveyed were family firms. While there is no comparison available for Portugal, Garcés-Galdeano et al. (2016) report a lower proportion of family firms for their sample of Spanish companies (54.59%); but this difference may be explained by the larger average size of the firms they studied. The mean number of family firm employees was 33.94 (SD = 35.07), and the mean age of the firms (in years) was 24.70 (SD = 14.38). Our sample is representative of the study population in terms of both size and industry, as shown in Table 1.

Measures

Dependent variable

Perceptual performance instruments were used to assess family business performance. Subjective measures of performance have been frequently used in the family business research (e.g., Kellermanns et al., 2012a), since they yield and capture evaluations that are more holistic than those generated by a single performance element (Rodríguez et al., 2004). There is also a strong correlation between objective and subjective performance measures (Ling and Kellermanns, 2010). Additionally, and in line with recent research (Stenholm et al., 2016), we consider that assessing a firm's performance against that of competitors provides greater insights into performance than does an assessment based solely within the firm (Birley and Westhead, 1990), than as specified by objective measures. Thus, we asked respondents to compare their organization to their competitors in terms of financial and competitive performance with respect to ROA; growth in sales; market share; the quality of products, services, or programs; and the development of new products, services, or programs. Five-point responses ranged from ''much worse'' to ''much better.'' The Cronbach's alpha of this scale was 0.841.

Independent and moderating variables

Since we wanted to analyze the individual effects of risk taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy on family firm performance, we treated EO as a disaggregated set of constructs. In particular, EO dimensions were measured using the 18-item scale of Hughes and Morgan (2007) because Lumpkin and Dess (1996) had theoretically proposed five EO dimensions and later proposed scales for competitive aggressiveness and autonomy (Lumpkin and Dess, 2001), but they did not propose a scale for all EO dimensions. Thus, Hughes and Morgan
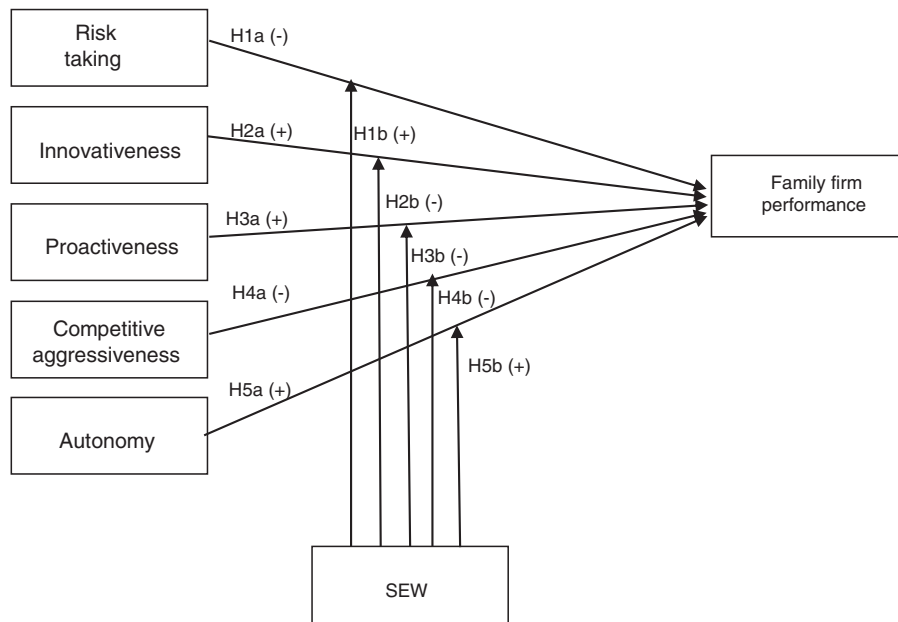
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Figure 1   Model and hypotheses.

Table 1   Sample characteristics.

Variables	Sample			Population ($n = 125{,}901$)
	Spanish family firms ($n = 297$)	Portuguese family firms ($n = 312$)	Total ($n = 609$)	
Number of employees (mean)	32	36	33.94	–
Small firms	233 (78.45%)	246 (78.85%)	479(78.65%)	109,140 (86.69%)
Medium firms	64 (21.55%)	66 (21.15%)	130 (21.35%)	16, 761(13.31%)
Firm age (mean, in years)	23.34	25.99	24.70	–
Agricultural sector	5 (1.68%)	11 (3.52%)	16 (2.63%)	4,228 (3.36%)
Manufacturing sector	101 (34.01%)	134 (42.95%)	235 (38.59%)	40,483 (32.15%)
Services sector	191 (64.31%)	167 (53.53%)	358 (58.78%)	81,190 (64.49%)

(2007) used Lumpkin and Dess' work as a guide when developing scales for all EO dimensions and sourced most of the items from previous studies (e.g., Barringer and Bluedorn, 1999; Hornsby et al., 2002; Hult and Ketchen, 2001; Lumpkin and Dess, 2001), while making modifications after pretesting. This scale is one of the most-cited among the measures that satisfy the conditions of multidimensionality according to Lumpkin and Dess's (1996) definition (Saha et al., 2017). Therefore, we measured the EO dimensions using the Hughes and Morgan (2007) scale: risk taking (three items, Cronbach's alpha = 0.637), innovativeness (three items, Cronbach's alpha = 0.857), proactiveness (three items, Cronbach's alpha = 0.733), competitive aggressiveness (three items, Cronbach's alpha = 0.774), and autonomy (six items, Cronbach's alpha = 0.822).

