Entrepreneurial Leadership in Austrian Family SMEs: A Configurational Approach

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This article explores the role of stewardship practices related to entrepreneurial leadership in turning EO into family firm performance while considering its environmental context. Family business research has only scarcely considered how the entrepreneurial orientation (EO)-financial performance relationship depends on configurations of internal and external factors which establish strategic fit. We argue that family firms can overcome the often-highlighted paternalism-entrepreneurship paradox by employing stewardship practices related to entrepreneurial leadership (internal factor), which in turn can help them leverage strategic fit between EO and dynamic environments (external factor). The results of a survey of 162 Austrian small and medium-sized family enterprises (SMEs) show that family firms can only profit from EO under certain configurations of internal and external factors. Employing stewardship practices related to entrepreneurial leadership turns out to be an efficient and necessary condition for transforming EO into performance. Environmental dynamism is furthermore a double-edged sword facilitating and impeding the transformation of EO into performance. These findings contribute to existing research by shedding light on the role of stewardship practices in establishing strategic fit in entrepreneurial family firms.

Keywords: Stewardship Theory, Entrepreneurial Leadership, Environmental Dynamism, Entrepreneurial Orientation, Financial Performance, Strategic Fit, Family Firms

Introduction

Understanding what drives firm performance is a long-standing focus of family business research. Businesses, including family firms, generally profit from entrepreneurial strategies in terms of profitability, growth, innovation, and international performance (Calabrò et al., 2021; Arzubiaga et al., 2018; Rauch et al., 2009; Wales, 2016; Wales et al., 2013). Entrepreneurial orientation (EO) refers to "entrepreneurial strategy-making processes that key decision makers use to enact their firm's organisational purpose, sustain its vision, and create competitive advantage(s)" (Rauch et al., 2009: 763), and

generally relates to innovativeness, proactivity, and risk-taking (Miller, 1983). Consequently, a firm's competitiveness, and hence sustainable performance, depends on its capability to establish an entrepreneurial orientation and reap its benefits. "This need is even greater in family firms with a vision to succeed across generations" (Cruz and Nordqvist, 2012: 33).

Despite this common agreement, research in the realm of family firms has generated contradictory debates about whether family firms are contexts conducive towards entrepreneurial strategizing (Casillas et al., 2011; Hernández-Linares and López-Fernández, 2018; Gimenez-Fernandez et al., 2021). On the one hand, conservatism, paternalism, and nepotism are characteristics considered to be preventative of entrepreneurial behaviour in family firms. On the other hand, a family's emotional attachment to the business, and the desire to secure the business for future generations and protect the family's reputation are listed as drivers of entrepreneurship in family firms. There remains to date no concordant opinion about how EO can be effectively transformed into family firm performance (Arzubiaga et al., 2018; Calabrò et al., 2021; Bauweraerts et al., 2021). Family firm-specific cultural and organisational influences on EO are often explained via stewardship theory (Howorth and Robinson, 2020; Zahra et al., 2008; Howorth et al., 2010). True stewardship is entrepreneurial in nature, and emphasises protecting and nurturing family firm wealth in its entirety, benefiting both the family and its business (Howorth and Robinson, 2020); this has been termed *entrepreneurial stewardship* (Discua Cruz et al., 2013). Effective stewardship that turns family and non-family employees into altruistic stewards that place the family firm's wealth at the centre of their actions is crucial (Eddleston et al., 2011; Howorth and Robinson, 2020; Zahra et al., 2008) because family firms failing to do so are prone to inertia (Chirico and Nordqvist, 2010). This research in turn aims to identify stewardship practices related to EO in family firms, and test their effectiveness.

With strategy implementation in family firms, appropriate leadership behaviour, i.e. the process of influencing "a group of individuals to achieve a common goal" (Northouse, 2015: 6), is a core component of effective stewardship (Pearson and Marler, 2010). While strategic postures provide direction, an effective implementation of strategy requires suitable leadership behaviour (Engelen et al., 2015). In entrepreneurially oriented family firms, we argue that entrepreneurial leadership is a

necessary and effective stewardship practice (Howorth and Robinson, 2020; Miller et al., 2013). Entrepreneurial leadership builds on stewardship principles like establishing an open, autonomous, trusting, supportive, and nurturing environment, and complies with the family's and business' entrepreneurial goals (Fries et al., 2021; Zahra et al., 2008; Renko et al., 2015; Discua Cruz et al., 2013). Research on the effectiveness of EO and its implementation mechanisms needs to also take environmental settings into account, because the proposition that EO is a universal blessing in any situation has been deemed "overly simplistic" (Wiklund and Shepherd, 2005: 76). This is why the following research also accounts for environmental dynamism when testing the effectiveness of stewardship practices related to entrepreneurial leadership in family firms. The high rate of change in terms of customer and competitor behaviour associated with dynamic environments (Khandwalla, 1977) makes dynamism a conducive context for entrepreneurially oriented family firms. The proactive, risk-taking, and innovative nature of entrepreneurially oriented family firms results in better anticipation of and adjustment to environmental change (Casillas et al., 2011; Yu et al., 2019; Casillas et al., 2010). Based on a sample of 162 family SMEs from Western Austria, we contribute to family business and entrepreneurship literature by testing effective orchestrations of entrepreneurial activities in family SMEs (Casillas et al., 2011; Kallmuenzer et al., 2018; Bauweraerts et al., 2021). This study contributes to this debate by focusing on actual stewardship practices in the form of entrepreneurial leadership. Existing research to date has largely relied on proxies of stewardship behaviour such as the family membership of executives or family involvement to explain the effectiveness of family firms' EO (Bauweraerts et al., 2021; Casillas et al., 2010). The use of proxies however neglects that family membership or involvement does not necessarily equate with actual stewardship behaviour protecting and nurturing family firm wealth (Howorth and Robinson, 2020; Miller et al., 2013; Zahra et al., 2008). Consequently, we extend the research on entrepreneurial stewardship in family firms which focuses on explaining collective entrepreneurial dynamics in family teams and business portfolios (Discua Cruz et al., 2013) by introducing a leadership perspective to the ongoing debate. We test how and when stewardship practices related to entrepreneurial leadership facilitate the transformation of entrepreneurial strategies into family firm performance. This research as a result follows calls to enhance our

understanding of leadership in family firms in general, and entrepreneurial leadership specifically (Koiranen, 2003; Renko et al., 2012; Leitch and Volery, 2017; Fries et al., 2021; Kansikas et al., 2012). Leadership research in family firms is scarce, and focuses on issues such as the family membership of leaders (Bauweraerts et al., 2021) or generational issues (Mussolino and Calabrò, 2014); it is very rare when it comes to the EO context (Hernández-Linares and López-Fernández, 2018).

Further, research on the boundary conditions of the EO-performance relationship in family firms only rarely adopts true configurational perspectives simultaneously considering the interplay of multiple contingency factors. Prior research has focused either on individual external contingency factors such as environmental dynamism (Casillas et al., 2010; Yu et al., 2019), or on individual family business internal contingency factors such as family-related goals (Kallmuenzer et al., 2018). Existing configurational studies have investigated interactions between EO and family business-internal characteristics such as firm size, participative decision making, and generational involvement and stages (Bauweraerts et al., 2021; Chirico et al., 2011). Configurational research investigating family business-internal and environmental contingencies of EO, and consequently strategic fit in family firms, has been limited to individual EO dimensions (Yu et al., 2019). By considering the interactions between EO, entrepreneurial leadership, and environmental dynamism, we close this gap, which importantly increases our understanding of strategic fit in family firms by establishing the role of stewardship practices for achieving strategic fit. In doing so, we also answer the calls to shed light on how EO is effectively transformed into family firm performance (Wales et al., 2021), while also covering multilevel variables when investigating family firm performance (McKenny et al., 2013).

Theoretical Background and Hypotheses Development

A Stewardship Perspective of Entrepreneurial Practices in Family Firms

EO describes an organizational posture of how decision-making practices determine firms' responses towards new technologies and reactions to new product-market opportunities involving risks. We consider a family SME to be entrepreneurially oriented when it simultaneously displays high levels of innovativeness, risk-taking, and proactivity (Covin and Slevin, 1989; Miller, 1983; Wales et al., 2019). This perspective

contrasts with the multidimensional conceptualisation of EO (Lumpkin and Dess, 1996), which argues that EO is a phenomenon with roots in the domains of innovation, proactivity, risk-taking, autonomy, and competitive aggressiveness. Not all of these dimensions have to be simultaneously present at the same level, but may instead complement each other. While the unidimensional conceptualisation "specifies what EO looks like", the multidimensional conceptualisation "specifies where to look for EO" (Covin and Wales, 2012: 681). Consequentially, the unidimensional conceptualisation suits our research goal better because we are interested in how family SMEs can reap the benefits of EO in its entirety.

EO is shaped through cultural influences on national or societal, regional, industry, and firm levels (Howorth et al., 2010; Fayolle et al., 2010; Lee and Peterson, 2000; Gupta and Levenburg, 2010; Wales et al., 2019). These cultural dimensions shape firms' values, attitudes, and behaviours as they form and transform EO (Fayolle et al., 2010; Howorth et al., 2010; Lee et al., 2019). This holds true for family firms, which for generations are often strongly embedded in certain cultural settings (Howorth et al., 2010). One theoretical lens frequently applied to explain entrepreneurship in family firms is stewardship theory (Howorth and Robinson, 2020; Bauweraerts et al., 2021). Stewardship theory provides insights into situations where managers are not driven by individual goals, but act in the best interests of the firm because their motives are aligned with its well-being (Davis et al., 1997). Stewardship theory provides a contrasting perspective to agency theory, which theorises about self-serving managers and associated governance costs. Stewardship theory is a relevant theoretical perspective for family firms because of the common conjunction of ownership and management which is especially the case in family SMEs (Chrisman et al., 2012; Zahra et al., 2008; Howorth et al., 2010).

Stewardship governance is associated with facilitating and empowering management and leadership practices, yielding a deep identification with the business (Davis et al., 1997). Stewardship cultures are based on trust, less formalisation, and more flexibility. The facilitating and empowering nature of stewardship practices yield a greater identification with the family and its business, increasing employee commitment and motivation to contribute to family firm wealth, while diminishing self-serving actions. Here, family business members act as stewards. In the best interest of the firm,

stewards not only follow the family business' strategic goals, but also seek to expand the firm's assets instead of merely protecting them. Howorth and Robinson (2020: 70) conclude that "a stewardship perspective that is true to these roots would be entrepreneurial, and family members who wish to expand the wealth, assets, and opportunities of the family would be active entrepreneurially." Studying family entrepreneurial teams and their business portfolios, Discua Cruz et al. (2013) coin the term *entrepreneurial stewardship* in this respect. We extend this perspective by focusing on individual family businesses and testing how entrepreneurial stewardship-related leadership practices facilitate successful strategy implementation. We specifically propose that in family firms with pronounced EO stewardship practices are most effective when they are entrepreneurial in nature and create a culture that is inherently entrepreneurial, including entrepreneurial leadership behaviour. In this kind of surrounding, entrepreneurial stewardship efforts go beyond the family boundaries, turning all (family and non-family) members into entrepreneurial stewards, leading to a successful implementation of EO.

