

Family firm entrepreneurial orientation: the effects of socio-emotional wealth, professionalization and bifurcation bias

Family firm
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Abstract

Purpose – This paper aims to examine the effects of socio-emotional wealth importance (SEWi) in family firms and family firm-specific HR practices, namely professionalization and bifurcation bias, on their entrepreneurial orientation (EO).

Design/methodology/approach – The paper surveyed 133 small and medium-sized family firms in the USA. The respondents were recruited through Prolific Academic.

Findings – When SEWi is low, a family firm becomes more similar to a non-family firm, thereby enjoying the benefits associated with EO. When SEWi is high, a family firm leverages the unique resources and capabilities specific to family firms. Moderate SEWi levels are associated with lower EO levels. Additionally, the results support the argument that professionalization (involving non-family managers, formalization and decentralization) fosters EO, while bifurcation bias hinders its development.

Originality/value – Unlike previous studies, this paper posits a non-linear, U-shaped relationship between SEWi and EO. It contributes to the field by empirically investigating the effects of professionalization and bifurcation bias on EO in family firms.

Keywords Entrepreneurial orientation, Socio-emotional wealth importance, HR practices, Family business

Paper type Research paper

1. Introduction

Family businesses (FBs) represent the majority of small and medium-sized enterprises (SMEs). They are often perceived as conservative and risk-averse (Naldi *et al.*, 2007), which may lead to the belief that they possess a lower degree of entrepreneurial spirit compared to non-family businesses (NFBs). However, recent authors challenge this notion (Kallmuenzer *et al.*, 2018). Successful FBs can leverage unique resources that enable them to be highly innovative (De Massis *et al.*, 2016). Additionally, it appears that some FBs lose their conservatism when faced with threats to family wealth or relationships (Gómez-Mejía *et al.*, 2011; Chrisman and Patel, 2012), which can sometimes result in excessive and unhealthy risk-taking behaviors (Kallmuenzer *et al.*, 2018). Recent family business literature suggests that

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family firms are enormously heterogeneous (Miller and Le Breton-Miller, 2021). This heterogeneity poses a challenge in formulating general statements about family firms. The foundation for the entrepreneurial actions of family businesses lies in their entrepreneurial orientation (EO) (Covin and Slevin, 1989). Entrepreneurial orientation can be understood as “entrepreneurial strategy-making processes that key decision makers use to enact their firm’s organizational purpose, sustain its vision, and create competitive advantage” (Rauch *et al.*, 2009, p. 763). Within management literature, EO is often recognized as a multidimensional construct. While there is no universally accepted consensus on the specific number and nature of EO dimensions, whether it is aggregate or superordinate, or on the exact dimensionality of EO, these aspects remain more theoretical than empirical concerns (Covin and Lumpkin, 2011). In this study, we adopt the classical conceptualization of EO proposed by Miller (1983), which comprises three sub-dimensions – innovativeness, proactiveness and risk-taking. Together, these dimensions collectively manifest as the EO of a firm. It is worth noting that these three dimensions of EO are arguably the most frequently cited dimensions in the management literature (Anderson *et al.*, 2015).

The EO of family businesses remains an open area of research (Hernández-Linares and López-Fernández, 2018) and is affected by unique attributes that have hardly a parallel in the world of NFBs. One of the distinctive characteristics of FBs is their set of goals, which encompass both economic and non-economic family-centered goals (Chrisman *et al.*, 2012), such as family harmony or transgenerational succession. The non-economic utility derived from achieving these goals, commonly called *socio-emotional wealth* (SEW), leads to unique behaviors and strategies of FBs (Gómez-Mejía *et al.*, 2011). However, family ties also have consequences that manifest in the human resources (HR) practices of family businesses (Hoon *et al.*, 2019). Although HR practices are recognized as a critical factor in entrepreneurship, the body of management literature investigating the importance of HR practices in the context of EO is still relatively limited (Florén *et al.*, 2016), and in the context of FBs, it is largely unexplored.

Compared to other types of entrepreneurial firms, the HR practices of family firms display unique features. Due to the limited pool of family members, the growth and survival of FBs often depend on the successful integration of non-family employees, which requires the implementation of professional HR practices (Daspit *et al.*, 2018). From a broader perspective, the transition process from a small and informal FB to a larger, formalized institution is referred to as *professionalization*. Professionalization encompasses a set of HR practices (Daspit *et al.*, 2018; Madison *et al.*, 2016), including the hiring of non-family managers, adoption of formalized HR systems, delegation of control and decentralization of authority (Dekker *et al.*, 2015). Recent management literature suggests that the epiphenomena of professionalization, such as the presence of non-family managers (Cruz and Nordqvist, 2012), decentralization (Ljungkvist *et al.*, 2019) and formalization (Anderson *et al.*, 2015), are all related to a firm’s EO. At the same time, the HR practices of family firms have a reputation for displaying favoritism toward family members (Daspit *et al.*, 2018). Transaction cost economics posits that the coexistence of family and non-family employees develops the potential for a binary perception of family and non-family employees. The asymmetric perception and treatment of family and non-family members (Verbeke and Kano, 2012), referred to as *bifurcation bias* (BB), is another family firm-specific HR practice (Daspit *et al.*, 2018) that appears to be related to FBs’ performance (Verbeke and Kano, 2012), including their EO (Schepers *et al.*, 2021).

Family firms’ pursuit of socio-emotional wealth and their unique HR practices contribute significantly to the heterogeneity observed among family businesses (Daspit *et al.*, 2018; Madison *et al.*, 2018; Swab *et al.*, 2020). This heterogeneity is likely to manifest in their behaviors and performance outcomes (Chrisman and Patel, 2012; Miller and Le Breton-Miller, 2021). However, the effects of these factors on EO are not yet well understood in the family

business literature (Hernández-Linares and López-Fernández, 2018). This study addresses this research gap by investigating how family firms' socio-emotional wealth importance (SEWi) and unique HR practices (professionalization and bifurcation bias) (Madison *et al.*, 2018) affect their EO. The study develops and tests three hypotheses. First, we anticipate a U-shaped relationship between SEWi and EO. This expectation is grounded in the idea that when SEWi is low, FBs align their goals more closely with those of NFBs, resulting in a comparable level of EO. As the emphasis on family-centered goals becomes moderate, the drivers of EO become weaker, leading to greater risk aversion and resource constraints, resulting in a decrease in EO. Conversely, when SEWi is high, family firms adopt long-term perspectives, nurture patient capital and cultivate internal and external relationships, leading to an increase in EO. Second, we propose a positive relationship between professionalization and EO. Professionalization involves hiring non-family managers, formalizing procedures and rules and decentralizing authority, all of which act as drivers of EO. Third, we posit a negative relationship between bifurcation bias and EO. Unequal treatment of family and non-family members may result in feelings of injustice, mistrust, demotivation, limited knowledge transfer and insufficient human capital, all of which hinder EO. The findings of our study provide empirical support for all three hypotheses.