Given that ''a direct measurement of SEW phenomena is virtually non-existent, and construct development is just beginning'' (Jiang et al., 2018, p. 133), SEW has generally been considered through distal proxies in the empirical research (Debicki et al., 2016), typically using family ownership (e.g., Berrone et al., 2010; Gómez-Mejía et al., 2007,

2018), but also other measures of family involvement (e.g., Casillas et al., 2010; Muñoz-Bullón et al., 2018). These proxies for SEW have substantial limitations however, since univariate measures do not explore the dimensions of the SEW construct in detail (Berrone et al., 2012). Hence, we used a four-item scale (Schepers et al., 2014) that is one of the three direct measures of SEW used in the literature (Jiang et al., 2018), the other two being the FIBER (Berrone et al., 2012) and SEW-i (Debicki et al., 2016). The former has significant problems (Hauck et al., 2016) that explain the use of simplified versions (Kallmuenzer et al., 2018; Vandekerkhof et al., 2018), while the later has yet to be used empirically. The scale we used to measure SEW (Schepers et al., 2014) has been used by others (Goel et al., 2013; Vandekerkhof et al., 2015) and is based on selection criteria taken from the Strategic Orientations of Small and Medium-Sized Enterprises (STRATOS) questionnaire (Bamberger, 1994, p. 399; Bamberger and Weir, 1990, p. 109). It measures (1) maintenance of the family traditions/character of the business, (2) creation/saving of jobs for the family (both may be considered proxies for

the perpetuation of the family dynasty), (3) independence in ownership, and (4) independence in management. This measure of SEW (Cronbach's alpha = 0.721), through simple, encompasses the main elements of SEW, such as the role of affection and emotion in family firms, the perpetuation of the family dynasty, the maintenance of family control, and the ability to exercise family influence (Goel et al., 2013; Gómez-Mejía et al., 2007; Schepers et al., 2014; Vandekerkhof et al., 2015). The five responses ranged from ''totally unimportant'' (1) to ''very important'' (5).

Control variables

We first controlled for the influence of the country on EO within family firms, as despite the homogeneity within the Iberian Peninsula, we cannot discount the possibility that cultural specificities or unobserved heterogeneity between countries may influence EO development or levels. Since larger firms might have more slack resources and easier access to external resources (Zahra et al., 2004), we controlled for firm size using the number of employees, whose log (ln) was taken to minimize kurtosis (e.g., Hernández-Linares et al., 2018a). We also controlled for industry type because businesses in different industries may exhibit different organizational and environmental characteristics, which may in turn influence their performance (Wiklund and Shepherd, 2005). Following NACE coding (statistical classification of economic activities in the European Community) standards, we introduced three dummy variables (manufacturing, construction, and services), with the primary sector used as the default. We also controlled for firm age by measuring the number of years between the firm's establishment and the survey year (2015), as similarly undertaken by Hernández-Linares et al. (2018a). Consistent with earlier investigations (e.g., Chirico et al., 2011), we controlled for environmental dynamism (Cronbach's alpha = 0.979), which refers to the frequency of changes, the difference involved in each change, and the irregularity in the overall pattern of change characterizing the organizational environment (Child, 1972), using a three-item index taken from Jansen et al. (2005). We controlled for the existence of strategic planning (Hernández-Linares et al., 2018a) by enquiring if the firm had a strategic plan that included both business goals and the resources and capabilities required to achieve them, with a dichotomous response format. We controlled for the existence of a board of directors, given that this may influence firm behavior (Piepper et al., 2008), and for past performance, as it could improve organizational slack resources and encourage entrepreneurial activities (Wiklund and Shepherd, 2005). Moreover, past performance may lead to inertial processes or organizational change (e.g., Kellermanns and Eddleston, 2006). Thus, we considered the performance attained by each organization in the year prior to that of our study. Data for past performance, country, size, industry, and firm age were obtained from the SABI database. Finally, we controlled for both the family and nonfamily character of the CEO and the number of family members on the management team (e.g., Cruz and Nordqvist, 2012) since nonfamily managers may bring more rationality and objectivity to decision making, thereby promoting entrepreneurial decisions.