EO and entrepreneurial leadership are two distinct phenomena (Dess et al., 2003); the latter increases the potential of the former. While EO describes a firmwide posture capturing organisational decision-making practices that determine firms' responses to opportunities, possibly involving risks (Lumpkin and Dess, 1996), entrepreneurial leadership refers to individual managerial behaviours "influencing and directing the performance of group members towards the achievement of organisational goals that involve recognizing and exploiting entrepreneurial opportunities" (Renko et al., 2015, p. 55). Building on stewardship principles (Fries et al., 2021), entrepreneurial leadership heavily rests on social exchange (Dess et al., 2003), which is not necessarily the case with EO, because top management decision-making can take place separately from other organisational ranks. Leadership in entrepreneurially oriented family firms is not necessarily based on entrepreneurial values (Renko et al., 2015; Chirico and Nordqvist, 2010; Casillas et al., 2011). For instance, it could strictly implement what has been planned and ordered by top management. Entrepreneurial leadership is a crucial stewardship means for triggering entrepreneurial behaviour among the individuals constituting a firm and meeting the goals of an entrepreneurially oriented family firm while fostering firm performance. This is key because family goals, including non-

financial ones, are best achieved by increasing their firm's prosperity (Bauweraerts et al., 2021).

Previous research investigating stewardship behaviour in family firms provided evidence that they develop effective stewardship practices such as entrepreneurial leadership to a varying degree (Miller et al., 2013). This is emphasised by two contradictory lines of argumentation that describe family firms as entrepreneurial or non-entrepreneurial, depending on their family-specific cultures and goals (Casillas et al., 2011). One explanation here is that family firms face the possibility of trade-offs between paternalism and entrepreneurship leading to family firm inertia because decisions are taken with a family focus directed towards preserving traditions (Chirico and Nordqvist, 2010). Koiranen (2003) demonstrates that paternalism and entrepreneurship in family firms are related through emotions. Renko et al. (2012: 177) argue that "the prevalence of paternalistic leadership practices in family business may be closely related to the strong emotional connections prevalent in such firms and the need to behave entrepreneurially." However, family firms that face inertia due to trade-offs between paternalism and entrepreneurship lack a true and effective stewardship culture, and display poor stewardship practices (Zahra et al., 2008; Eddleston et al., 2011). Instead of empowering their employees, they overwhelm them with care, suppressing any proactive and innovative contribution to the firm's wealth (Koiranen, 2003), holding them off from becoming family firm stewards as a result (Zahra et al., 2008). Family firms in this instance fail to implement a culture of entrepreneurial stewardship where identifying entrepreneurial opportunities to increase the family's assets is a collective effort (Discua Cruz et al., 2013). These kinds of cultural trade-offs can often cause disharmony between strategy and the organisation.

Building on a stewardship perspective, we argue that for family firms to be able to effectively turn their EO into performance, they need to develop stewardship practices related to entrepreneurial leadership. However, the effectiveness of strategies (Lumpkin and Dess, 2001) and stewardship cultures (Chirico and Baù, 2014) for firm prosperity are contingent on the environmental context. All firms, including family SMEs, need to achieve strategic fit between strategy, the organisation, and environment (Lindow et al., 2010; Carmeli et al., 2010). The following sections develop hypotheses discussing how

configurations of stewardship practices related to entrepreneurial leadership and environmental dynamism influence the EO performance link in family firms.

Configurations of EO, Entrepreneurial Leadership, and Environmental Dynamism, and Their Influence on Performance

Entrepreneurial Leadership and EO in Family Firms

Stewardship theory postulates that the "identification with and achievement of the organisation's strategic mission can lead to intrinsic satisfaction and provide a significant source of personal utility for stewards" (Zahra et al., 2008: 1037). In family firms, EO is strengthened through stewardship cultures. This is especially the case when strong bonds between the family and the firm exist, and the interaction among family members and the firm is strong (Eddleston et al., 2011). Appropriate leadership behaviour based on stewardship principles is a key component of these kinds of stewardship cultures (Eddleston, 2008; Pearson and Marler, 2010). Entrepreneurial leadership incorporates strong stewardship principles, seeking to turn firm members into entrepreneurial agents. This is especially important in the case of entrepreneurial family firms. Entrepreneurial leaders challenge a firm's dominant logic as well as their subordinates (Ireland et al., 2003), encouraging followers to set entrepreneurial goals (Gupta et al., 2004; Ireland et al., 2003), which in turn creates strategic fit with the family firm's strategic posture.

Entrepreneurial leaders "emphasize building commitment through active, creative, and discovery-driven engagement with the opportunities presented by the environment" (Gupta et al., 2004: 255). Here, entrepreneurial leaders trigger business opportunity recognition and exploitation among their followers (Gupta et al., 2004). While "opportunity recognition is about perception, exploitation is about action, and the goals set by entrepreneurial leaders involve both" (Renko et al., 2015: 57). Entrepreneurial leadership fosters the development of growth-related (substantive) and opportunity spotting, and change-related (dynamic) organisational capabilities (Koryak et al., 2015). Thus, entrepreneurial leadership protects (i.e. change capabilities) and nurtures (i.e. growth capabilities) firm wealth, which is the foundation of good stewardship in family firms (Howorth and Robinson, 2020). Entrepreneurial leaders themselves identify innovation opportunities, emphasize their benefits to the entire firm, and secure

resources for exploiting opportunities (Ireland et al., 2003). Consequently, they act as role models and can be described as true stewards, acting entrepreneurially and sacrificing their own interests for the wealth of the family firm and its employees (Howorth and Robinson, 2020; Fries et al., 2021).

Entrepreneurial leadership builds on transformational leadership principles such as articulating a vivid and motivating vision, the intellectual stimulation of followers, or inspirational motivation (Renko et al., 2015; Fries et al., 2021). Transformational leadership principles are a core foundation of a family firm's stewardship orientation (Eddleston, 2008) because this kind of leadership behaviour triggers stronger emotional connection and psychological ownership among employees, turning them into family firm stewards (Fries et al., 2021). The capacity of entrepreneurial leaders to articulate a compelling entrepreneurial vision creating a common understanding of the family business among all members is a particularly important stewardship practice because it replaces paternalistic behaviour (Fries et al., 2021). Another stewardship component of entrepreneurial leadership is its foundation in participative leadership, which strengthens intrinsic motivations to engage in innovation and develop an entrepreneurial mindset (Fries et al., 2021). Entrepreneurial leadership heavily rests on social exchange (Dess et al., 2003), identified as one of the core stewardship-based leadership behaviours for implementing a stewardship culture (Pearson and Marler, 2010). Furthermore, entrepreneurial leadership intersects with creativity-supportive leadership because creativity is an important aspect of innovation and opportunity seeking (Renko et al., 2015), enabling followers to become active entrepreneurial stewards nurturing the family business. In sum, these attributes of entrepreneurial leadership strengthen follower identification, involvement, and intrinsic motivation and consciousness, driving them to act as stewards in charge of innovation and future success (Zahra et al., 2008; Fries et al., 2021).

Based on stewardship theory, we expect entrepreneurial leadership to be an effective practice for creating an entrepreneurial stewardship culture, turning family firm members into intrinsically-driven stewards seeking to achieve the family firm's entrepreneurial goals. As entrepreneurial leadership increases, the capacity among all (family and non-family) ranks of a family firm to challenge current situations, take risks, and be creative prevents family firms from falling into the "paternalism trap" that

triggers inertia instead of entrepreneurship (Chirico and Nordqvist, 2010). Entrepreneurial leadership will therefore enable family firms to balance "care taking" and "care-giving" attitudes, meaning that employees not only have the freedom to express ideas, but are also empowered to follow them (Koiranen, 2003). Empirical evidence supports our reasoning. For instance, it's been shown that managerial individual innovation behaviour can be transformed more easily into firm-level exploration in family-owned firms (Strobl et al., 2020b). Research has also demonstrated that entrepreneurial leadership correlates with EO (Renko et al., 2015), triggering exploration and exploitation innovation outcomes in organisations, with a special emphasis on the former (Strobl et al., 2020a). Based on this reasoning, we propose the following hypothesis:

Hypothesis 1: The relationship between EO and family firm financial performance is stronger when stewardship practices related to entrepreneurial leadership are high.

Environmental Dynamism and EO in Family Firms

Environmental dynamism describes environmental contexts characterized by high rates of change and uncertainty (Miller and Friesen, 1983). Customer expectations, production, and service trends vary constantly, and competitors' actions are typically unpredictable. Despite posing survival challenges (Bettis and Hitt, 1995), the dynamic nature of these environments opens up business opportunities. Here, strategies focusing on innovation are beneficial because they provide external strategic fit (Miller, 1983; Miller and Friesen, 1983). Not responding correctly to environmental changes (a misalignment between strategy and environment) has been shown to be a major driver of organisational failure (Miles and Snow, 1994). In dynamic environments, firms must respond quickly and proactively. "A strong proactive tendency gives a firm the ability to anticipate change or needs in the marketplace and be among the first to act on them" (Lumpkin and Dess, 2001: 445). The uncertainty associated with environmental dynamism diminishes managerial capabilities to predict future outcomes and the impacts of events (Khandwalla, 1977). Consequently, dynamic environments also require risk-taking: in dynamic environments, "performance should be highest for those firms that have an orientation for pursuing new opportunities because they have a good

fit between their strategic orientation and the environment" (Wiklund and Shepherd, 2005). EO is exactly this kind of strategic posture (Covin and Slevin, 1991). This is also the case for family firms (Casillas et al., 2011) because they display a greater EO under conditions of environmental dynamism (Cruz and Nordqvist, 2012), obviously seeking external strategic fit. Thus, as dynamism in the environment establishes an external strategic fit with an entrepreneurial posture, we expect that family firms displaying a high EO will perform better in these environmental contexts. We therefore posit:

Hypothesis 2: The relationship between EO and family firm financial performance is stronger when environmental dynamism is high.