The paper presents several contributions. Firstly, unlike previous researchers, we examine the potential curvilinear effects of SEWi on firm-level outcomes in family businesses. This approach offers at least two new insights. First, while SEW has traditionally been viewed as a beneficial and positive influence (Kellermanns *et al.*, 2012), recent studies have found evidence of its potential "dark side" (Kallmuenzer *et al.*, 2018). By considering the curvilinear effects of SEWi, we introduce a novel perspective on this construct, opening new avenues for future research. Second, the consideration of curvilinear effects of SEWi addresses the methodological shortcomings of past research. We support Daryanto's (2019) assertion that despite the popularity of moderation analyses in management research, few authors consider that significant moderation effects may actually represent unnoticed cases of "spurious moderation". A moderation effect is said to be spurious if a curvilinear relationship, existing between the focal predictor and the dependent variable, leads to false-positive results (Lubinski and Humphreys, 1990) and incorrect acceptance of hypotheses that involve moderating effects. By comparing alternative model specifications and showing that curvilinear effects of SEWi, instead of its moderating effects, best explain our observations, our study suggests that previous research that examined moderation effects of family-centered goals (e.g. Kallmuenzer *et al.*, 2018) could be enriched by exploring curvilinear relationships, potentially yielding intriguing new findings. Furthermore, our study addresses the existing theoretical limitations in previous research that overlooks the heterogeneity of FBs (Miller and Le Breton-Miller, 2021). Failing to acknowledge the diverse nature of FBs can result in oversimplification and restricted applicability of research findings. In this study, we contribute to the family business literature by demonstrating that SEWi is a significant source of heterogeneity in the behaviors and performance of family firms (Swab *et al.*, 2020). Additionally, our findings support the observations made by Madison *et al.* (2018) that FBs' specific HR practices, such as professionalization and bifurcation bias, also contribute to their heterogeneity. Overall, our research reveals that family firms display varying levels of EO, influenced by the degree to which they prioritize SEW, professionalize their operations and the asymmetric treatment of family members compared to non-family employees. Finally, the results contribute to the management literature by focusing on the emerging topic of the role of HR practices in the context of EO (Florén *et al.*, 2016). Additionally, the paper provides empirical contributions to the topic of professionalization in FBs, as we did not find any study investigating the link between professionalization and EO (Hernández-Linares and López-Fernández, 2018), and to the under-researched topic of the effects of BB in FBs (Jennings *et al.*, 2018; Verbeke *et al.*, 2020).

2. Theoretical background and hypotheses

2.1 Socio-emotional wealth importance and entrepreneurial orientation

The family business literature does not clearly explain the link between SEWi and EO (Hernández-Linares and López-Fernández, 2018). One line of research suggests that FBs tend to be risk-averse, conservative and resistant to change (Miller *et al.*, 2008; Naldi *et al.*, 2007). Related studies have found that FBs mitigate the risk of organizational failure, which could result in a complete loss of their SEW, by deliberately avoiding risky opportunities (Huybrechts *et al.*, 2013). Consequently, FBs tend to allocate fewer resources to research and development (Block, 2012) and engage in fewer innovation efforts compared to NFBs. They typically demonstrate a preference for incremental rather than radical innovations (Nieto *et al.*, 2015). Moreover, to protect family influence over the firm, family firms often tend to employ less debt (Baixauli-Soler *et al.*, 2021) and avoid hiring experienced non-family managers (Chrisman *et al.*, 2014). Capital constraints and the absence of non-family members' perspectives contribute to preserving family control but can dampen entrepreneurship (Garcés-Galdeano *et al.*, 2016). Beyond family control, entrepreneurship and change are sometimes seen as potential threats to family cohesion and affective commitment (Marchisio *et al.*, 2010) and can lead to family conflicts. Consequently, in order to preserve their SEW (Berrone *et al.*, 2012), FBs can display a greater reluctance to engage in entrepreneurial activities and display lower overall levels of entrepreneurship compared to NFBs (Garcés-Galdeano *et al.*, 2016).

Despite the compelling arguments presented by studies indicating a negative relationship between SEW preservation efforts and EO, other authors have put forth alternative perspectives. These perspectives highlight the potential for FBs to leverage their unique resources and capabilities in order to foster sustainable growth and innovation (De Massis *et al.*, 2016; Eddleston *et al.*, 2012). Several reasons support the notion that focusing on SEW preservation efforts can enhance EO. First, the desire to preserve the family dynasty promotes a long-term orientation (LTO), which in turn encourages research and development (Chrisman and Patel, 2012), the development of new products and expansion into new markets (Eddleston *et al.*, 2012). FBs with a long-term orientation can utilize patient capital (capital invested without the threat of liquidation in the long term), which provides support for creative and innovative strategies (Sirmon and Hitt, 2003). LTO also fosters comprehensive strategic decision-making, facilitating the integration and implementation of innovation efforts (Eddleston *et al.*, 2012). Consequently, long-term oriented FBs can achieve greater innovation output with lower innovation input compared to NFBs (De Massis *et al.*, 2016; Duran *et al.*, 2016). Second, family firms emphasizing SEW strive to maintain a positive organizational reputation (Berrone *et al.*, 2012). They adopt behaviors aimed at enhancing the firm's social status (Davis *et al.*, 2000), focus on differentiation, seek external support and cultivate dynamic and proactive attitudes (Arzubiaga *et al.*, 2019). Third, FBs that prioritize SEW are likely to develop their social capital (Llanos-Contreras *et al.*, 2021), which can be of both external and internal nature. Firms with a strong emphasis on SEW are inclined to anticipate and meet stakeholder demands, thereby strengthening social ties with internal and external stakeholders (Cennamo *et al.*, 2012). The formation of strong social ties, a key aspect of SEW, is associated with trust and feelings of closeness and solidarity (Berrone *et al.*, 2012). Additionally, intentions of intergenerational business transfer are associated with values such as altruism, loyalty and collaboration (Cherchem, 2017). These intentions also foster patient capital (Sirmon and Hitt, 2003) and facilitate learning. These factors collectively strengthen family members' relationships, help identify and leverage opportunities (Discua Cruz *et al.*, 2013) and facilitate knowledge transfer. Finally, previous authors suggest that when SEW is threatened, FBs are willing to protect it by accepting significant and at times even unhealthy (Kallmuenzer *et al.*, 2018) levels of risk and undertaking radical competitive actions (Gómez-Mejía *et al.*, 2011; Chrisman and Patel, 2012).