Measure properties and analysis

As is common in the literature on EO and family firms, all the constructs were measured using Likert-type five-point scales (Cruz and Nordqvist, 2012; Schepers et al., 2014), ranging from ''strongly disagree'' to ''strongly agree'' unless otherwise noted. The Cronbach's alpha values were acceptable ($\alpha \geq 0.721$), above the threshold point of 0.7 (Nunnally, 1978). The risk-taking construct ($\alpha = 0.637$) was the exception. A Cronbach's alpha greater than 0.6 is considered adequate, however, since a high coefficient alpha does not always mean a high degree of internal consistency, as alpha is also affected by the length of the test or the number of items per construct (Merschmann and Thonemann, 2011; Tavakol and Dennick, 2011). Hence, we considered a limit of 0.6 to be reasonable (Nunnally and Bernstein, 1994), and it is also broadly accepted in the literature (e.g., Covin and Wales, 2012).

To evaluate the survey items, we conducted confirmatory factory analysis (CFA) since we utilized established measures of our variables, and an exploratory factor analysis would thus not have been appropriate. To run the CFA, we used AMOS (e.g., Hernández-Linares et al., 2018a). The seven latent variables (the five EO dimensions of risk taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy; as well as SEW and firm performance) were included in the model. The hypothesized model showed an acceptable model fit considering the number of items and the interrelationships of the EO constructs ($\chi^2 = 1278.045(324)$, CFI = 0.851, IFI = 0.851, NFI = 0.810, TLI = 0.838, AGFI = 0.872, and RMSEA = 0.070; e.g., Cheung and Rensvold, 2002). Furthermore, all standardized factor loadings exceeded the 0.50 cutoff for practical significance (Hair et al., 2006), and all were significant at the 0.001 level ($t > 2.0$), providing evidence of convergent validity (Kohli et al., 1998; see Appendix). To establish the discriminant validity of the constructs, we calculated the average variance extracted (AVE), whose values ranged from 0.6593 to 0.83, all above the 0.50 threshold. We also calculated the values of the construct reliabilities, which ranged from 0.812 to 0.939, all above the acceptable level of 0.70 (see Appendix).

We also addressed the possibility that the EO dimensions were artifacts of the performance. To address this issue, we utilized two instrumental variables, shared vision and commitment to learning, for each of our five entrepreneurial orientation dimensions. We then used Stata 13.0 and the IVENDOG and IVREG2 programs (Baum et al., 2002) to calculate a 2SLS regression (Hamilton and Nickerson, 2003), as well as the Wu–Hausman F and Durbin–Wu–Hausman tests. The resultant non-significant F and chi-square tests suggested that the independent variables were exogenous, and therefore that their estimates were unbiased (Davidson and Mackinnon, 1983). These results show that reverse causality was not a concern (innovativeness: $F = 0.00050$, $p = 0.98221$, and $\chi^2 = 0.00054$, $p = 0.98143$; risk taking: $F = 0.03081$, $p = 0.86083$ and $\chi^2 = 0.03346$, $p = 0.85485$; proactiveness: $F = 0.07555$, $p = 0.78369$ and $\chi^2 = 0.08203$, $p = 0.77457$; competitive aggressiveness: $F = 0.02308$, $p = 0.87941$ and $\chi^2 = 0.02506$, $p = 0.8742$; autonomy: $F = 0.01820$, $p = 0.89283$ and $\chi^2 = 0.01976$, $p = 0.88821$).

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Results

Main results

The mean values, standard deviations, and zero-order correlations are shown in Table 2. Multicollinearity does not appear to be a serious concern. All correlation coefficients were smaller than the recommended threshold of 0.65 (Tabachnick and Fidell, 2012). To further mitigate any remaining multicollinearity concerns, the variables were converted to z-scores before the interaction terms were created (Aiken and West, 1991). The resulting variance inflation factors and highest condition index were well below the suggested thresholds (Hair et al., 1998). Furthermore, the possibility of a common method bias was addressed via Harman's (1967) single-factor test using the procedure suggested by Podsakoff and Organ (1986) and applied by recent studies (e.g., Hernández-Linares et al., 2018a). All items of the independent, dependent, and control variables were entered into the factor analysis. Seven factors with eigen values > 1.0 were identified, accounting for 60.43% of the variance. Since the first factor (24.56%) did not explain the majority of the variance, no single method factor emerged. We also obtained seven of the 12 control variables—country, size, industry (manufacturing, construction, and services), age, and past performance—from a secondary source, the SABI database.

Our hypotheses were tested using multiple regression analysis instead of SEM, since SEM is usually used to test moderation in a sub-group analysis. As our moderator was continuous rather than dichotomous (e.g., gender or family firm), such an analysis could have artificially constrained variance by requiring us to dichotomize the moderator. Thus, we opted for regular regression analysis, a common method of testing for moderation (it is relevant to note here, and as we also outline in the discussion section, that we could not infer causality in testing our hypotheses). The results are presented in Table 3. In Model 1, five of the 12 control variables were significantly related to family firm performance: country ($b = -0.058$, $p < 0.05$), environmental dynamism ($b = 0.077$, $p < 0.01$), strategic planning ($b = 0.117$, $p < 0.001$), firm age ($b = -0.094$, $p < 0.001$), and past performance ($b = 0.058$, $p < 0.05$). Size ($b = 0.049$, $p < 0.10$) and the construction sector ($b = -0.092$, $p < 0.10$) were partially significant.