Configuring Entrepreneurial Leadership, Environmental Dynamism, and EO in Family Firms

There is general evidence that external strategic fit with dynamic environments requires capabilities related to adaptation and change (Beer et al., 2005). In family firms, stewardship behaviour such as entrepreneurial leadership help leverage the external strategic fit between firm strategy and the environment. In family firms with a stewardship orientation, "the family and employees interact to create a setting where ideas about how to monitor and respond to changes in the environment can flourish" (Zahra et al., 2008: 1049). Consequently, a stewardship orientation establishes the necessary strategic flexibility (Zahra et al., 2008) which is necessary to cope with uncertain environmental conditions (Shimizu and Hitt, 2004). Thus, there will be a reinforcing effect between stewardship practices related to entrepreneurial leadership and environmental dynamisms in entrepreneurially oriented family firms. A stewardship orientation is based on stewardship practices nurturing trust, participation, identification, and ownership among family firm members, which help introduce rapid changes and initiatives to react to changing environmental circumstances (Zahra et al., 2008). Along with its transformational and participative components, entrepreneurial leadership also involves these stewardship practices (Fries et al., 2021) as it focuses on creating an open environment, empowering organisational members from all ranks to engage in opportunity recognition (Ireland et al., 2003; Renko et al., 2015; Zahra et al., 2008). Stewardship practices related to entrepreneurial leadership strengthen the trust,

commitment, and intrinsic motivation of all family firm members to contribute to family firm goals. These practices furthermore minimise resistance to change, fostering information and knowledge exchange and collaboration, and can even increase explorative employee behaviour, yielding possible solutions for coping with environmental change (Eddleston et al., 2011; Zahra et al., 2008). Stewardship practices related to entrepreneurial leadership as a result strengthen the growth- and change-related dynamic capabilities of family firms (Fries et al., 2021; Howorth et al., 2010; Koryak et al., 2015) which are crucial for prevailing in dynamic environments. Stewardship practices related to entrepreneurial leadership increase the strategic flexibility of family firms in two ways: They increase the capacity to come up with viable solutions to external change, as well as the capacity to implement organisational change.

Based on these arguments, we expect the outcomes of EO in family firms to depend on how well the firm's strategy aligns with environmental conditions (external strategic fit), as well as on family firms' capabilities to leverage potential benefits from this alignment through suitable leadership based on entrepreneurial stewardship principles. Consequently, when pursuing entrepreneurial strategies related to risk-taking, innovation, and proactiveness, family firms will perform best when environmental conditions are dynamic, and stewardship practices related to entrepreneurial leadership are highly developed. While environmental dynamism will provide an abundance of opportunities for exploitation (Miller, 1983; Miller and Friesen, 1983; Chirico and Baù, 2014), entrepreneurial leadership prevents family firms from paternalism-induced inertia (Chirico and Nordqvist, 2010) by turning family and non-family employees into entrepreneurial stewards seeking to grow the family's assets (Eddleston et al., 2011; Fries et al., 2021; Zahra et al., 2008; Discua Cruz et al., 2013). We therefore propose:

Hypothesis 3: The EO-financial performance relationship depends on configurations of environmental dynamism and stewardship practices related to entrepreneurial leadership. We propose that environmental dynamism and stewardship practices related to entrepreneurial leadership have a reinforcing effect on the EO-financial performance relationship in family firms.

Method

Sample and Procedure

We selected a sample of family SMEs from three Western Austrian provinces (Vorarlberg, Tyrol, and Salzburg) to investigate the proposed hypotheses. The relationships of interest are likely to be more pronounced in an SME context where ownership and management are usually aligned within the owner family, and where family values and behaviour play a key role (Chrisman et al., 2012; Zahra et al., 2008; Howorth et al., 2010; Kotlar and De Massis, 2013). Western Austria is characterized by a strong SME and family business culture. The region provided a suitable context for this investigation because it is relatively homogeneous in terms of its institutional and legal setting, economic activity, population, income, and infrastructure. This also minimised the probability of contextual biases in our results, as a family firm's "environmental context (that is, cultural, demographic, economic, educational, legal and social) can shape family firm formation, diversity and development" (Howorth et al., 2010: 440). In general, 99.7 percent of all businesses in Austria are SMEs, which contribute 61.8 percent to its total added value (European Commission, 2019). These mostly micro businesses (<10 employees) employ about 68.3 percent (roughly 1.9 million people) of the Austrian workforce (European Commission, 2019). 19.8 percent of the businesses employing 20.8 of the Austrian SME workforce are located in Western Austria (WKO, 2018a). Roughly 90 percent of all firms in Austria are family firms (Haushofer, 2013; WKO, 2018b). Even after excluding the number of solo self-employed entrepreneurs, 54 percent of all businesses in Austria are family firms (Haushofer, 2013). The percentage of family businesses among Austrian SMEs decreases with business size: while 88 percent of micro businesses (<10 employees) and 78 percent of small businesses (10 to 49 employees) are family firms, only 63 percent of medium-sized businesses (50 to 249 employees) are family firms (Haushofer, 2013). These businesses are largely active in the wholesale and retail, tourism, construction, handicraft, and manufacturing industries (Haushofer, 2013; WKO, 2018b).

In Austria, data on family firm SMEs is not systematically captured in official databases. Moreover, the databases that are available do not provide insights into leadership or strategy-related variables such as entrepreneurial leadership and EO. This

is why a survey design was chosen to collect the data, with the questionnaire addressed to family firm managers in leading positions such as owners and CEOs. These key informants are deemed to be the most knowledgeable in SMEs when it comes to reporting on issues such as EO (Cruz and Nordqvist, 2012; Engelen et al., 2015). In cooperation with the Austrian Chamber of Commerce, which provided a randomly selected sample of potential family businesses that agreed to be contacted, the study's sample was created via online research of family SMEs in Western Austria. Overall, 1,056 family firms were identified, and an email link to an online questionnaire was sent to them in June 2014. To ensure that only top managers answered the survey, the respondents had to report their position in the firm (96 percent of respondents were managers with ownership stakes or CEOs, while four percent held other top managerial positions in their respective firms). Two email reminders were sent out four and eight weeks later, and one reminder phone call was made after 12 weeks to complete the data collection in September 2014.

The sample selection process proved difficult in terms of pre-selecting family businesses, particularly in light of the lack of a generally agreed upon family business definition. Recent research mapping family business definitions from the literature highlights that family ownership-, control-, and management related-criteria are key for distinguishing family from non-family firms (Hernández-Linares et al., 2018; Diaz-Moriana et al., 2019). However, the sampling population is highly sensitive to whether these criteria are applied in a broader or a narrower sense (Howorth et al., 2010), and researchers need to carefully select criteria according to their research goals (Diaz-Moriana et al., 2019; Howorth and Robinson, 2020). As this research focused on specific cultural values related to family businesses such as leadership behaviour, we applied a narrower definition guaranteeing family influence on these variables. Following propositions by Westhead and Cowling (1998), a set of introductory questions collected information to distinguish family from non-family firms. We included firms in the sample that perceived themselves as being a family firm (Westhead and Cowling, 1998), and where ownership and management were aligned in the same families, the majority ownership stake (>50%) was held by these families, and at least two family members were actively involved in the daily operations of the firm (Miller et al., 2007; Westhead and Cowling, 1998). The alignment of ownership and

management guaranteed that the strategic control of the business lies within the family (Kotlar and De Massis, 2013). The active involvement of at least two family members ensured that family values play an important role in their daily business, and that the investigated businesses were not lone founder businesses, which might differ in their behaviour compared to other family firms (Miller et al., 2007; Kotlar and De Massis, 2013). A final sample of 162 completed questionnaires was achieved after deleting incomplete responses, the responses not meeting our family business definition, and responses from large firms (firms with more than 250 employees (European Commission, 2020)). Firms that did not employ people were also deleted. The overall response rate of 15.34 percent is slightly above the average response rate (10 to 12 percent) usually reported in comparable research (Sieger et al., 2013). Table 1 reports the sample characteristics.

--- please insert table 1 about here ---

Measurement

Existing scales were adapted to the study context to ensure the validity and reliability of the measurement of the variables of interest. The original scales were developed in English, which is why a translation-back translation procedure by two university academics was done to guarantee the validity and reliability of the German survey. A pre-test among six academics and two family business executives was also conducted, yielding minor adjustments regarding the survey's wording and structure.

As outlined above, we followed the unidimensional conceptualisation of EO (Covin and Slevin, 1989; Miller, 1983; Wales et al., 2019), with EO conceptualised as "the intersection of, or shared variance among, these dimensions. In the absence of covariation among innovativeness, risk taking, and proactiveness the presence of an EO […] should not be claimed" (Covin and Wales, 2012: 680). The scale by Covin and Slevin (1989) was adapted. The scale measures the dimensions of risk-taking (sample item: "In general, the top managers of my firm have a strong proclivity for low-risk projects (with normal and certain rates of return)" vs. "… for high-risk projects (with chances of very high returns)"), proactivity (sample item: "In general, the top managers of my firm have a strong tendency to 'follow the leader' in introducing new products or ideas" vs. "… to be ahead of other competitors in introducing novel ideas or products")

and innovativeness (sample item: “Changes in product or service lines have been mostly of a minor nature” vs. “… have usually been quite dramatic”) with three items each on a seven-point semantic differential.

Entrepreneurial leadership was assessed with eight items adapted from Renko et al. (2015). In line with similar survey research investigating SME leadership (Engelen et al., 2015), key informants were asked to evaluate leadership behaviour by agreeing or disagreeing with the eight items (sample item: “As a manager I am able to push my followers to challenge the current ways we do business”) along a seven-point scale. Although there is evidence that managers inflate their own ratings (Podsakoff and Organ, 1986), and subordinates deliver more accurate assessments of leadership behaviour, we opted for the self-rating approach. First, top managers are the more appropriate choice for measuring the other variables of interest in this study. Second, research also shows that self-reporting measures can generally capture leadership behaviour (Fleenor et al., 2010), especially when it is not about measuring the exact *level* of behaviour, but detecting a certain *pattern* of it (Kim and Yukl, 1995). In this research, we sought to investigate whether respondents displayed a certain pattern of entrepreneurial leadership behaviour. Further, we expected potential biases stemming from inflated self-perceptions to be normally distributed.

Environmental dynamism was adapted from Jansen et al. (2006). This scale contains five items (sample item: “In our market, the volumes of products and services to be delivered change fast and often”). The respondents rated their level of agreement based on a seven-point scale.

Because financial performance data on all the SMEs in our sample was not publicly available, we relied on subjective performance evaluations; there is evidence that this measurement approach does not bias results (Rauch et al., 2009). Following Lumpkin and Dess (2001), we measured financial performance by asking respondents to rate the development of their businesses’ return on sales, gross profit, and net profit over a period of three years in comparison to their competitors on a seven-point scale (from 1 = low performer, to 7 = high performer).

Because contextual factors from multiple levels might affect family firm performance (McKenny et al., 2013), we also included several control variables on the organisational, family, and environmental levels. On the organisational level, we

controlled for potential firm size effects in terms of number of employees (Strobl et al., 2020b). Further, following Zahra et al. (2008), we controlled for firm age in terms of the number of years since the firm was founded. Because research points to the importance of family firm diversity (Howorth et al., 2010), we also included controls on the family level. Family business research highlights potential generational influences in family firms (Cruz and Nordqvist, 2012), which is why a dummy variable was included, controlling for whether the founder generation was in charge of the business. Following Zahra et al. (2008), we controlled for the overall number of family members working in the business, as well as for the number of non-family members actively involved in management (Arzubiaga et al., 2018). Based on previous research investigating family firm performance (Casillas and Moreno, 2010; Kallmuenzer et al., 2018), we controlled for family influence (item: "In my family business, family members exert control over the firm's strategic decisions") using a seven-point scale (from 1 = strongly disagree, to 7 = strongly agree). This item was adapted from Berrone et al. (2012). We also controlled for potential influences from family membership of the CEO (Arzubiaga et al., 2018). In terms of the environmental level, we included industry dummies to control for industry-specific performance effects (Kallmuenzer et al., 2018).