This response is particularly likely when the family firm places high importance on its SEW. Consequently, an overall emphasis on SEW can be expected to positively contribute to EO (Hernández-Perlines *et al.*, 2020).

The above discussion does not conclude that the relationship between SEW preservation efforts and EO is strictly positive or negative. It is worth noting that previous authors have not considered the potential curvilinear effects of SEWi, which could explain the mixed findings. When SEWi is low, FBs place little to no importance on family-centered non-economic goals. Thus, they are similar to NFBs because they follow similar goals. In such cases, family involvement does not significantly affect the firm, as there is minimal family essence within it (Chrisman *et al.*, 2012). Consequently, FBs with no focus on SEW enjoy the advantages of NFBs concerning EO, such as their willingness to undertake risk, employ debt and dilute ownership and availability of non-family members' ideas, or, more broadly, a more extensive bridging social capital that facilitates access to financial capital (Chua *et al.*, 2011), information and other types of resources required for entrepreneurial activities. All these factors foster EO, and thus, EO can be expected to be high when SEWi is low. However, as the importance of family-centered goals increases for FBs, their risk-taking decreases (Naldi *et al.*, 2007), they embrace more conservative strategies and face resource constraints (Miller *et al.*, 2008). Under such circumstances, the drivers of EO are attenuated, and entrepreneurial capacities are inefficiently utilized (Kallmuenzer *et al.*, 2018), leading to a decrease in EO. Thus, moderate levels of SEWi are associated with lower EO. On the other hand, when SEW receives considerable importance, FBs adopt long-term horizons, develop patient capital, focus on building a strong corporate reputation and cultivate internal and external social capital. These factors are assumed to grant FBs unique competitive advantages (Debicki *et al.*, 2017), mitigate resource constraints, facilitate innovation processes (De Massis *et al.*, 2016; Duran *et al.*, 2016) and establish strong bonds with stakeholders (Cennamo *et al.*, 2012) that facilitate entrepreneurial action. As a result, high levels of SEWi are expected to be positively associated with high levels of EO (Hernández-Perlines *et al.*, 2020).

H1. There is a U-shaped relationship between SEWi and EO in FBs.

2.2 Professionalization and entrepreneurial orientation

When deciding whom to appoint a manager in FBs, family members often represent the first choice. Non-family managers face entry barriers since they are not familiarized with family values, lack family-specific knowledge and lack knowledge of the behaviors expected from family members. Additionally, their strengths and weaknesses are unknown to family members, presenting the danger of adverse selection (Verbeke and Kano, 2012). With misaligned goals, non-family managers can create agency conflicts (Rosecká and Machek, 2021). Thus, family members are often unwilling to place much power in the hands of non-family members (Chua *et al.*, 2003). Nevertheless, at some point, some FBs have to decide whether to proceed to the “next level” (Dekker *et al.*, 2013). Hiring “full-time, non-family employees, particularly with the delegation of managerial authority” (Stewart and Hitt, 2012, p. 59) is a crucial part of professionalization. Overall, professionalization is a process of making “FBs more like NFBs in terms of its ownership, governance, management structure, and human resource policies” (Fang *et al.*, 2012, p. 15). There are multiple reasons why FBs professionalize. First, due to the limited pool of family members, FBs often lack management talent and skills. Professional managers can also have better access to capital and labor markets (Brumana *et al.*, 2015). Second, professionalization helps FBs formalize procedures and implement control-enhancing mechanisms (Stewart and Hitt, 2012). Third, professionalization may play an important role in succession. Due to insufficient training, the lack of suitable successors can result in the appointment of trusted non-family managers (Dyer, 1989), and professionalization can also help reduce rivalries among heirs (Brumana *et al.*, 2015).

Professionalization is often associated with interpersonal conflicts (Dyer, 1989) as well as agency conflicts and the costs involved in formalizing control systems and monitoring management (Dyer, 2006). However, the implementation of professional rules and monitoring helps reduce nepotism and familial opportunism, thereby protecting firm resources (Dyer, 2006). Since non-family members tend to have better access to financial and human capital (Brumana *et al.*, 2015), FBs with a non-family CEO are likely to have a greater pool of resources, such as increased innovation input, compared to those with a family CEO (Duran *et al.*, 2016). The process of professionalization entails formalization of procedures, rules and communications, as well as the decentralization of authority (Dekker *et al.*, 2015). Given that formalization fosters exploitative innovation and decentralization fosters explorative innovation (Jansen *et al.*, 2006), professionalization is expected to enhance both types of innovation efforts. Finally, due to the professional and educational backgrounds of non-family managers (Dyer, 1989), they can bring new perspectives and novel ideas that contribute to innovation (Stanley *et al.*, 2019). Therefore, it can be assumed that professionalization increases *innovativeness* (García-Lopera *et al.*, 2022).

While agency theory assumes that risk aversion increases with ownership share, family members often bear the entire risk of failure as the family wealth is linked to the FB's performance (Naldi *et al.*, 2007). Consequently, family managers often hesitate to expand into existing or new markets or engage in strategic renewal activities (Schulze *et al.*, 2002). Conversely, due to the reluctance of FBs to distribute shares outside of the family, non-family members often have limited or no ownership stake. This lack of personal financial risk encourages non-family managers to pursue riskier projects, driven by the presence of moral hazard (Huybrechts *et al.*, 2013). Nevertheless, non-family managers' willingness to take on greater risks compared to family members can also be attributed to other factors. They often possess superior education and professional experience in comparison to family managers (Dyer, 1989), both of which are significant predictors of risk-taking (Farag and Mallin, 2018).

While professionalization also involves decentralization and formalization, previous research suggests that both aspects contribute to an increase organizational risk-taking. Decentralized, organic and participative structures create an environment that fosters risk-taking, with individuals and teams driving this process rather than centralized authorities (Caruana *et al.*, 1998). Furthermore, formalized systems and procedures provide a sense of "protection" against uncertainty and directly contribute to EO (De Clercq *et al.*, 2010). Thus, in line with recent empirical findings (García-Lopera *et al.*, 2022), we expect that professionalization increases *risk-taking*.