To test Hypotheses 1a–5a, we entered the five EO dimensions (risk taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy) in Model 2. A significant change in R^2 was observed ($\triangle R^2 = 0.152$, $p < 0.001$). Proactiveness ($b = 0.115$, $p < 0.005$), competitive aggressiveness ($b = 0.144$, $p < 0.001$), and autonomy ($b = 0.059$, $p < 0.05$) had significantly positive effects on family firm performance, as posited by Hypotheses 3a and 5a and contrary to Hypothesis 4a.

Next, to test for the hypothesized moderation effects, we first entered the moderator (SEW) in Model 3 and then the five interaction terms in Model 4. No change in R^2 was observed in Model 3. In Model 4, however, a significant change was detected ($\triangle R^2 = 0.018$, $p < 0.01$). Hypothesis 1b, proposing that SEW moderates the relationship between risk taking and family firm performance, was supported because
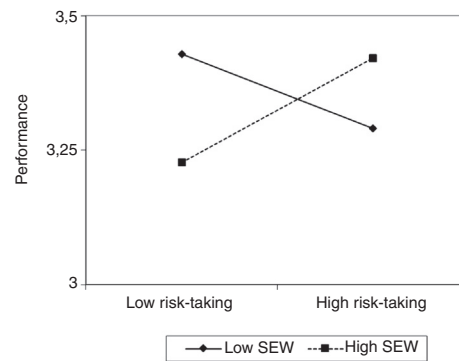

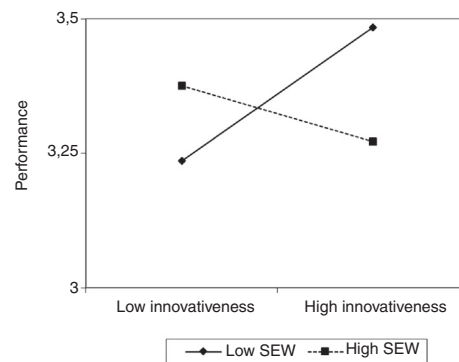**Figure 2**   Interaction: Risk-taking and SEW.

Figure 3   Interaction: Innovativeness and SEW.

the significant interaction between risk taking and SEW was positive ($b = 0.083$, $p < 0.01$). Hypothesis 2b, postulating that SEW negatively moderates the relationship between innovativeness and firm performance, was also supported ($b = -0.088$, $p < 0.05$). Hypotheses 3b, 4b, and 5b, proposing that SEW moderates the relationships between family firm performance and proactiveness ($b = 0.060$, $p = 0.11$), competitive aggressiveness ($b = 0.026$, n.s.), and autonomy ($b = -0.020$, n.s.), were not supported, though the result for proactiveness approached significance.

To facilitate the interpretation of the moderation effects, the significant interactions were plotted in Figs. 2 and 3. The interaction between risk taking and SEW (see Fig. 2) shows that there is a negative relationship between risk taking and performance for family firms with a low concern for SEW preservation, while there is a positive relationship for family firms with high levels of concern for SEW maintenance. When we tested the effects of the gradients, both family firms with a low concern for SEW ($t = -2.522$, $p < 0.05$) and a high concern ($t = 2.871$, $p < 0.01$) displayed significant interactions with risk taking, affecting performance. The second significant interaction effect between innovativeness and SEW (see Fig. 3) shows a positive relationship between innovativeness and performance for family firms with low levels of concern for SEW, while this relationship is negative for family businesses with high levels of concern. A gradient test revealed that the positive slope between innovativeness and organizational performance was significant for family businesses that scored low on SEW ($t = 3.011$, $p < 0.005$), whereas the slope for family firms with high SEW was not significant ($t = -1.746$, n.s.).

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Table 2 Descriptive statistics and pairwise correlations.