Results

Bias Testing

Survey research entails the possibility of facing potential biases such as common method bias (Podsakoff et al., 2003). To avoid this, we guaranteed anonymity and confidentiality to the survey respondents (Podsakoff et al., 2012) Furthermore, as described before, measures were adapted from existing research and pre-tested. Finally, the main variables of interest were measured with multi-item measures (Harrison et al., 1996). Besides these a priori measures, we also investigated the data for common method bias.

First, we validated our dependent variable with archival performance data. For a subsample of 32 firms, we were able to access basic balance sheets and calculate return on assets (ROA). Our survey took place halfway through the year 2014, so we gathered data for the period 2011 to 2014 to match our self-report measure covering performance

in comparison to competitors over a three-year period. We calculated averages for the periods 2011 to 2013 ($ROA_{2011\ to\ 2013}$), 2012 to 2014 ($ROA_{2012\ to\ 2014}$), and 2011 to 2014 ($ROA_{2011\ to\ 2014}$). We found highly significant correlations of 0.46*** for $ROA_{2011\ to\ 2013}$ ($p = 0.009$), 0.43** for $ROA_{2012\ to\ 2014}$ ($p = 0.013$), and 0.46*** for $ROA_{2011\ to\ 2014}$ ($p = 0.008$). These results are comparable to other research (de Luque et al., 2008) and provide evidence that our measure effectively captures actual financial performance. Second, we controlled for common method bias in the data, applying a Harman's one-factor test (Podsakoff and Organ, 1986); all items were included in an exploratory factor analysis. As no single factor (the analysis yielded 11 factors) emerged, and the first factor (AVE = 23.35 percent) explained less than 50 percent of data variance, common method bias was no serious issue for the analysis. In addition, we included a common method factor in a confirmatory factor analysis (CFA) when we evaluated the measurement model (see the section on the measurement model below). We compared the standardized regression weights of the model with and the model without the common method factor. As the differences of the regression weights were very small ($\Delta < 0.2$), common method bias again turned out to not be a serious issue (Serrano Archimi et al., 2018). Finally, following Armstrong and Overton (1977), we also controlled for a possible non-response bias by testing for differences between early respondents (the first 20 percent) and late ones (the last 20 percent). This analysis yielded no significant results.

Measurement Model

A CFA was performed in AMOS 26.0.0 to investigate the measurement model. To achieve acceptable model fit, one item each of the EO dimensions of innovativeness and proactiveness, as well as entrepreneurial leadership had to be excluded. Furthermore, two items of environmental dynamism were deleted. As all measures were based on reflective measurement models, excluding these items should not pose any problems (Jarvis et al., 2003). In line with Miller's (1983) original conceptualisation when using Covin and Slevin's (1989) scale, we measured EO as a Type-I second-order construct (Covin and Wales, 2012). Thus, the reflective first-order constructs of innovativeness (AVE = 0.58; CR = 0.74), risk-taking (AVE = 0.66; CR = 0.85), and proactiveness (AVE = 0.59; CR = 0.74) were reflective dimensions of the second-order EO construct

(AVE = 0.67; CR = 0.85). The confirmatory factor analysis provided empirical support for this view of the EO construct. Following Kreiser et al. (2002), a considerable degree of co-variance was given when the dimensions showed correlations of 0.5 or higher. The CFA revealed correlations of 0.69 between innovativeness and risk-taking, 0.73 between innovativeness and proactiveness, and 0.49 between risk-taking and proactiveness. All other latent variables of our analysis were reflective first-order constructs.

The final CFA resulted in an acceptable model fit (χ^2 = 295.59 (p = 0.000). χ^2/df = 1.84; TLI = 0.91; CFI = 0.93; RMSEA = 0.07 (90% CI = 0.059 – 0.085); SRMR = 0.06). The significant χ^2 value should not be seen as problematic, as this is almost always the case in social sciences (Iacobucci, 2010). Furthermore, all the survey items displayed high standardized loadings (0.65 – 0.98) on the proposed latent variables. Also, the values for average variance extracted (AVE) (0.58 – 0.86) and construct reliability (CR) (0.74 – 0.95) were well above common thresholds (Bagozzi and Yi, 1988). Confirming discriminant validity (Fornell and Larcker, 1981), the squared roots of the AVEs exceeded the respective latent variable correlations (see Table 2). The multi item measures were collapsed into single variables by calculating the item means.

--- please insert table 2 about here ---

Hypothesis Testing

For hypotheses testing, we conducted a series of hierarchical ordinary least squares (OLS) regressions in SPSS 26.0.0. This approach is appropriate and effective for investigating multilevel influences on family firm performance (Yu et al., 2019; Chirico et al., 2011) when the independence of error terms assumption is plausible (McKenny et al., 2013). This was the case for this study, as it involved no nested data gathered from multiple sources. In addition, this analysis approach was chosen over a structural equation modelling (SEM) approach for several reasons (Tinsley and Brown, 2000; Byrne, 2013). First, we were interested in the configurations of independent variables which are tested using higher-order interaction terms. Interaction terms often cause problems in SEM, and most SEM software packages are not able to handle higher order interactions. Second, this research focussed on predicting one dependent variable (i.e., financial performance), i.e. we were not interested in researching a complex model

structure. Third, the research was based on a comparably small sample size, which often causes problems when applying SEM.

Empirically, three-way interactions capture configurational perspectives (Wiklund and Shepherd, 2005). Because the analysis involved interaction terms, all predicting variables were standardized (Aiken and West, 1991). To understand the true relationships between independent variables, their interactions among each other and the dependent variables, and their main effects, two-way, and three-way interaction terms must be considered together (Aguinis et al., 2016; Brambor et al., 2006). The significance of the term with the highest order determines the relationships between the variables constituting this term and the dependent variable (Dawson and Richter, 2006). Thus, the influences of EO, entrepreneurial leadership, and environmental dynamism, as well as their two-way interactions depend on the significance of their three-way interaction.

Model 1 in Table 3 regresses the control variables on financial performance. Variance inflation factors (VIF) were calculated to investigate potential multicollinearity issues. All VIFs were well below the proposed thresholds (O'Brien, 2007), and the reported OLS regression weights were unstandardized (see Table 3). We found a significant and positive effect for the control variable of the handicraft industry ($\beta = 0.24^{*}$; T statistic = 1.85). The family-specific control variables did not show any significant effects on financial performance. In Model 2, the direct effects of EO, entrepreneurial leadership, and environmental dynamism were added. Model 2 shows that on average, EO ($\beta = 0.28^{***}$; T statistic = 2.69) and entrepreneurial leadership ($\beta = 0.29^{***}$; T statistic = 2.70) displayed significant effects on financial performance in Austrian family SMEs. Environmental dynamism ($\beta = 0.12$; T statistic = 1.13) did not exert a significant effect. In Model 2, the effect of the control variable handicraft industry increased in significance ($\beta = 0.25^{**}$; T statistic = 2.07). Including the main effects in the regression considerably increased the explained variance of financial performance of Austrian family SMEs to 15 percent (adjusted R^2). Model 3 additionally contained the two-way interaction terms between EO, entrepreneurial leadership, and environmental dynamism. The model shows that, on average, all interaction terms were insignificant. The results for the control handicraft industry remained nearly the same as in Model 2 ($\beta = 0.27^{**}$; T statistic = 2.31). Model 4 includes the three-way interaction

term between EO, entrepreneurial leadership, and environmental dynamism. In this model, the two-way interaction term between EO and entrepreneurial leadership (β = 0.20*; T statistic = 1.70) became significant at the 10% level. The regression weight for the three-way interaction term between EO, entrepreneurial leadership, and environmental dynamism was negative and significant (β = -0.26**; T statistic = -2.41). Model 4 as a result provides evidence that the true nature of the influence of EO on financial performance in Austrian family SMEs is conditional on the configuration of both entrepreneurial leadership and environmental dynamism. Also, in Model 4, only the control handicraft industry (β = 0.27**; T statistic = 2.31) displayed significant influences. However, the controls for the number of non-family members involved (β = -0.17; T statistic = -1.62), family influence (β = -0.16; T statistic = -1.54), and firm age (β = 0.15; T statistic = 1.54) were close to becoming significant at the 10% level. The analysis showed that the explained variance of financial performance of Austrian family SMEs increases significantly (F-Change = 5.81**); in Model 4, this was to about 19 percent (adjusted R^2). The configurational model as a result provided the highest explanatory power.

--- please insert table 3 about here ---

Figure 1 visualizes how the combination of different levels (low/high = ± 1 standard deviation) of entrepreneurial leadership and environmental dynamism influence the EO-financial performance link in Austrian family SMEs. Figure 1 shows that the EO-financial performance link turned out to be positive when at least one of the contextual factors was present on a high level. In situations where entrepreneurial leadership and environmental dynamism were simultaneously present at low levels, Figure 1 indicates a negative relationship between EO and financial performance for Austrian family SMEs. Overall, situations where high EO was facilitated through high levels of entrepreneurial leadership and environmental dynamism led to the highest financial performance for the sampled businesses.

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However, the strength (slope) of the relationship between EO and performance did not differ significantly between situations where the contextual factors were both present on a high level, compared to situations where only one of the contextual factors was present on a high level (see Table 4). Only the slope for the relationship between

EO and performance under conditions of low entrepreneurial leadership and low environmental dynamism differed significantly from the other situations (see Table 4).

--- please insert table 4 about here ---

We also conducted a conditional effects analysis using Hayes' (2013) Model 3 in the process macro (version 3.4) for SPSS. Table 5 presents the path coefficients for the relationship between EO and financial performance at varying levels (low/high = ± 1 standard deviation) of entrepreneurial leadership and environmental dynamism. A path coefficient is considered significant when the respective confidence interval does not include zero. Figure 2 presents a graphic illustration of Table 5.