By definition, proactiveness refers to a "firm's efforts to seize new opportunities" (Zellweger and Sieger, 2012) and requires a forward-looking perspective. Consequently, proactiveness is closely associated with long-term planning. It is important to differentiate the inherent LTO of FBs (Chrisman and Patel, 2012) from formal long-term planning, which appears to be less prevalent in FBs than in NFBs (Samuelsson *et al.*, 2016). FBs often rely on high levels of trust that serve as a substitute for formal control (Mustakallio *et al.*, 2002). However, professionalization can disrupt this tradeoff, and the presence of non-family managers can contribute to a greater formalization, thereby increasing the proactiveness of family businesses. In addition to formalization, the presence of non-family managers contributes to the development of objectivity, which enhances proactive strategies (De Massis *et al.*, 2013). Due to their detachment from the business, non-family managers can recognize and seize entrepreneurial opportunities (Vecchiarelli and Mussolino, 2013). Hence, along with innovativeness and risk-taking, professionalization can be expected to also increase *proactiveness*.

H2. There is a positive relationship between professionalization and EO in FBs.

2.3 Bifurcation bias and entrepreneurial orientation

According to transaction cost economics, some assets in FBs are highly dedicated, non-tradable and have little economic value outside of the firm. This gives rise to a distinction between family-specific assets and other assets. Asset specificity, along with bounded rationality (the inability of non-family members to fully understand family-centered goals and related opportunities) and bounded reliability (the failure to fulfill promises due to changes in the preferences and priorities of the family), creates the potential for bifurcation bias (Verbeke and Kano, 2012). When HR practices are bifurcated, family members are treated as “stewards” while non-family employees are viewed as short-term “agents” (Verbeke and Kano, 2012). Despite the growing number of studies on the effects of professionalization (Madison *et al.*, 2018), empirical evidence on the effects of bifurcation bias remains limited (Verbeke *et al.*, 2020). Although bifurcation bias exists to some extent in most FBs (Jennings *et al.*, 2018), it becomes detrimental when the asymmetric treatment of family and non-family members becomes a predominant and systematic HR practice (Schepers *et al.*, 2021). According to Verbeke and Kano (2012, p. 1192), “those FBs that suffer from BB will face severe performance issues”.

Bifurcation bias can potentially harm EO in multiple ways. First, the asymmetric treatment of family and non-family members triggers feelings of injustice among non-family employees (Schepers *et al.*, 2021). Meta-analytic evidence suggests that justice is a crucial antecedent of trust, and a lack of trust inhibits risk-taking behaviors as individuals are unwilling to display vulnerability to leaders and colleagues (Colquitt *et al.*, 2007). Therefore, it can be hypothesized that the perceived injustice resulting from bifurcated HR practices diminishes the willingness to engage in risky moves and decisions (De Clercq *et al.*, 2010), thereby reducing organizational *risk-taking*.

The perception of glass ceiling and injustice in FBs can result in demotivation, slow decision-making (Dyer, 1989) and withdrawal of entrepreneurial efforts (Verbeke and Kano, 2012). Moreover, the feelings of exclusion from the controlling family experienced by non-family managers create faultlines within the management team, leading to “behavioral disruptions” (Minichilli *et al.*, 2010). These disruptions, combined with the perceived injustice triggered by BB, create an environment characterized by a lack of knowledge exchange (De Clercq *et al.*, 2010), where ideas and opinions are not freely shared (Dyer, 1989). Additionally, bifurcation bias often results in a scarcity of skilled and professional employees (Gedajlovic and Carney, 2010), making it difficult for the family firm to attract and retain highly qualified individuals from outside the family. Thus, FBs suffering from high levels of BB tend to have limited human resource capacity, primarily consisting of family members. Family members, being part of a dense and overlapping social group, often share similar knowledge, skills, experiences and perspectives. This homogeneity makes them less able to identify new market opportunities and pursue innovative initiatives (Webb *et al.*, 2010). Consequently, in FBs with highly bifurcated HR practices, both *proactiveness* and *innovativeness* are likely to be hindered.

H3. There is a negative relationship between bifurcation bias and EO in FBs.

3. Sample and data collection

Since family business directors are assumed to be well-informed about business processes (Eddleston *et al.*, 2008), this study employs the key-informant approach. The population of respondents consists of family business directors who are members of the controlling family. The research sample was recruited using Prolific Academic, an online panel employed by multiple previous authors (e.g. Hedricks *et al.*, 2019; Derfler-Rozin *et al.*, 2021). Online panel data (OPD) is increasingly used in management research, and there are hardly any

management research topics that have not been explored using OPD (Porter *et al.*, 2019). Results based OPD are comparable to those based on conventional datasets (Walter *et al.*, 2019), and participants recruited from Prolific Academic are more honest, responsive, diverse and naïve compared to those recruited from MTurk (Hedricks *et al.*, 2019). We employed a two-stage data collection process. In the first stage, a prescreening survey was administered to 1,500 respondents. Access to the prescreening survey was limited to U.S. nationals with previous management experience and a minimum approval rate of 98%. The approval rate surpasses the commonly employed thresholds of 95–97% (Matherly, 2019). The term “family business” is defined using various criteria in the literature, broadly categorized as family involvement and family essence criteria (Chrisman *et al.*, 2012). This study, like several previous authors (e.g. Campbell and Park, 2016; Casillas *et al.*, 2010; Madison *et al.*, 2014), adopts the criterion of self-perception as a family firm. This criterion serves as a proxy variable for capturing the family essence aspect (De Massis *et al.*, 2021), as it recognizes that family involvement alone does not guarantee the pursuit of family-centered non-economic goals (Chrisman *et al.*, 2012). Specifically, to be classified as a family firm, participants were required to respond affirmatively to the question, “Would you describe your business as a family firm?” (Uhlener, 2005). Overall, the prescreening survey recruited a sample of 254 participants who worked in FBs as directors or top executives and were members of the controlling family. The pre-screening stage’s incidence rate was 16.93%, suggesting that the population is not easy-to-reach, and the choice of OPD is appropriate (Porter *et al.*, 2019). In the second stage, a questionnaire was distributed to the 254 individuals. Participants who completed the entire survey were compensated by £4 each, with an average completion time of approximately 12 min. A total of 186 complete survey responses were obtained, resulting in a response rate of 73.23% in the second stage.