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Performance	3.453	0.681																		
2. Risk taking	3.832	0.712	0.287**																	
3. Innovativeness	4.052	0.738	0.333**	0.573**																
4. Proactiveness	3.780	0.722	0.393**	0.502**	0.650**															
5. Competitive aggressiveness	3.870	0.751	0.408**	0.433**	0.532**	0.613**														
6. Autonomy	3.509	0.775	0.223**	0.336**	0.289**	0.262**	0.312**													
7. SEW	3.803	0.878	−0.019	−0.025	−0.016	0.010	0.074	−0.140**												
8. Country	1.510	0.500	−0.047	0.154**	0.080*	−0.020	−0.025	−0.065	−0.028											
9. Size[a]	3.181	0.764	0.099*	0.010	0.024	0.027	0.057	−0.001	−0.089*	0.042										
10. Manufacturing sector	0.289	0.454	−0.008	0.042	0.015	−0.063	−0.075	−0.040	0.001	0.115*	0.126**									
11. Construction sector	0.098	0.298	−0.066	−0.116**	−0.061	−0.085*	−0.012	0.004	−0.029	−0.030	−0.011	−0.211**								
12. Services sector	0.586	0.493	0.030	0.009	0.004	0.084*	0.066	0.031	−0.002	−0.106**	−0.098*	−0.759**	−0.393**							
13. Firm age	24.701	14.378	−0.117**	−0.068	−0.060	−0.120**	−0.104*	−0.088*	0.024	0.092	0.275**	0.171**	−0.007	−0.119						
14. Environmental dynamism	3.627	0.912	0.131*	0.242**	0.322**	0.350**	0.274**	0.200**	0.071	0.026	0.033	−0.040	−0.046	0.078	−0.034					
15. Strategic planning	0.620	0.486	0.196**	0.272**	0.232**	0.211*	0.187**	0.025	−0.029	0.232**	0.166**	0.025	−0.057	−0.010	−0.046	0.069				
16. Board	0.370	0.484	0.091*	0.020	0.051	0.086*	0.107**	0.038	−0.067	−0.151**	0.282**	0.063	0.007	−0.035	0.177**	0.035	0.104*			
17. Past perform (hundred)	166.53	1,521.71	0.080*	−0.007	−0.020	−0.003	−0.006	−0.049	−0.023	0.063	0.119**	−0.015	0.070	−0.029	0.097*	−0.027	0.033	0.015		
18. Family CEO	0.890	0.309	−0.048	0.080*	0.010	0.076	−0.003	0.011	0.080*	0.014	−0.203**	−0.073	0.025	0.034	−0.115**	0.028	−0.075	−0.195**	−0.072	
19. Family TMT	2.120	1.253	0.036	0.006	0.007	−0.019	0.007	−0.088*	0.170**	0.114**	0.173**	0.049	−0.027	−0.021	0.124**	0.046	0.013	0.119**	0.119**	0.093*

$n = 609$.
* $p < 0.05$.
** $p < 0.01$.
[a] Logarithmezed variable.

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Table 3 Results of lineal regression analysis: four models.[a]

Variables	Models			
	Model 1	Model 2	Model 3	Model 4
Controls:				
Country	−0.058[*]	−0.047[†]	−0.048[†]	−0.042
Size[1]	0.049[†]	0.042	0.041	0.049[†]
Manufacturing sector	−0.081	−0.026	−0.028	−0.030
Construction sector	−0.093[†]	−0.053	−0.055	−0.062
Services sector	−0.091	−0.043	−0.046	−0.046
Environmental dynamism	0.077[**]	−0.025	−0.024	−0.028
Family CEO	−0.017	−0.033	−0.033	−0.025
Strategic planning	0.117[***]	0.060[*]	0.060[*]	0.056[*]
Age	−0.094[***]	0.063[*]	−0.063[*]	−0.063[*]
Board	0.038	0.009	0.008	0.005
Number of family in TMT	0.019	0.031	0.033	0.038
Past performance	0.058[*]	0.057[*]	0.056[*]	0.058[*]
Independent variables:				
Risk taking		0.026	0.026	0.014
Innovativeness		0.035	0.034	0.036
Proactiveness		0.115[**]	0.115[**]	0.112[**]
Competitive aggressiveness		0.144[***]	0.146[***]	0.149[***]
Autonomy		0.059[*]	0.057[*]	0.060[*]
Moderator:				
SEW			−0.012	−0.018
Interaction effects:				
Risk taking × SEW				0.083[**]
Innovativeness × SEW				−0.088[*]
Proactiveness × SEW				0.060
Competitive aggressiveness × SEW				0.026
Autonomy × SEW				−0.020
ΔR^2	0.096[***]	0.152[***]	0.000	0.018[*]
R^2	0.096	0.248	0.248	0.267
Adjusted R^2	0.078	0.226	0.225	0.238
F	5.285[***]	11.466[***]	10.827[***]	9.248[***]

[*] $p < 0.05$.
[**] $p < 0.01$.
[***] $p < 0.001$.
[†] $p < 0.10$.
[a] Standardized regression weights.
[1] Logarithmized.

Robustness test

To assess the empirical robustness of our results, we examined objective measures of performance with a lag of two years. As the dependent variable, we used return on assets (ROA) for 2017, retrieved from the SABI database, as the correlation between the perceptual performance measure and ROA for 2017 equals 0.109 ($p = 0.025$). This low correlation may be due to the fact that Spain and Portugal had recovered from protracted economic crises by 2017. It should be noted that we obtained data for 2017 ROA only for 422 of the 609 firms included in our original sample. The results of this robustness test (see Table 4) corroborate the finding that not all EO dimensions are necessary for improved performance in the family business context. Innovativeness ($b = −2.522$, $p < 0.05$) and competitive aggressiveness ($b = 1.910$, $p < 0.05$) are the only EO dimensions that are significantly associated

with family firm performance. While the effect of competitive aggressiveness is consistent across the two dependent variables, innovativeness is negatively related to objective firm performance. In an environment of economic recovery, as that described above, higher innovativeness will likely generate higher capital expenditure, which will negatively affect the dependent variable but will not necessarily affect subjective performance, as the ability to invest is likely associated with the mere perception of good performance.