--- please insert table 5 about here ---

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Figure 2 shows that the marginal effect of EO was negative under conditions of low entrepreneurial leadership and low environmental dynamism. With increasing environmental dynamism, this effect turned positive when environmental dynamism was present at medium levels. However, the 95 percent confidence interval showed that these effects were not significant. The relationship between EO and financial performance in Austrian family SMEs became positive and significant when entrepreneurial leadership shifted from low to medium, and environmental dynamism was high at the same time ($\beta = 0.36^{**}$; T statistic = 2.24). The marginal effect remained positive when entrepreneurial leadership increased from medium to high. This effect became insignificant depending on the level of environmental dynamism. The effect turned insignificant for the first time when entrepreneurial leadership was medium and environmental dynamism went from medium to low ($\beta = 0.14$; T statistic = 0.62). The effect became significant again as entrepreneurial leadership went from medium to high. Interestingly, the marginal effect of EO became insignificant at the 5% level again when entrepreneurial leadership and environmental dynamism were high ($\beta = 0.30^{*}$; T statistic = 1.66). Roughly 52 percent of the observations fell into the significant regions of the three-way interactions.

We also investigated how the interaction between EO and entrepreneurial leadership develops under changing levels of environmental dynamism. Figure 3 illustrates these findings by presenting the marginal effects of the EO entrepreneurial

leadership interaction, and the respective 95 percent confidence interval for observed values of environmental dynamism. The interaction term showed a strong positive and significant marginal effect on financial performance in Austrian family SMEs, which decreased with increasing levels of environmental dynamism (see Figure 3). The effect turned insignificant at medium to high levels of environmental dynamism. For the interaction between EO and entrepreneurial leadership, roughly 36 percent of the observations were significant.

--- please insert figure 3 about here ---

This analysis indicates two important issues. First, for a positive and significant link between EO and financial performance in Austrian family SMEs, entrepreneurial leadership needs to meet a certain threshold, which according to this study lies between low and medium levels of entrepreneurial leadership (see Figure 2). Reaping the benefits of entrepreneurial top-level decision-making requires a minimum level of entrepreneurial stewardship-oriented leadership behaviour in Austrian family SMEs. Second, how effective entrepreneurial leadership actually is in Austrian family SMEs depends on environmental dynamism. Environmental dynamism appears to be more beneficial at low and medium levels of entrepreneurial leadership (see Figure 3). We reason that environmental dynamism is a double-edged sword: while dynamic environments provide Austrian family SMEs with business opportunities, and consequently an external strategic fit with EO, they at the same time increase volatility and unpredictability. As can be seen under conditions of low and medium levels of entrepreneurial leadership, dynamic environments can make up for shortcomings in entrepreneurial stewardship-related leadership behaviour by providing sufficient opportunities. However, when Austrian family firms display well-developed stewardship related to entrepreneurial leadership that strengthens opportunity recognition and exploitation, the negative effect associated with environmental dynamism becomes visible (see Figure 3). We as a result find partial support for H1 and H3. While we find the EO-financial performance link in Austrian family SMEs to be dependent upon configurations of entrepreneurial leadership and environmental dynamism, we do not find a reinforcing effect. H2 is therefore not supported.

Discussion

Our work adds to the research demonstrating that the relationship between EO and performance is neither simple nor linear (Tang et al., 2008). The present study also shows that Austrian family SMEs can only financially profit from EO when well-developed stewardship practices related to entrepreneurial leadership are in place, or when environmental conditions provide an abundance of entrepreneurial opportunities. For family SMEs with an entrepreneurial posture, the highest family firm performance is observed among configurations of high stewardship practices related to entrepreneurial leadership and high environmental dynamism. The lowest family firm performance is observed among configurations of low stewardship practices related to entrepreneurial leadership and low environmental dynamism. So in family SMEs, the non-linearities observed between EO and performance (Tang et al., 2008) might partly stem from specific configurations of internal stewardship-related elements, and external environmental factors providing or not providing strategic fit with EO.

In line with stewardship theory (Howorth and Robinson, 2020), internal implementation mechanisms of strategy in terms of stewardship-related entrepreneurial leadership turn out to be crucial for family firms. We derive from this that entrepreneurial leadership is an effective stewardship practice that enables entrepreneurially oriented family SMEs to successfully develop an effective stewardship culture (Eddleston et al., 2011; Zahra et al., 2008; Howorth and Robinson, 2020) and overcome trade-offs between paternalism and entrepreneurship, which potentially lead to family firm inertia (Chirico and Nordqvist, 2010), and are a sign of ineffective stewardship. Entrepreneurial leadership strongly builds on stewardship principles such as employee empowerment and participation, trust, and support, as well as visionary and intellectual stimulation (Fries et al., 2021; Zahra et al., 2008). Entrepreneurial leadership enables all members of family SMEs to recognize entrepreneurial opportunities and secure resources for exploiting them. Thus, entrepreneurial leadership turns family and non-family employees into stewards who intrinsically strive to reach the family firm's entrepreneurial goals and create wealth for the family and the business. It furthermore prevents family SMEs from falling into a "care taking" mode (Koiranen, 2003) which often grants little autonomy and freedom to employees to engage in opportunity recognition and exploitation, and fails to develop

the necessary level of sensitivity and attentiveness to available opportunities (Carmeli et al., 2010).

We have shown that family SMEs in Austria need to exert at least medium levels of stewardship-related entrepreneurial leadership to transform EO into financial performance. "The entrepreneurial leader's passion, creativity, and vision motivate others to experiment and learn for themselves" (Renko et al., 2015: 70). As such, we provide evidence that stewardship practices related to entrepreneurial leadership in the form of leading subordinates to challenging current situations, risk, and creativity are a precondition for successful entrepreneurial endeavours by Austrian family SMEs.

In situations when the entire family business is entrepreneurially alert due to their entrepreneurial stewardship orientation (Discua Cruz et al., 2013), entrepreneurial opportunities can even be detected in stable environments where such opportunities are rare. Our research points out how this is the most conducive context for family SMEs to efficiently turn an entrepreneurial posture into performance. Stable environments can also provide external strategic fit with EO when family firms manage to overcome the potential downsides of their cultural peculiarities by adopting suitable strategy implementation mechanisms in the form stewardship practices related to entrepreneurial leadership. This is an important contribution because although entrepreneurial leadership has been identified as a leadership style prevalent in family firms (Fries et al., 2021; Kansikas et al., 2012), performance implications and boundary conditions have not yet been investigated. Consequently, we show that in entrepreneurially oriented family SMEs, entrepreneurial stewardship practices are crucial for establishing strategic fitness (Beer et al., 2005). These findings extend the literature on entrepreneurial stewardship (Discua Cruz et al., 2013) which has focused on explaining collective entrepreneurial dynamics in family teams and their business portfolios. We add to this literature in two ways. First, introducing a leadership perspective to entrepreneurial stewardship, we show that individual family assets are nurtured most effectively when stewardship behaviour focusses on expanding collective entrepreneurial dynamics beyond the family to include non-family members. Second, we extend this literature by showing how the implementation of strategic decision making related to EO is dependent on entrepreneurial stewardship behaviour. In this respect, entrepreneurial leadership is not only an effective, but a necessary stewardship practice for overcoming

the shortcomings of family firms in terms of introducing EO, such as risk aversion (Gómez-Mejía et al., 2007), temporal fluctuations of proactiveness (De Massis et al., 2014), or unfavourable attitudes towards innovation (Bergfeld and Weber, 2011).

Generally, the strength of the EO-financial performance link in family SMEs depends on configurations of internal and external factors, whereas extreme configurations (low-low vs. high-high) undermine the EO-financial performance link. This finding indicates that environmental dynamism cannot be viewed solely as a blessing for small and medium-sized family firms, even when they have established an entrepreneurial stewardship culture conducive to EO. This finding is to some extent surprising, although not unprecedented in research on small businesses. Wiklund and Sheperd (2005) provide similar insights for small businesses in general and, based on a resource-based view, highlight that differentiation in terms of unique resource endowments might explain this finding. More specifically, they conclude that "EO can be used to overcome environmental and resource constraints" (Wiklund and Shepherd, 2005: 85). Our study points towards a slightly different interpretation. For Austrian family SMEs, environmental dynamism appears to be a curse and a blessing at the same time. While it provides external strategic fit to EO, and facilitates reaping the financial benefits of EO, it does so only for family SMEs with low to medium stewardship practices related to entrepreneurial leadership. Consequentially, weakly developed stewardship cultures grant less autonomy and freedom to employees and non-leading family members to express and follow ideas and act as stewards. Here the abundance of opportunities provided in dynamic environmental conditions makes up for a weak stewardship culture and leadership practices inconsistent with EO. However, as soon as family firms manage to align their business culture to EO and overcome cultural issues associated with the paternalism-entrepreneurship paradox (Chirico and Nordqvist, 2010), the downsides of dynamic environments become visible. Varying customer expectations, production, and service trends, as well as unpredictable competitor actions diminish the managerial capabilities to predict the future outcomes and impacts of events (Khandwalla, 1977), and even pose survival challenges (Bettis and Hitt, 1995) despite the fact that stewardship practices related to entrepreneurial leadership increase the family firm's strategic flexibility (Zahra et al., 2008).

The following managerial implications can be drawn based on this discussion. First, entrepreneurial family SMEs must strive for a true or entrepreneurial stewardship culture that stimulates entrepreneurship focussing on family firm prosperity. Promoting a trusting, open, and cooperative environment as well as strengthening psychological ownership and commitment are important when doing this. Processes, communication, and reward structures should stimulate entrepreneurial leadership among managers. Second, family firm leadership should actively engage in challenging well-worn paths, as our findings indicate that directing individuals on all organisational levels towards opportunity recognition and exploitation will pay off financially. Third, family SMEs should implement environmental scanning or monitoring systems to stimulate both an ongoing discussion of environmental changes and proactive action. Although environmental scanning is crucial, the information gathered then needs to be discussed in cross-organisational teams involving family and non-family employees to avoid misinterpretations while benefitting from the identification of entrepreneurial opportunities throughout the organisation. This holds true for small and medium-sized family firms where non-family members' participation in strategic management processes is scarce, but provides valuable insight from outside of the family (Tabor et al., 2018; Arzubiaga et al., 2018). Thus, family firm managers should make use of strategic fitness processes that align the organisation to strategy, and stimulate change-related strategizing and strategy implementation (Beer et al., 2005).

Our study is not without limitations; these nevertheless provide a solid foundation for future research initiatives. We applied a narrow definition of family firms, mainly capturing behaviour in the form of what has been described as "family entrepreneurial teams" (Howorth and Robinson, 2020). The findings therefore might not be generalizable to situations with less active family involvement in management. Further, different types of family firms follow different strategies and goals (Westhead and Howorth, 2007). Testing the robustness of our findings using broader family business definitions and contrasting family firm types with each other might therefore provide important insight into key boundary conditions. Our sample was limited to Western Austria, which is characterized by a specific institutional and cultural context that is driven by established family SMEs, particularly in the rural mountainous regions found there. There is evidence that institutional and cultural contexts might influence family

firm behaviour, and also form EO (Lee and Peterson, 2000; Gupta and Levenburg, 2010; Howorth et al., 2010; Wales et al., 2019). It would be especially interesting to investigate stewardship behaviour in emerging economies, as most research so far has concentrated on developed economies in Western countries. Further, in emerging economies, environmental dynamics are characterised through greater economic, political, and social instabilities, making strategizing even more difficult due to greater uncertainty (Hoskisson et al., 2000). Configurational research on family firms in emerging economies could account and compensate for this by e.g. investigating how dynamic political environments (e.g., rapidly and frequently changing rules and regulations) impact entrepreneurial practices. Summing up, while this study delivers valuable insights for family SMEs from developed institutional settings, especially from German-speaking Europe, future research should try to replicate and extend these findings within other cultures and regions (Yu et al., 2019).