To ensure that respondents devoted appropriate attention and time to answering the questions, the survey included three attention checks. If an attention check was not answered correctly (five cases), the response was withdrawn. We also asked respondents to briefly describe the structure of the family that runs the company. Every description was carefully checked, and if it was not credible, meaningful, or the participant could potentially be a non-family member, the case was not included in the sample. We also excluded cases when a respondent systematically chose the same answers (straightlining). During this step, both authors proceeded independently, and subsequently, they evaluated the interrater reliability. The percent agreement was 96.24%, and Cohen’s kappa, which was 0.907, satisfies Fleiss and Cohen’s (1973) suggested threshold of 0.75. Overall, 38 cases were eliminated. Furthermore, to prevent respondents from accessing the survey outside of the U.S. and using virtual private servers (VPS) to hide their location, we employed Winter *et al.’s* (2019) protocol. This resulted in the removal of three participants. Lastly, we only considered SMEs with fewer than 250 employees. Thus, the final sample consists of 133 U.S. small and medium-sized family business managers who are members of the controlling family.

In terms of the demographic profiles of the respondents, 71% were men and 29% were women. Among the respondents, 29% were younger than 30 years, 46% were aged between 31 and 40 years, 15% were aged between 41 and 50 years, 6% were aged between 51 and 60 years and 4% were older than 60 years. Table 1 provides an overview of the sample’s firm-level demographics, including firm size, industry affiliation and generational involvement. The majority of firms in the sample (60.1%) fall into the category of small enterprises, and nearly half of them (49.6%) primarily engage in service-related activities. In terms of generational involvement, the most common cases are second-generation (46.6%) and first-generation (27.8%) family businesses.

To evaluate non-response bias, we conducted a comparison between early and late respondents, as late respondents are often considered similar to non-respondents (Eddleston *et al.*, 2008). Student’s *t*-tests were performed to examine mean differences in the study

Table 1.

Basic demographic
variables of the sample

Descriptive		Relative frequency
Firm size	Micro (1–9 employees)	27.1%
	Small (10–49 employees)	60.1%
	Medium (50–249 employees)	12.8%
Industry	Manufacturing	12.8%
	Construction	9.0%
	Wholesale and retail	17.3%
	Services	49.6%
	Other	11.3%
Generational involvement	First generation	27.8%
	Second generation	46.6%
	Third generation	22.6%
	Fourth generation	3.0%

Source(s): Created by authors

variables between early and late respondents. The results indicate that there were no significant differences between the two groups at the 0.05 level. Therefore, non-response bias does not seem to be a concern in this study.

4. Variables and measures

4.1 Measurement of variables

In addition to single-item control variables, the survey employs psychometric scales to measure EO, SEWi, professionalization and bifurcation bias [1]. While the management literature presents multiple possible measures of *entrepreneurial orientation* (Covin and Lumpkin, 2011), we approach it through the three most commonly cited components: innovativeness, proactiveness and risk-taking (Anderson *et al.*, 2015; Richard *et al.*, 2004). Consistent with Miller's (1983) original view of EO as the simultaneous manifestation of innovativeness, risk-taking and proactiveness, our measure of EO consists of these three sub-dimensions, collectively measured using nine items based on Hughes and Morgan's (2007) scale. *Socio-emotional wealth importance* is measured using the nine-item SEWi scale by Debicki *et al.* (2016). The scale incorporates three conceptualizations of SEW (family prominence, continuity and enrichment) and assesses its relative importance rather than directly measuring the stock of SEW. To measure *professionalization*, the study adopts the three-item construct by Madison *et al.* (2018), reflecting that professionalization of FBs is not merely a dichotomous variable but can have multiple levels (Stewart and Hitt, 2012). The professionalization measure is the sum of three scores (yes/no questions) indicating the presence of non-family managers, a compensation incentive plan, and a performance appraisal system (Madison *et al.*, 2018). For measuring *bifurcation bias*, this paper also builds on Madison *et al.*'s (2018) work, who adopted a five-item monitoring scale (Chrisman *et al.*, 2007) to compare monitoring of family and non-family employees. Nevertheless, unlike Madison *et al.* (2018), this paper does not merely use a dichotomous variable to represent bifurcation bias. We believe that BB also takes multiple levels, and its essence is more ordinal than dichotomous. Consequently, we calculated the differences between the monitoring scores of family vs non-family employees for each of the five items of Chrisman *et al.*'s (2007) monitoring scale, thus creating five new items that represent five individual bifurcated monitoring practices. These five items collectively form a bifurcation bias scale, which we further validate in the remainder of this section.

The analysis controls for firm size (employee number in the past 12 months, including management) and industry affiliation, both of which are assumed to be related to EO

(e.g. Sciascia *et al.*, 2013). We consider five major industries: manufacturing, wholesale and retail, construction, services and other industries (Schepers *et al.*, 2014). Further, as EO is likely to be affected by generational changes (Zellweger and Sieger, 2012), the analysis controls for generational involvement (the number of generations currently involved in the firm's operations). The expected direction is negative as first-generation FBs are more likely to adopt entrepreneurial behaviors than later-generation FBs (Block, 2012). Finally, to address the possible effects of recent pandemics, the analysis controls for the impact of Covid-19 by employing a single item, "How would you say has the Covid-19 pandemic affected the firm?" (from 1 = much worse to 5 = much better).

4.2 Reliability and validity of constructs

Convergent and discriminant validity were evaluated using SPSS Amos. The confirmatory factor analysis (CFA) included four latent variables (professionalization, EO, SEWi and BB). In the analysis, EO and SEWi were treated as second-order constructs. The CFA indicated an acceptable overall model fit ($\chi^2 = 508.914$, CMIN/df = 1.426, CFI = 0.916, RMSEA = 0.055, PCLOSE = 0.209). The composite reliabilities (CR) are 0.928 for EO, 0.940 for SEWi and 0.818 for BB. While professionalization displays the weakest composite reliability (CR = 0.626), all CRs are greater than 0.6, as recommended by Fornell and Larcker (1981), and along with the Cronbach alphas, they suggest acceptable reliability of the constructs. Regarding convergent validity, EO and SEWi display good values of average variance extracted (AVE), which are 0.772 for EO and 0.842 for SEWi – both greater than the suggested threshold of 0.5 (Hair *et al.*, 2010). For professionalization (AVE = 0.401) and BB (AVE = 0.484), AVEs fall below 0.5. Nevertheless, because CRs are still higher than 0.6, the convergent validity of the constructs is considered adequate (Fornell and Larcker, 1981). Discriminant validity is also acceptable, as the maximum shared variances (MSVs) and average shared variances (ASV) of all constructs are greater than their AVEs (Hair *et al.*, 2010). Finally, because the choice of variables is based on existing validated scales, we consider the constructs to have reasonable content validity.