Turning to the interaction effects, we observe the following pattern. The opposite sign of innovativeness' main effects is mirrored in the interaction of innovativeness ($b = 2.288$, $p < 0.05$), for the reasons outlined above. The interaction between proactiveness and SEW ($b = −3.149$, $p < 0.01$), which is not significant in our main analysis, shows a significantly negative effect. Here again, the findings may be due to the economic environment from which the compa-

Table 4   Results of lineal regression analysis, with ROA 2017 as dependent variable.[a]

Variables	Models			
	Model 1	Model 2	Model 3	Model 4
Controls:				
Country	−0.130	−0.103	−0.111	−0.113
Size[11]	0.848	0.732	0.717	0.739
Manufacturing sector	−0.258	0.257	0.227	0.556
Construction sector	−10.644	−10.193	−10.207	−0.766
Services sector	−0.798	−0.341	−0.375	−0.150
Environmental dynamism	−0.686	−1.101	−1.087	−0.977
Family CEO	1.686[*]	1.365[†]	1.368[†]	1.284[†]
Strategic planning	0.493	0.067	0.072	0.293
Age	1.091	1.183	1.190	1.154
Board	0.711	0.357	0.355	0.445
Number of family in TMT	0.019	0.358	0.381	0.068
Independent variables:				
Risk taking		1.896[†]	1.889[†]	1.806[†]
Innovativeness		−2.522[*]	−2.528[*]	−2.350[*]
Proactiveness		1.010	0.999	1.290
Competitive aggressiveness		1.910[*]	1.936[*]	1.733[†]
Autonomy		−0.447	−0.472	−0.667
Moderator:				
SEW			−0.147	0.205
Interaction effects:				
Risk taking × SEW				−0.936
Innovativeness × SEW				2.288[*]
Proactiveness × SEW				−3.149[**]
Competitive aggressiveness × SEW				1.603
Autonomy × SEW				−1.475[†]
ΔR^2	0.038	0.030[*]	0.000	0.032[*]
R^2	0.038	0.068	0.068	0.100
Adjusted R^2	0.012	0.031	0.029	0.051
F	1.468	1.853[*]	1.742[*]	2.025[**]

[*] $p < 0.05$.
[**] $p < 0.01$.
[†] $p < 0.10$.
[a] Standardized regression weights.
[1] Logarithmized.

nies are emerging and the associated company activities that directly affect ROA but do not affect perceptions of performance relative to that of peers, as our main analysis does. In addition, the different dependent variables, one holistic and one very singular, are not easily comparable (e.g., see Shepherd and Wiklund, 2009).

Discussion

Our findings support the view that not all five EO dimensions influence firm performance to the same degree in family firms, highlighting the need to differentiate between them (Casillas and Moreno, 2010; Hughes and Morgan, 2007; Lumpkin and Dess, 1996). Furthermore, we find marginal support between the interaction of SEW and individual EO dimensions. Below, we discuss the individual effects in more detail.

Risk taking and innovativeness were hypothesized to be negatively and positively associated with family firm performance, respectively. Our results do not support these hypotheses since both coefficients were non-significant, although the coefficients were positive for both dimensions. For risk taking, our results are in line with those obtained by previous family firm studies (Casillas and Moreno, 2010; Kallmuenzer et al., 2018; Zellweger and Sieger, 2012). This result reinforces a theoretically curious discovery, as risk should be related to performance. Our findings stress not only the uniqueness of the family firm context (Sciascia et al., 2014) but also the need to investigate family firm-specific moderators. For innovativeness, the non-significant relationship with firm performance is in line with Kallmuenzer et al.'s (2018) findings but contrasts with most extant literature (Casillas and Moreno, 2010; Casillas et al., 2010; Craig et al., 2014; Hatak et al., 2016; Kellermanns et al., 2012a; Naldi et al., 2007; Stenholm et al., 2016). This difference could be explained by the fact

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that innovativeness may be required (as a necessary condition for surviving) in the context of a long economic crisis but may not be a sufficient condition for growth or improved performance. However, more empirical evidence drawn from economic crisis contexts is necessary to corroborate this view.