Moreover, our study followed a survey design relying on single key informants. This procedure makes sense in terms of increasing sample size, efficiency, and feasibility. Despite employing countermeasures to mitigate potential biases (Podsakoff et al., 2012; Harrison et al., 1996), they cannot be excluded entirely. Further, although the research design and approach to analysis "can be used effectively to test multilevel models" (McKenny et al., 2013: 598), we acknowledge that the investigation of multilevel factors influencing family firm performance would benefit from more complex approaches to sampling and data collection (i.e. multiple respondents and data sources) as well as other multilevel analysis approaches (McKenny et al., 2013). Therefore, future studies should prove the robustness of the results by applying other methods and using different data.

Conclusion

This study investigates ideas from literature about how effective or true stewardship behaviour is entrepreneurial in nature (Howorth and Robinson, 2020; Zahra et al., 2008; Miller et al., 2013). Focusing on the effectiveness of actual stewardship behaviour related to entrepreneurial leadership and its environmental boundary conditions, we extend existing research on the EO-performance link in family firms. Previous research relied heavily on proxies of stewardship behaviour such as the family membership of

executives or family involvement (Bauweraerts et al., 2021; Casillas et al., 2010). While such variables might be indicative of family commitment, this is a necessary, albeit insufficient condition of entrepreneurial capabilities (Zahra et al., 2008). Committed family leaders following actual stewardship practices such as entrepreneurial leadership create sufficient and productive conditions within these circumstances. Consequently, by focusing on actual entrepreneurial stewardship practices (Discua Cruz et al., 2013), this research makes an important contribution by offering an explanation for contradictions revealed in the extant literature regarding whether family firms are entrepreneurial in nature or not (Casillas et al., 2011; Hernández-Linares and López-Fernández, 2018; Gimenez-Fernandez et al., 2021). Introducing a leadership perspective to the current debate, this research points out how the existence of entrepreneurial stewardship practices embedding all (family and non-family) members of family SMEs into collective entrepreneurial dynamics provides answers to this question.

The current study also contributes to the research investigating environmental influences on family SMEs (Casillas et al., 2011; Chirico and Baù, 2014; Yu et al., 2019). Following a stewardship perspective (Davis et al., 1997), our results provide evidence that while entrepreneurial configurations indicating the strategic fitness in family SMEs (EO coupled with stewardship practices related to entrepreneurial leadership) provide coping mechanisms for dynamism in the environment, they do not completely circumvent the disadvantages that accompany dynamism. While overall family SMEs still achieved the highest financial performance in situations where an EO was facilitated through stewardship practice related to entrepreneurial leadership and high environmental dynamism, the EO performance link itself turned out to be weaker under such circumstances. Consequently, environmental dynamism is a double-edged sword, both facilitating and impeding the transformation of EO into family SME performance. While environmental dynamism provides entrepreneurial opportunities for family SMEs, it also involves survival challenges, making predictions difficult as a result (Bettis and Hitt, 1995; Khandwalla, 1977). These challenges become visible once family SMEs are perfectly aligned internally in terms of entrepreneurial stewardship-related leadership and strategic decision making. This adds to existing research on EO and environmental dynamism in family firms (Casillas et al., 2010; Yu et al., 2019), as well as in general terms (Wiklund and Shepherd, 2005), by providing a more fine-

grained understanding of how environmental dynamism influences entrepreneurial configurations in family SMEs.

References

Aguinis H, Edwards JR and Bradley KJ (2016) Improving Our Understanding of Moderation and Mediation in Strategic Management Research. *Organizational Research Methods* 20(4): 665-685.

Aiken LS and West SG (1991) *Multiple regression: Testing and interpreting interactions.* Newbury Park, London, New Delhi: Sage.

Armstrong JS and Overton TS (1977) Estimating Nonresponse Bias in Mail Surveys. *Journal of Marketing Research* 14(3): 396-402.

Arzubiaga U, Kotlar J, De Massis A, et al. (2018) Entrepreneurial orientation and innovation in family SMEs: Unveiling the (actual) impact of the Board of Directors. *Journal of Business Venturing* 33(4): 455-469.

Bagozzi RP and Yi Y (1988) On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Science* 16(1): 74-94.

Bauweraerts J, Pongelli C, Sciascia S, et al. (2021) Transforming entrepreneurial orientation into performance in family SMEs: Are nonfamily CEOs better than family CEOs? *Journal of Small Business Management*. DOI: 10.1080/00472778.2020.1866763. 1-32.

Beer M, Voelpel SC, Leibold M, et al. (2005) Strategic Management as Organizational Learning: Developing Fit and Alignment through a Disciplined Process. *Long Range Planning* 38(5): 445-465.

Bergfeld M-MH and Weber F-M (2011) Dynasties of innovation: highly performing German family firms and the owners' role for innovation. *International Journal of Entrepreneurship and Innovation Management* 13(1): 80-94.

Berrone P, Cruz C and Gomez-Mejia LR (2012) Socioemotional Wealth in Family Firms:Theoretical Dimensions, Assessment Approaches, and Agenda for Future Research. *Family Business Review* 25(3): 258-279.

Bettis RA and Hitt MA (1995) The New Competitive Landscape. *Strategic Management Journal* 16: 7-19.

Brambor T, Clark WR and Golder M (2006) Understanding Interaction Models: Improving Empirical Analyses. *Political Analysis* 14(1): 63-82.

Byrne BM (2013) *Structural Equation Modeling With AMOS.* New York: Routledge.

Calabrò A, Santulli R, Torchia M, et al. (2021) Entrepreneurial Orientation and Family Firm Performance: The Moderating Role of TMT Identity-Based and Knowledge-Based Faultlines. *Entrepreneurship Theory and Practice* 45(4): 838-866.

Carmeli A, Gelbard R and Gefen D (2010) The importance of innovation leadership in cultivating strategic fit and enhancing firm performance. *The Leadership Quarterly* 21(3): 339-349.

Casillas JC and Moreno AM (2010) The relationship between entrepreneurial orientation and growth: The moderating role of family involvement. *Entrepreneurship & Regional Development* 22(3-4): 265-291.

Casillas JC, Moreno AM and Barbero JL (2010) A Configurational Approach of the Relationship Between Entrepreneurial Orientation and Growth of Family Firms. *Family Business Review* 23(1): 27-44.

Casillas JC, Moreno AM and Barbero JL (2011) Entrepreneurial orientation of family firms: Family and environmental dimensions. *Journal of Family Business Strategy* 2(2): 90-100.

Chirico F and Baù M (2014) Is the Family an "Asset" or "Liability" for Firm Performance? The Moderating Role of Environmental Dynamism. *Journal of Small Business Management* 52(2): 210-225.

Chirico F and Nordqvist M (2010) Dynamic capabilities and trans-generational value creation in family firms: The role of organizational culture. *International Small Business Journal* 28(5): 487-504.

Chirico F, Sirmon DG, Sciascia S, et al. (2011) Resource orchestration in family firms: investigating how entrepreneurial orientation, generational involvement, and participative strategy affect performance. *Strategic Entrepreneurship Journal* 5(4): 307-326.

Chrisman JJ, Chua JH, Pearson AW, et al. (2012) Family Involvement, Family Influence, and Family–Centered Non–Economic Goals in Small Firms. *Entrepreneurship Theory and Practice* 36(2): 267-293.

Covin JG and Slevin DP (1989) Strategic management of small firms in hostile and benign environments. *Strategic Management Journal* 10(1): 75-87.

Covin JG and Slevin DP (1991) A Conceptual Model of Entrepreneurship as Firm Behavior. *Entrepreneurship: Theory & Practice* 16(1): 7-25.

Covin JG and Wales WJ (2012) The Measurement of Entrepreneurial Orientation. *Entrepreneurship Theory and Practice* 36(4): 677-702.

Cruz C and Nordqvist M (2012) Entrepreneurial orientation in family firms: a generational perspective. *Small Business Economics* 38(1): 33-49.

Davis JH, Schoorman FD and Donaldson L (1997) Toward a Stewardship Theory of Management. *The Academy of Management Review* 22(1): 20-47.

Dawson JF and Richter AW (2006) Probing Three-Way Interactions in Moderated Multiple Regression: Development and Application of a Slope Difference Test. *Journal of Applied Psychology* 91(4): 917-926.

de Luque MS, Washburn NT, Waldman DA, et al. (2008) Unrequited Profit: How Stakeholder and Economic Values Relate to Subordinates' Perceptions of Leadership and Firm Performance. *Administrative Science Quarterly* 53(4): 626-654.

De Massis A, Chirico F, Kotlar J, et al. (2014) The Temporal Evolution of Proactiveness in Family Firms:The Horizontal S-Curve Hypothesis. *Family Business Review* 27(1): 35-50.

Dess GG, Ireland RD, Zahra SA, et al. (2003) Emerging Issues in Corporate Entrepreneurship. *Journal of Management* 29(3): 351-378.

Diaz-Moriana V, Hogan T, Clinton E, et al. (2019) Defining Family Business: A Closer Look at Definitional Heterogeneity. In: Memili E and Dibrell C (eds) *The Palgrave Handbook of Heterogeneity among Family Firms*. Cham: Springer International Publishing, pp.333-374.

Discua Cruz A, Howorth C and Hamilton E (2013) Intrafamily Entrepreneurship: The Formation and Membership of Family Entrepreneurial Teams. *Entrepreneurship Theory and Practice* 37(1): 17-46.

Eddleston KA (2008) Commentary: The Prequel to Family Firm Culture and Stewardship: The Leadership Perspective of the Founder. *Entrepreneurship Theory and Practice* 32(6): 1055-1061.

Eddleston KA, Kellermanns FW and Zellweger TM (2011) Exploring the Entrepreneurial Behavior of Family Firms: Does the Stewardship Perspective Explain Differences? *Entrepreneurship Theory and Practice* 36(2): 347-367.

Engelen A, Gupta V, Strenger L, et al. (2015) Entrepreneurial Orientation, Firm Performance, and the Moderating Role of Transformational Leadership Behaviors. *Journal of Management* 41(4): 1069-1097.

European Commission (2019) 2019 SBA Fact Sheet - Austria. European Commission.

European Commission (2020) *SME definition*. Available at: https://ec.europa.eu/growth/smes/sme-definition_en (accessed 17.02.2020).