4.3 Common method bias and multicollinearity issues

Because the study is survey-based and cross-sectional, there is a possibility of common method bias affecting the reliability of the results (Podsakoff *et al.*, 2003). To assess this, this study employs Harman's one-factor test with unrotated factor solutions. The exploratory factor analysis revealed that a single factor accounted for only 27.6% of the variance. As this factor did not explain more than 50% of the variance in the data, common method bias does not seem to be present in the data (Fornell and Larcker, 1981; Podsakoff *et al.*, 2003). In addition, since there are statistically significant correlations between the constructs, it is important to address multicollinearity issues in the analysis. To reduce structural multicollinearity, the variables were mean-centered prior to running the regressions (Aiken *et al.*, 1991). Furthermore, the maximum variance inflation factor (VIF) was found to be 3.626. Since none of the VIFs exceeds the threshold of 10, multicollinearity does not seem to pose a problem to the analysis (Hair *et al.*, 2010).

5. Results

An overview of descriptive statistics and bivariate Pearson correlations is provided in Table 2. The average firm displays relatively high values of EO ($M = 3.8$) and SEWi ($M = 3.74$). The average family firm is moderately professionalized ($M = 1.64$ with values ranging from 0 to 3). On average, two generations are involved in the business and the average number of employees is 30. EO displays a significant correlation with SEWi ($r = 0.504$, $p < 0.001$) and professionalization ($r = 0.173$, $p = 0.046$) and is weakly and

Table 2.
Descriptive statistics

Variable	<i>M</i>	<i>SD</i>	α	1	2	3	4	5	6
1. EO	3.80	0.57	0.87	1.00					
2. SEWi	3.74	0.79	0.90	0.50**	1.00				
3. Professionalization	1.64	1.06	0.55	0.17*	0.10	1.00			
4. Bifurcation bias	0.07	0.83	0.83	-0.16 [†]	0.01	0.05	1.00		
5. Generational involvement	2.01	0.79	-	0.01	0.19*	0.16 [†]	0.09	1.00	
6. Firm size	30.11	45.11	-	0.06	-0.03	0.16 [†]	0.03	0.10	1.00
7. Covid-19 perception	2.88	0.82	-	0.18*	0.15 [†]	0.15 [†]	-0.16 [†]	0.20*	-0.01

Note(s): ** - significant at 0.01, * - significant at 0.05, [†] - significant at 0.1. *M* = mean, *SD* = standard deviation
Source(s): Created by authors

negatively correlated with BB ($r = -0.162, p = 0.063$). It is also positively correlated with the Covid-19 variable ($r = 0.177, p = 0.042$), meaning that entrepreneurially oriented firms perceive more benefits than damages of the pandemic. SEWi is weakly and positively correlated with generational involvement ($r = 0.189, p = 0.030$) and Covid-19 perception ($r = 0.149, p = 0.089$). Professionalization is weakly and positively associated with firm size ($r = 0.158, p = 0.069$) and generational involvement ($r = 0.156, p = 0.072$). Except for the above correlations, BB does not seem to be linearly associated with any other independent variables except of Covid-19 ($r = -0.156, p = 0.073$). Generational involvement is significantly correlated with the perception of Covid-19 ($r = 0.200, p = 0.021$).

The results of hypotheses testing are displayed in Table 3. We employed a hierarchical OLS regression with robust standard errors, and each stage reports the change in R^2 and its significance. In Model 1, the dependent variable is regressed against the control variables. Model 2 further includes the independent variables: SEWi, professionalization and BB. Finally, Model 3 incorporates the quadratic term SEWi². With the exception of industry dummies, the control variables show no strong association with EO. Generational involvement appears to have a marginal negative relationship with EO ($b = -0.098$,

Variables	Model 1	Model 2	Model 3
Intercept	3.16** (0.40)	3.65** (0.22)	3.43** (0.22)
<i>Control variables</i>			
Generational involvement	-0.04 (0.06)	-0.08 (0.06)	-0.10 [†] (0.05)
Firm size	-0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Covid-19 perception	0.10 [†] (0.06)	0.04 (0.06)	0.07 (0.05)
Industry dummies	Yes	Yes	Yes
<i>Linear effects</i>			
SEWi		0.32** (0.06)	0.42** (0.06)
Professionalization		0.07 (0.04)	0.09** (0.04)
Bifurcation bias		-0.09 (0.06)	-0.11 [†] (0.06)
<i>Curvilinear effects</i>			
SEWi ²			0.17** (0.05)
R^2	0.14	0.35	0.42
ΔR^2	0.14*	0.20**	0.07**
<i>F</i> -statistics	2.90**	6.40**	7.78**

Note(s): ** - $p < 0.01$, * - $p < 0.05$, [†] . $p < 0.1$. Standard errors reported in parentheses (.)
Source(s): Created by authors

Table 3.
Hierarchical regression
results

$p = 0.069$), which is consistent with previous findings (Block, 2012). In Model 2, SEWi is positively and significantly associated with EO ($b = 0.323, p < 0.001$). The results of Model 3 support all three hypotheses. First, professionalization is positively and significantly related to EO ($b = 0.088, p = 0.029$). Second, BB is negatively and significantly related to EO ($b = -0.107, p = 0.056$). Finally, the squared term $SEWi^2$ is positive and significant ($b = 0.173, p < 0.001$), providing support for the third hypothesis. Thus, the relationship between SEWi and EO appears to be U-shaped. However, it is necessary to consider the location of the turning point (Haans et al., 2016). The turning point can be calculated as $-b/2a$, where b is the coefficient of the linear term and a is the coefficient of the quadratic term. By employing the formula and adding the mean (to undo the centering of SEWi), the turning point occurs when $SEWi = 2.57$.

Additional analyses are necessary to determine whether the turning point falls within the data range and whether the slope is sufficiently steep at the endpoints of the data range (Lind and Mehlum, 2010). Table 4 summarizes the tests related to the U-shaped relationship between SEWi and EO. To construct the confidence interval (CI) of the turning point, the Fieller (1954) method is preferred since it is more robust to finite sample bias and departure from normality compared to the traditional Delta method (Haans et al., 2016). The 95% Fieller interval for the turning point is [1.18, 2.82], indicating that the turning point lies within the data range and is not “dangerously close” to its endpoints. The Delta method provides the same result, with a 95% CI for the turning point of [2.10, 3.02]. Furthermore, the slope at the lower bound of the data range is negative and significant ($b = -0.537, p < 0.001$), and the slope at the upper bound of the data range is positive and significant ($b = 0.851, p < 0.001$). This means that over the data range, EO is decreasing with SEWi until reaching the turning point, after which it starts increasing. Finally, an exact test of the presence of a U shape (Lind and Mehlum, 2010) suggests that the relationship between SEWi and EO is indeed U-shaped ($t = 2.96, p < 0.01$).