Proactiveness was hypothesized to be positively associated with family business performance. Our results suggest that, in the family business context, a proactive tendency gives firms the ability to anticipate change or needs in the marketplace and to capitalize on opportunities offered by their environment (Covin and Slevin, 1989; Hughes and Morgan, 2007; Wiklund and Shepherd, 2005). This confirms the positive impact of proactiveness on firm performance and thus family firms' need to take the initiative in staying ahead of competitors by introducing novel ideas, products, or services (Casillas and Moreno, 2010; Casillas et al., 2010; Kallmuenzer et al., 2018; Stenholm et al., 2016). Competitive aggressiveness was hypothesized to be negatively associated with family business performance, but our results do not support this hypothesis, since competitive aggressiveness was found to have a significantly positive influence on family business performance. This result also confirms that, in the unique family firm context, firms that tend to act frequently and speedily in their marketplace also tend to capture business opportunities and secure first-mover advantages (Schumpeter, 1950). This finding provides another original contribution, as this EO dimension has been omitted by most of the family business research, and studies that have considered it (Casillas and Moreno, 2010; Kallmuenzer et al., 2018) have found no significant association with firm performance or growth. This may be due to the survey period examined. An economic crisis hit the Spanish and Portuguese economies hard in mid-2015, and family firms had to fight for survival. As pointed out by prior research (e.g. Gómez-Mejía et al., 2007), family firms are ready to temporarily put aside concerns about reputational losses due to aggressive competitiveness in urgent situations. A similar phenomenon has been described regarding family firms' level of R&D investment (Chrisman and Patel, 2012; Patel and Chrisman, 2014). This result also contradicts the view that competitive aggressiveness has little relevance in the context of family organizations (Zellweger and Sieger, 2012). Finally, a positive and significant association between autonomy and family firm performance was found, confirming the view that the strong preference for survival characterizing family firms is related to autonomy (Dess et al., 2011). The ability of employees and teams to act autonomously enables family firms to improve their performance (Kallmuenzer et al., 2018; Zellweger and Sieger, 2012).

Regarding the moderating role of SEW in the relationships between the EO dimensions and family firm performance, we first hypothesized that the concern to maintain SEW would mitigate the negative relationship between risk taking and family firm performance. The significant moderating effect of SEW on the risk taking–performance nexus was positive (see Fig. 2), supporting the hypothesis and contradicting the view that family firms for whom SEW preservation is a priority are not able to use their capability to take risks and fully exploit business opportunities (Kallmuenzer et al., 2018; Schepers et al., 2014). This suggests that risk taking is an accepted means of enhancing family firm performance while retaining control for family firms highly concerned with SEW preservation. The interaction between innovativeness and SEW for family firm performance was negative, as hypothesized. However, as the negative slope for family firms scoring high in SEW was non-significant, we can say only that the innovativeness–performance link was positive for firms with low levels of SEW. These results, together with contradictory empirical findings in the literature (whereby Casillas and Moreno (2010) report that family involvement enhanced the innovativeness–performance link, while Kallmuenzer et al. (2018) report a moderator effect of family-oriented goals), suggest that more research is needed to determine how the concern for SEW preservation affects the innovativeness–performance nexus. Finally, our findings did not support the remaining interaction effect hypotheses. Globally considered, these empirical findings confirm the view that SEW motivates the ''unique family firms' decisions and behaviors'' (Jiang et al., 2018, p. 125).

Contributions

Our study makes multiple contributions to the literature on EO, family firms, and SEW. First, our work analyzes the complexity of the EO–performance link in the specific context of family firms by answering the call for further research on the consequences of the differences among the EO dimensions. Specifically, we address a research gap identified by Lumpkin and Dess (1996), who proposed that the impact of risk taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy on firm performance may be positive or negative depending on the context—in our case, the family firm and its concern for SEW preservation. Thus, considering the influence of SEW on the relationship between all five EO dimensions and family business performance, we extend Schepers et al. (2014) by analyzing all five EO dimensions and complement Kallmuenzer et al. (2018) by measuring SEW. Additionally, we perform our analysis in a geographical context, the Iberian Peninsula, which underwent a period of economic crisis in 2015, when the questionnaire was administered. Second, our study suggests that not all family businesses behave in the same strategic way and that, consequently, they must not be treated as a homogeneous group. Such a treatment would neglect to account for the complexity in the way family firms realize performance benefits from entrepreneurship (Chirico et al., 2011) as well as the heterogeneity among family firms, which is noted in the literature (Chua et al., 2012; Stanley et al., 2017, 2019). Third, our findings suggest the need to explicitly include affective or emotional factors in the study of

EO within family firms. Indeed, emotional factors have long been recognized as important to family firms (e.g., Berrone et al., 2012; Gómez-Mejía et al., 2007, 2018), yet a theory of the family firm will have to account not only for the influences of SEW as reference points in firm-level decision making but also for emotional antecedents at the individual level of analysis. Finally, our finding that concern for SEW preservation has a positive impact on the relationship between risk taking and family firm performance and a negative impact on the link between innovativeness and family business performance strengthens the prior findings that SEW has both negative and positive impacts (Kellermanns et al., 2012b; Naldi et al., 2013) by supporting them with initial empirical evidence (see also Naldi et al., 2013).