Fayolle A, Basso O and Bouchard V (2010) Three levels of culture and firms' entrepreneurial orientation: A research agenda. *Entrepreneurship & Regional Development* 22(7-8): 707-730.

Fleenor JW, Smither JW, Atwater LE, et al. (2010) Self–other rating agreement in leadership: A review. *The Leadership Quarterly* 21(6): 1005-1034.

Fornell C and Larcker DF (1981) Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18(February): 39-50.

Fries A, Kammerlander N and Leitterstorf M (2021) Leadership Styles and Leadership Behaviors in Family Firms: A Systematic Literature Review. *Journal of Family Business Strategy* 12(1): 100374.

Gimenez-Fernandez EM, Beukel K, Tyler BB, et al. (2021) Should we patent it or keep it a secret? The moderating role of proactive orientation in family versus non-family SMEs. *International Small Business Journal*. 39(5): 450-473.

Gómez-Mejía LR, Haynes KT, Núñez-Nickel M, et al. (2007) Socioemotional Wealth and Business Risks in Family-controlled Firms: Evidence from Spanish Olive Oil Mills. *Administrative Science Quarterly* 52(1): 106-137.

Gupta V and Levenburg N (2010) A Thematic Analysis of Cultural Variations in Family Businesses: The CASE Project. *Family Business Review* 23(2): 155-169.

Gupta V, MacMillan IC and Surie G (2004) Entrepreneurial leadership: developing and measuring a cross-cultural construct. *Journal of Business Venturing* 19(2): 241-260.

Harrison DA, McLaughlin ME and Coalter TM (1996) Context, Cognition, and Common Method Variance: Psychometric and Verbal Protocol Evidence. *Organizational Behavior and Human Decision Processes* 68(3): 246-261.

Haushofer C (2013) Familienunternehmen in Österreich: Eine aktuelle Studie der WKO. In: Wirtschaftspolitik WÖS (ed). Vienna.

Hayes AF (2013) *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-based Approach.* New York, NY: Guilford Press.

Hernández-Linares R and López-Fernández MC (2018) Entrepreneurial Orientation and the Family Firm: Mapping the Field and Tracing a Path for Future Research. *Family Business Review* 31(3): 318-351.

Hernández-Linares R, Sarkar S and Cobo MJ (2018) Inspecting the Achilles heel: a quantitative analysis of 50 years of family business definitions. *Scientometrics* 115(2): 929-951.

Hoskisson RE, Eden L, Lau CM, et al. (2000) Strategy in Emerging Economies. *Academy of Management Journal* 43(3): 249-267.

Howorth C and Robinson N (2020) *Family Business.* London: Routledge.

Howorth C, Rose M, Hamilton E, et al. (2010) Family firm diversity and development: An introduction. *International Small Business Journal* 28(5): 437-451.

Iacobucci D (2010) Structural equations modeling: Fit Indices, sample size, and advanced topics. *Journal of Consumer Psychology* 20(1): 90-98.

Ireland RD, Hitt MA and Sirmon DG (2003) A Model of Strategic Entrepreneurship: The Construct and its Dimensions. *Journal of Management* 29(6): 963-989.

Jansen JJP, Bosch FAJVD and Volberda HW (2006) Exploratory Innovation, Exploitative Innovation, and Performance: Effects of Organizational Antecedents and Environmental Moderators. *Management Science* 52(11): 1661-1674.

Jarvis CB, MacKenzie SB and Podsakoff PM (2003) A Critical Review of Construct Indicators and Measurement Model Misspecification in Marketing and Consumer Research. *Journal of Consumer Research* 30(2): 199-218.

Kallmuenzer A, Strobl A and Peters M (2018) Tweaking the entrepreneurial orientation–performance relationship in family firms: the effect of control mechanisms and family-related goals. *Review of Managerial Science* 12(4): 855–883.

Kansikas J, Laakkonen A, Sarpo V, et al. (2012) Entrepreneurial leadership and familiness as resources for strategic entrepreneurship. *International Journal of Entrepreneurial Behavior & Research* 18(2): 141-158.

Khandwalla PN (1977) Some Top Management Styles, Their Context and Performance. *Organization & Administrative Sciences* 7(4): 21-45.

Kim H and Yukl G (1995) Relationships of managerial effectiveness and advancement to self-reported and subordinate-reported leadership behaviors from the multiple-linkage mode. *The Leadership Quarterly* 6(3): 361-377.

Koiranen M (2003) Understanding the Contesting Ideologies of Family Business: Challenge for Leadership and Professional Services. *Family Business Review* 16(4): 241-250.

Koryak O, Mole KF, Lockett A, et al. (2015) Entrepreneurial leadership, capabilities and firm growth. *International Small Business Journal* 33(1): 89-105.

Kotlar J and De Massis A (2013) Goal Setting in Family Firms: Goal Diversity, Social Interactions, and Collective Commitment to Family-Centered Goals. *Entrepreneurship Theory and Practice* 37(6): 1263-1288.

Kreiser PM, Marino LD and Weaver KM (2002) Assessing the Psychometric Properties of the Entrepreneurial Orientation Scale: A Multi-Country Analysis. *Entrepreneurship: Theory & Practice* 26(4): 71-93.

Lee SM and Peterson SJ (2000) Culture, entrepreneurial orientation, and global competitiveness. *Journal of World Business* 35(4): 401-416.

Lee Y, Howe M and Kreiser PM (2019) Organisational culture and entrepreneurial orientation: An orthogonal perspective of individualism and collectivism. *International Small Business Journal* 37(2): 125-152.

Leitch CM and Volery T (2017) Entrepreneurial leadership: Insights and directions. *International Small Business Journal* 35(2): 147-156.

Lindow CM, Stubner S and Wulf T (2010) Strategic fit within family firms: The role of family influence and the effect on performance. *Journal of Family Business Strategy* 1(3): 167-178.

Lumpkin GT and Dess GG (1996) Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance. *The Academy of Management Review* 21(1): 135-172.

Lumpkin GT and Dess GG (2001) Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing* 16(5): 429-451.

McKenny AF, Payne GT, Zachary MA, et al. (2013) Multilevel Analysis in Family Business Studies. In: Melin L, Nordqvist M and Sharma P (eds) *The SAGE Handbook of Family Business*. Thousand Oaks: Sage.

Miles RE and Snow CC (1994) *Fit, failure and the hall of fame: How companies succeed or fail.* New York: The Free Press.

Miller D (1983) The Correlates of Entrepreneurship in Three Types of Firms. *Management Science* 29(7): 770-791.

Miller D and Friesen PH (1983) Strategy-making and environment: The third link. *Strategic Management Journal* 4(3): 221-235.

Miller D, Le Breton-Miller I, Lester RH, et al. (2007) Are family firms really superior performers? *Journal of Corporate Finance* 13(5): 829-858.

Miller D, Minichilli A and Corbetta G (2013) Is family leadership always beneficial? *Strategic Management Journal* 34(5): 553-571.

Mussolino D and Calabrò A (2014) Paternalistic leadership in family firms: Types and implications for intergenerational succession. *Journal of Family Business Strategy* 5(2): 197-210.

Northouse PG (2015) *Leadership: Theory and Practice.* Thousand Oaks, CA: SAGE Publications Inc.

O'Brien RM (2007) A Caution Regarding Rules of Thumb for Variance Inflation Factors. *Quality & Quantity* 41(5): 673-690.

Pearson AW and Marler LE (2010) A Leadership Perspective of Reciprocal Stewardship in Family Firms. *Entrepreneurship Theory and Practice* 34(6): 1117-1124.

Podsakoff PM, MacKenzie SB, Lee J-Y, et al. (2003) Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88(5): 879-903.

Podsakoff PM, MacKenzie SB and Podsakoff NP (2012) Sources of Method Bias in Social Science Research and Recommendations on How to Control It. *Annual Review of Psychology* 63(1): 539-569.

Podsakoff PM and Organ DW (1986) Self-Reports in Organizational Research: Problems and Prospects. *Journal of Management* 12(4): 531-544.

Rauch A, Wiklund J, Lumpkin GT, et al. (2009) Entrepreneurial Orientation and Business Performance: An Assessment of Past Research and Suggestions for the Future. *Entrepreneurship Theory and Practice* 33(3): 761-787.

Renko M, El Tarabishy A, Carsrud AL, et al. (2015) Understanding and Measuring Entrepreneurial Leadership Style. *Journal of Small Business Management* 53(1): 54-74.

Renko M, Tarabishy AE, Carsrud AL, et al. (2012) Entrepreneurial Leadership and the Family Business. In: Carsrud AL and Brännback M (eds) *Understanding Family Businesses: Undiscovered Approaches, Unique Perspectives, and Neglected Topics*. New York, Dordrecht, Heidelberg, London: Springer, pp.169-184.

Serrano Archimi C, Reynaud E, Yasin HM, et al. (2018) How Perceived Corporate Social Responsibility Affects Employee Cynicism: The Mediating Role of Organizational Trust. *Journal of Business Ethics* 151(4): 907-921.

Shimizu K and Hitt MA (2004) Strategic flexibility:Organizational preparedness to reverse ineffective strategic decisions. *Academy of Management Perspectives* 18(4): 44-59.

Sieger P, Zellweger T and Aquino K (2013) Turning Agents into Psychological Principals: Aligning Interests of Non-Owners through Psychological Ownership. *Journal of Management Studies* 50(3): 361-388.

Strobl A, Bauer F and Matzler K (2020a) The impact of industry-wide and target market environmental hostility on entrepreneurial leadership in mergers and acquisitions. *Journal of World Business* 55(2): 100931.

Strobl A, Matzler K, Nketia BA, et al. (2020b) Individual innovation behavior and firm-level exploration and exploitation: how family firms make the most of their managers. *Review of Managerial Science* 14(4): 809 - 844.

Tabor W, Chrisman JJ, Madison K, et al. (2018) Nonfamily Members in Family Firms: A Review and Future Research Agenda. *Family Business Review* 31(1): 54-79.

Tang J, Tang Z, Marino LD, et al. (2008) Exploring an Inverted U–Shape Relationship between Entrepreneurial Orientation and Performance in Chinese Ventures. *Entrepreneurship Theory and Practice* 32(1): 219-239.

Tinsley HEA and Brown SD (2000) *Handbook of applied multivariate statistics and mathematical modeling.* San Diego: Academic Press.

Wales WJ (2016) Entrepreneurial orientation: A review and synthesis of promising research directions. *International Small Business Journal* 34(1): 3-15.

Wales WJ, Gupta VK, Marino L, et al. (2019) Entrepreneurial orientation: International, global and cross-cultural research. *International Small Business Journal* 37(2): 95-104.

Wales WJ, Gupta VK and Mousa F-T (2013) Empirical research on entrepreneurial orientation: An assessment and suggestions for future research. *International Small Business Journal* 31(4): 357-383.

Wales WJ, Kraus S, Filser M, et al. (2021) The status quo of research on entrepreneurial orientation: Conversational landmarks and theoretical scaffolding. *Journal of Business Research* 128: 564-577.