5.1 Robustness checks

To test the robustness of our results, we followed the two-step modeling information-theoretic approach suggested by Daryanto (2019). After testing the theory-driven hypotheses, we assessed the quality of the model against other competing models. Specifically, we evaluated the residual sums of squares (RSS), Akaike information criterion (AIC), distance (D) and Akaike weights (w_i) for each model. Lower values of AIC suggest better acceptability of the model, while D represents the difference between AIC of a model and the minimum AIC in the set of competing models. A model can be considered to have substantial support if $D \leq 2$ and poor support when $4 \leq D \leq 7$ (Burnham and Anderson, 2003). Akaike weight w_i represents the relative likelihood of a model among the candidate models. Following Daryanto (2019), our analysis tested the model against eight competing models and reported their RSS, AIC, D and

Description	Result
Data range	[1.00, 5.00]
Estimated turning point	2.566
95% CI – Fieller method	[1.18, 2.82]
95% CI – Delta method	[2.10, 3.02]
Slope at the lower bound of data range	$b = -0.537, p = 0.002$
Slope at the upper bound of data range	$b = 0.851, p < 0.001$
Overall test of U-shape	$t = 2.960, p = 0.002$

Source(s): Created by authors

Table 4.
Test of a U-shaped relationship between SEWi and EO

w_i (see Table 5). The hypothesized model (a) received the strongest support, with $D = 0$ and Akaike weight of 0.399. The models with interaction terms did not receive enough support (Burnham and Anderson, 2003), suggesting no important moderating effects among the model variables. The only plausible model with $D \leq 2$ was model (f), which contained squared terms. This finding suggests that there may also be curvilinear effects of professionalization or BB. Specifically, model (f) predicted consistent findings with the main model, except for a significant and negative squared term of professionalization ($B = -0.078, p = 0.062$). The turning point of this assumed inverse U-shaped relationship occurred when BB was -1.185 , a value inside the data range $[-4.00, 4.00]$. However, additional tests revealed that the slope at the lower bound of the data range was not significant enough ($b = 0.231, p = 0.174$). Thus, the true relationship may be merely one half of an inverse U-shape, i.e. a concave and decreasing function (Haans et al., 2016). The model also failed Lind and Mehlum's (2010) exact test of the presence of an inverse U-shaped relationship ($t = 0.940, p = 0.174$), providing poor support for the existence of such a relationship between BB and EO. Overall, the robustness checks provide support for the hypothesized model (a).

6. Discussion and conclusions

In their review on EO in FBs, Hernández-Linares and López-Fernández (2018) emphasize the importance of investigating how the distinct characteristics and diverse nature of FBs influence EO within these organizations. Our results suggest that certain distinctive attributes of FBs, such as their SEW preservation efforts (Swab et al., 2020) and their unique HR practices (Madison et al., 2018), contribute to the heterogeneity observed in EO within these businesses.

This study presents a challenge to the conventional belief that SEW preservation efforts render FBs risk-averse, conservative and less entrepreneurial (Miller et al., 2008). It also questions the notion that SEWi and EO are always positively related (Hernández-Perlines et al., 2020). Instead, this study reveals that entrepreneurial attitudes within family firms are highly complex phenomena (Kallmuenzer et al., 2018) and that family firms display vast within-group differences.

In line with Hypothesis 1, our findings suggest that the relationship between EO and SEWi is U-shaped. Hence, FBs with low SEWi display a higher level of EO. One explanation for this is that these firms, despite having family involvement, lack the strong family essence required to pursue family-centered goals (Chrisman et al., 2012). Consequently, they tend to adopt goals more akin to those of NFBs. Put differently, FBs with low SEWi, resembling non-

Model specification	RSS	AIC	D	w_i
a $S + S^2 + P + B$ (the hypothesized model)	24.4	-198.8	0.00	0.399
b $S + P + B$	27.4	-185.8	12.95	0.001
c $S + S^2$	26.1	-194.6	4.15	0.050
d $P + B + P^2 + B^2$	34.3	-153.9	44.85	0.000
e $S + P + B + S \times P + S \times B$	26.1	-187.8	10.95	0.002
f $S^2 + P^2 + B^2 + S + P + B$	23.7	-198.5	0.25	0.352
g $S^2 + P^2 + B^2 + S + P + B + S \times P + S \times B$	23.4	-196.3	2.45	0.117
h $S^2 + P^2 + B^2 + S + P + B + S \times P + S \times B + S^2 \times P + S^2 \times B$	23.0	-194.8	3.95	0.055
i $S^2 + P^2 + B^2 + S + P + B + S \times P + S \times B + S \times P^2 + S \times B^2$	23.3	-193.1	5.65	0.024

Note(s): The models also include all control variables, which are not displayed in the table for clarity. S = SEWi, P = professionalization, B = bifurcation bias

Source(s): Created by authors

Table 5.
Multimodel inference

family firms, display a willingness to take risks and use debt financing to a similar extent as NFBs. Like NFBs, they are also likely to enjoy more extensive bridging social ties (Mani and Durand, 2019), which facilitate access to capital (Chua *et al.*, 2011) and develop absorptive, adaptive and innovative capabilities (Wang, 2016). It can be assumed that all these factors contribute to their EO. As SEWi increases, however, our findings indicate a decline in EO. This can be attributed to the growing significance of preserving SEW, which tends to lead to conservatism, risk aversion and resource constraints (Kallmuenzer *et al.*, 2018; Miller *et al.*, 2008; Naldi *et al.*, 2007). Moderate levels of family essence appear to reduce the formation of bridging ties (Mani and Durand, 2019), limiting access to knowledge and new ideas (Zheng, 2010), thereby inhibiting EO. Finally, when SEWi reaches higher levels, EO also increases, as observed in previous research (Hernández-Perlines *et al.*, 2020). This can be attributed to SEWi fostering the adoption of LTO (Chrisman and Patel, 2012), leading to the development of patient capital and comprehensive strategic decision-making (Eddleston *et al.*, 2012; Sirmon and Hitt, 2003). Additionally, FBs with strong SEWi are driven to engage in entrepreneurial activities to enhance their family reputation (Arzubiaga *et al.*, 2019). Such firms are more likely to develop durable bonds with stakeholders (Cennamo *et al.*, 2012), dynamic capabilities (Wang, 2016), knowledge integration (Kansikas and Murphy, 2011) – all conducive to fostering entrepreneurship. The discovery of the U-shaped relationship between SEWi and EO offers a novel perspective on the concept of SEW and constitutes a significant theoretical contribution of our study. It suggests that future research examining the consequences of SEWi should not only consider its moderating effects (e.g. Kallmuenzer *et al.*, 2018) but also explore its potential curvilinear effects, which can provide a greater explanatory power (Daryanto, 2019). Moreover, recent family business authors (e.g. Brinkerink *et al.*, 2022) advocate for replication studies to gain new insights into our understanding of family firms. In addition to examining the impacts of SEWi, replication studies that incorporate curvilinear effects when evaluating previously validated moderation models hold the potential to stimulate novel perspectives and enrich our understanding of various constructs within family business research. The fact that different levels of SEWi lead to different levels of EO also means that SEWi is an important source of differences between family firms. This suggests that family firms with little family essence and “pure” family firms, or perhaps “business first” and “family first” business types (Ward, 1987) may share some common behavioral characteristics and, in several aspects, outperform family firms that struggle to address the competing demands of business and family.