Limitations and future research

Our work offers empirical support for the dual influence of SEW on the EO–performance link. Without excluding economic factors, and in line with previous research (e.g., Chua et al., 2015), our findings corroborate the view that further study is required to better understand EO within family businesses, as well as the influence of affective and emotional family-related factors on family firm decisions and behaviors (Hernández-Linares and López-Fernández, 2018).

The limitations of this study offer opportunities for future research. First, we focused on family firms located in the Iberian Peninsula, which had been dealing with an economic crisis when the survey was conducted. Therefore, caution should be exercised in generalizing these findings to noncomparable populations. Future studies should consider the implications of our work for family firms in other countries or economic situations. Second, although cross-sectional designs are common in the strategic literature (e.g., Casillas and Moreno, 2010; Hughes and Morgan, 2007), employing a cross-sectional design constrains the strength of the causal inferences that can be made. Hence, a longitudinal design might help to further strengthen the findings. For example, it would be interesting to analyze whether the effects of different EO dimensions change over time as the economic situation in Spain and Portugal evolves or if performance levels differ between family businesses operating in different contexts. We conducted tests for common method bias, which revealed no potential concerns (Harman, 1967; Podsakoff and Organ, 1986); thus, the potential for effects should not significantly affect the results. The results of a Harman's test are in line with the results of Rauch et al.'s (2009) meta-analysis of the EO–performance link, according to which (1) common method bias was not a problem when subjective measures were used, and (2) the use of different measures of performance (both quantitative and self-reported) led to similar magnitudes. We used family firm performance as a dependent variable, but many dependent variables deserve attention in family firms (Yu et al., 2012). Our results showed an increase of 1.8% in the variance explained, when interaction effects were introduced in the regression model. This change was significant, confirming the moderation effect, and was higher than 1%, thus of practical significance for enhancing our knowledge. However, research on SEW in connection with dependent variables is still in its infancy. While the literature has inferred the presence of SEW, the research has tended not to measure it directly. When the questionnaire was administered (2015), only the operationalization by Schepers et al. (2014) was available. Since then, alternative measures such as the FIBER scale have been validated (Hauck et al., 2016), though showing significant problems, and another SEW measure (SEW-i) became available in 2016 (Debicki et al., 2016), but the literature has not yet embraced its empirical use. Thus, while our approach was the best at the time of data collection, we encourage future research to build upon our findings by using additional conceptualizations of SEW to provide more fine-grained insights and to enhance the variance explained. Moreover, the absence of a significant relationship between innovativeness and family firm performance in our empirical study stresses the need to distinguish between internal innovativeness (new managerial processes, structures, and management systems, such as in organizational and incremental innovations) and external innovativeness (new products, markets, and technological processes, such as in radical innovations in product and processes) to detect more nuanced differences, as in Zellweger and Sieger (2012), who found that family businesses tended to have more of the former than of the latter.

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Acknowledgments

Appendix. Confirmatory factor analysis

Paths[a]	Standardized estimates	t-Value	AVEs	Construct reliability
Independent variables				
Risk taking				
V1 ← RT	0.662	19.489	0.593	0.812
V2 ← RT	0.798	27.179		
V3 ← RT	0.857[b]			
Innovativeness				
V4 ← I	0.876	38.097	0.836	0.939
V5 ← I	0.936	48.899		
V6 ← I	0.937[b]			
Proactiveness				
V7 ← P	0.823	30.970	0.717	0.883
V8 ← P	0.921	43.712		
V9 ← P	0.811[b]			
Competitive aggressiveness				
V10 ← CA	0.888	37.641	0.766	0.907
V11 ← CA	0.874	35.969		
V12 ← CA	0.878[b]			
Autonomy				
V13 ← A	0.830	27.980	0.627	0.909
V14 ← A	0.840	28.642		
V15 ← A	0.825	27.637		
V16 ← A	0.716	21.507		
V17 ← A	0.690	20.288		
V18 ← A	0.851[b]			
Moderating variable				
Socioemotional wealth				
V1 ← SEW	0.647	18.094	0.767	0.850
V2 ← SEW	0.643	17.926		
V3 ← SEW	0.876	28.877		
V4 ← SEW	0.895[b]			
Dependent variable				
Performance				
V1 ← PF	0.810	27.556	0.763	0.941
V2 ← PF	0.902	35.092		
V3 ← PF	0.895	34.443		
V4 ← PF	0.934	38.669		
V5 ← PF	0.832[b]			

AC: competitive aggressiveness; A: autonomy; I: innovativeness; PF: performance; P: proactiveness; RT: risk taking; SEW: socioemotional wealth; V: variable.
[a] Goodness-of-fits statistics: $\chi^2 = 1278(324)$, CFI = 0.851, IFI = 0.851, NFI = 0.810, TLI = 0.838, AGFI = 0.872, and RMSEA = 0.070.
[b] Fixed parameter.

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