Our research also reveals a significant relationship between family firms’ specific HR practices and their entrepreneurship. Consistent with existing theory, the essential aspects of professionalization, such as the presence of non-family managers (García-Lopera *et al.*, 2022), formalization (De Clercq *et al.*, 2010) and decentralization (Caruana *et al.*, 1998), appear to contribute to a FB’s EO. The finding, which supports Hypothesis 2, suggests that professionalization can indeed fulfill its traditional purpose of aligning a FB’s management structures and procedures more closely with those of a NFB (Fang *et al.*, 2012), at least in terms of EO. Surprisingly, to date, no study has evaluated the relationship between professionalization and EO (Hernández-Linares and López-Fernández, 2018). Our finding thus presents an empirical contribution to the field of family business research. In addition, unlike previous authors (Huybrechts *et al.*, 2013), we have not treated professionalization as a simple dichotomous concept but have instead considered its multi-faceted nature (Dekker *et al.*, 2013; Madison *et al.*, 2016). Furthermore, we found that bifurcation bias is negatively related to EO, supporting Hypothesis 3. The effects of BB represent a relatively new and inadequately explored topic in the family business literature (Verbeke *et al.*, 2020). Although theoretical propositions by Jennings *et al.* (2018) suggested the possibility of a “healthy” level of BB, our analysis did not find any evidence of a curvilinear effect. Therefore, our findings align with the conclusions of Verbeke and Kano (2012) and Verbeke *et al.* (2020),

indicating that BB, if it becomes a systematic managerial practice, has detrimental effects on firm-level outcomes. This insight presents another significant empirical contribution of our study.

The findings present several implications that are relevant for practitioners, including family firm owners, managers and potential successors, in both their professional experience and education. When family business managers show only moderate concern for SEW, entrepreneurial behaviors of the firm can be limited (Debicki *et al.*, 2016). Consequently, family business managers may struggle to prioritize either family-centered or business-centered goals. To foster entrepreneurship in “family-first” businesses, it is crucial to appoint managers who understand and are aligned with family objectives, both economic and non-economic, and are willing to support them. In cases where the manager is not a family member, he/she must be made familiar with the core values and goals of the family firm. Conversely, in “business-first” FBs or those lacking a family essence (e.g. with intentions to sell the firm in the future), EO can resemble that of NFBs. Second, practitioners should recognize the benefits associated with the professionalization of family businesses, which can lead to financial gains (Madison *et al.*, 2018). Family firm owners need to recognize that professionalization, which enhances entrepreneurship, encompasses more than just formalization and decentralization of power; it also entails appointing non-family managers. This can increase the firm’s risk appetite and enable the identification of entrepreneurial activities that the family firm might not have engaged in otherwise. Third, family firm owners must be mindful that unremedied BB, i.e. unequal treatment of family and non-family employees, does not yield any advantages (Schepers *et al.*, 2021). Instead, it creates an environment of injustice and hampers entrepreneurial spirit. To overcome these issues, BB should not become a systematic HR practice in FBs. Instead, efforts should be made to promote fairness and equal treatment among all employees, regardless of their ties to the controlling family.

However, this study also has several limitations. First, it does not consider the actual outcomes of EO, such as innovation output, which makes it impossible to evaluate the “resource orchestration” advantages of FBs (Duran *et al.*, 2016) with different levels of SEWi. Second, the measure of professionalization used in the study implicitly assumes that professionalization is always a “smooth” process. However, the effects of professionalization may vary when non-family managers perceive injustice, unwanted “meddling” of family owners, or limited freedom of decision-making. In such cases, the positive effects of professionalization on EO could be weakened due to dysfunctional conflicts in the management team. Third, unlike some previous studies (Vecchiarini and Mussolino, 2013), this research did not find a moderating effect of generational involvement on the relationship between professionalization and EO. Although we evaluated various model specifications, including an interaction between professionalization and generational involvement, no significant moderating effect was found. This observation could be attributed to the sample containing only a few third- and later-generation family businesses. Additionally, the study did not consider other possible sub-dimensions of EO, such as autonomy or competitive aggressiveness, nor did it specifically examine the effects of individual facets of EO that have been found to be empirically distinct (Covin and Lumpkin, 2011; Kallmuenzer *et al.*, 2018). Finally, despite its increasing popularity in recent years (Porter *et al.*, 2019), sampling based on OPD can be seen as another limitation.

The analysis also suggests that future research is warranted. First, further evidence is needed to understand the underlying factors that drive the EO of family businesses. We propose that FBs with low SEWi may benefit from bridging social capital, whereas FBs with high SEWi may benefit from bonding social capital, which enables them to better put social capital into action. More broadly, the question of how FB’s “familiness” affect their entrepreneurial activities still requires empirical investigation (Hernández-Linares and

López-Fernández, 2018). Second, it remains unclear which specific family-centered non-economic goals drive EO, as our analysis cannot distinguish the broad range of goals that a FB can follow. Thus, for instance, the role of succession intentions in EO demands further academic attention (Hernández-Linares and López-Fernández, 2018). Third, while this study demonstrates that BB negatively affects EO, additional research is needed to determine which family-related variables can intervene in the BB-EO relationship (e.g. Schepers *et al.*, 2021).

Note

1. A detailed list of these measures is available from the authors upon request.

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