Westhead P and Cowling M (1998) Family Firm Research: The Need for a Methodological Rethink. *Entrepreneurship Theory and Practice* 23(1): 31-56.

Westhead P and Howorth C (2007) 'Types' of private family firms: an exploratory conceptual and empirical analysis. *Entrepreneurship & Regional Development* 19(5): 405-431.

Wiklund J and Shepherd D (2005) Entrepreneurial orientation and small business performance: a configurational approach. *Journal of Business Venturing* 20(1): 71-91.

WKO (2018a) Unternehmen und Beschäftigte nach Bundesländern, Sektoren und Größenklassen. Wirtschaftskammer Österreich.

WKO (2018b) WKO-Analyse: Familienunternehmen in Österreich. Wirtschaftskammer Österreich.

Yu A, Lumpkin GT, Praveen Parboteeah K, et al. (2019) Autonomy and family business performance: The joint effect of environmental dynamism and national culture. *International Small Business Journal* 37(2): 153-185.

Zahra SA, Hayton JC, Neubaum DO, et al. (2008) Culture of Family Commitment and Strategic Flexibility: The Moderating Effect of Stewardship. *Entrepreneurship Theory and Practice* 32(6): 1035-1054.

Family Business Characteristics	
Family CEO	151
First generation in charge of business	44
Average number of non-family managers	0.47
Average number of employees	36.67
Revenue	
Up to 1 Mio. EUR	62
Up to 2 Mill. EUR	31
Up to 10 Mio. EUR	46
Up to 50 Mio. EUR	21
Up to 100 Mio. EUR	2
Industry*	
Wholesale	9
Retail	16
Consulting/IT	7
Tourism/Leisure	80
Transport/Logistics	8
Manufacturing	10
Handcraft	35
Other	14

*multiple answers possible (*n = 162*)

Table 1: Sample Characteristics.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(1) Financial Performance (AVE = 0.86; CR = 0.95)	*0.93*																	
(2) Entrepreneurial Orientation (AVE = 0.67; CR = 0.85)	0.36***	*0.82*																
(3) Entrepreneurial Leadership (AVE = 0.59; CR = 0.91)	0.32***	0.42***	*0.77*															
(4) Environmental Dynamism (AVE = 0.64; CR = 0.84)	0.21***	0.27***	0.22***	*0.80*														
(5) Firm size (no. of employees)	-0.00	0.10	-0.11	.16**	*1*													
(6) Company Age (no. of years)	0.08	0.04	-0.15*	0.18**	0.23***	*1*												
(7) Generation (first vs. later)	-0.00	0.05	0.09	-0.09	-0.25***	-0.41***	*1*											
(8) Family CEO	0.02	0.05	0.05	0.00	0.12	-0.01	0.17**	*1*										
(9) Non-family managers involved (no.)	-0.17*	-0.09	-0.15*	-0.09	0.04	0.11	-0.14*	-0.03	*1*									
(10) Family employees (no.)	0.11	0.01	-0.01	0.13*	0.38***	0.05	-0.18**	-0.06	-0.06	*1*								
(11) Family influence	0.06	0.13*	0.29***	0.28***	0.08	0.11	-0.06	0.00	-0.14*	0.15*	*1*							
(12) Wholesale	0.01	-0.07	0.05	-0.10	0.10	-0.02	0.03	0.07	-0.04	0.07	0.12	*1*						
(13) Retail	-0.02	-0.09	0.08	0.04	-0.10	-0.06	-0.06	-0.08	-0.01	0.03	-0.03	0.28***	*1*					
(14) Consulting/IT	-0.01	0.02	-0.01	-0.07	-0.02	-0.14*	0.21***	0.06	-0.05	-0.06	-0.07	-0.05	0.03	*1*				
(15) Tourism/Leisure	0.05	0.14*	0.13	0.15*	-0.10	0.05	-0.02	-0.03	-0.20**	0.03	0.12	-0.24***	-0.29***	-0.21***	*1*			
(16) Transport/Logistics	-0.06	-0.02	0.06	-0.02	0.04	-0.05	-0.08	0.06	0.39***	-0.01	-0.12	-0.06	-0.08	0.09	-.17**	*1*		
(17) Manufacturing	-0.03	-0.06	-0.29***	-0.01	0.45***	0.23***	-0.16**	0.07	0.16**	0.05	-0.02	0.05	-0.09	-0.06	-0.25***	-0.06	*1*	
(18) Handcraft	0.12	-0.07	-0.07	-0.10	-0.12	-0.01	-0.05	-0.04	-0.04	0.03	-0.1	-0.06	0.08	-0.11	-0.46***	-0.12	-0.07	*1*
Mean	4.65	4.17	5.86	5.04	36.67	59.17	0.27	0.93	0.47	3.30	6.28	0.06	0.10	0.04	0.49	0.05	0.06	0.22
S.D.	1.22	1.17	1.01	1.32	47.26	55.27	0.45	0.25	1.352	1.62	1.22	0.23	0.23	0.20	0.50	0.22	0.24	0.41

Note: Square root of AVE in italics on the diagonal; Significant at *p<.1; **p<.05; ***p<.01; S.D. = Standard Deviation

Table 2: Variable Correlations, Means and Standard Deviations

Financial Performance (n = 162)	**Model 1**				**Model 2**				**Model 3**				**Model 4**			
	β	S.D.	T Statistic	VIF	β	S.D.	T Statistic	VIF	β	S.D.	T Statistic	VIF	β	S.D.	T Statistic	VIF
Constant	4.65***	0.10	47.10		4.67***	0.09	51.71		4.57***	0.11	43.59		4.56***	0.10	44.27	
Wholesale	0.05	0.11	0.50	1.27	0.09	0.10	0.90	1.31	0.08	0.10	0.82	1.31	0.07	0.10	0.74	1.31
Retail	0.01	0.11	0.06	1.28	-0.03	0.10	-0.34	1.32	0.00	0.10	-0.04	1.36	-0.02	0.10	-0.22	1.37
Consulting/IT	0.06	0.12	0.54	1.26	0.07	0.11	0.65	1.27	0.07	0.11	0.66	1.27	0.04	0.10	0.38	1.29
Tourism/Leisure	0.18	0.15	1.20	2.29	0.12	0.14	0.91	2.31	0.15	0.14	1.06	2.43	0.11	0.14	0.78	2.47
Transport/Logistics	0.02	0.12	0.16	1.39	-0.03	0.11	-0.26	1.41	0.02	0.11	0.14	1.50	0.00	0.11	0.03	1.51
Manufacturing	0.06	0.12	0.46	1.58	0.15	0.11	1.37	1.64	0.16	0.11	1.41	1.66	0.11	0.11	0.96	1.72
Handcraft	0.24*	0.13	1.85	1.78	0.25**	0.12	2.07	1.78	0.27**	0.12	2.31	1.81	0.25**	0.12	2.12	1.83
Non-family managers involved (no.)	-0.16	0.11	-1.41	1.37	-0.11	0.10	-1.04	1.39	-0.14	0.11	-1.31	1.43	-0.17	0.10	-1.62	1.45
Family influence	0.04	0.10	0.41	1.10	-0.11	0.10	-1.08	1.27	-0.11	0.11	-1.01	1.44	-0.16	0.11	-1.54	1.51
Generation (first vs. later)	0.06	0.12	0.47	1.42	0.02	0.11	0.21	1.43	0.05	0.11	0.49	1.51	0.04	0.11	0.37	1.51
Family CEO	0.03	0.10	0.28	1.09	0.01	0.09	0.07	1.09	-0.02	0.09	-0.17	1.12	-0.02	0.09	-0.21	1.12
Family employees (no.)	0.13	0.11	1.15	1.30	0.12	0.10	1.19	1.36	0.14	0.10	1.36	1.38	0.13	0.10	1.31	1.38
Company Age (no. of years)	0.13	0.11	1.18	1.29	0.15	0.10	1.49	1.29	0.15	0.10	1.43	1.30	0.15	0.10	1.54	1.30
Firm size (no. of employees)	-0.05	0.13	-0.37	1.68	-0.12	0.12	-1.03	1.75	-0.09	0.12	-0.73	1.81	-0.11	0.12	-0.92	1.82
Entrepreneurial Orientation (EO)					0.28***	0.11	2.69	1.39	0.24**	0.11	2.11	1.57	0.23**	0.11	2.11	1.57
Entrepreneurial Leadership (EL)					0.29***	0.11	2.70	1.54	0.39***	0.13	2.91	2.39	0.44***	0.13	3.31	2.46
Environmental Dynamism (ED)					0.12	0.11	1.13	1.33	0.14	0.11	1.33	1.38	0.28**	0.12	2.37	1.82
EO*EL									0.13	0.12	1.15	1.70	0.20*	0.12	1.70	1.80
EO*ED									0.08	0.10	0.77	1.44	0.13	0.10	1.27	1.51
EL*ED									0.08	0.08	1.00	1.50	-0.08	0.11	-0.74	2.50
EO*EL*ED													-0.26**	0.11	-2.41	2.49
F-Value	0.84				2.64***				2.51***				2.76***			
F-Change	0.84				10.27***				1.60				5.81**			
R^2	0.08				0.25				0.27				0.30			
Adjusted R^2	-0.02				0.15				0.16				0.19			

Note: Significant at **p<.1*; ***p<.05*; ****p<.01;* Reference categories for the dummy variables are as follows: Industry (Wholesale, Retail, Consulting/IT, Tourism/Leisure, Transport/Logistics, Manufacturing, Handcraft) = Other; Generation = Later Generation; Family CEO = Non-Family CEO;

Table 3: Results OLS Regression

Pair of slopes	T Statistic for Slope Difference	p-value for Slope Difference
(1) and (2)	-0.98	0.33
(1) and (3)	-0.44	0.66
(1) and (4)	2.12	0.04
(2) and (3)	0.45	0.65
(2) and (4)	2.58	0.01
(3) and (4)	2.41	0.02

Table 4: Results Simple Slope Analysis.

Entrepreneurial Leadership	Environmental Dynamism	Coefficient Entrepreneurial Orientation → Financial Performance	S.D.	95% Confidence Interval		T Statistic
				LL	UL	
Low	Low	-0.39	0.26	-0.90	0.12	-1.53
Low	Medium	0.01	0.19	-0.35	0.38	0.06
Low	High	0.41*	0.24	-0.06	0.89	1.71
Medium	Low	0.09	0.14	-0.19	0.36	0.62
Medium	Medium	0.22**	0.11	0.00	0.44	2.01
Medium	High	0.36**	0.16	0.04	0.67	2.24
High	Low	0.56***	0.20	0.17	0.96	2.82
High	Medium	0.43***	0.14	0.16	0.71	3.09
High	High	0.30*	0.18	-0.06	0.66	1.66

Note: Significant at *$p<.1$; **$p<.05$; ***$p<.01$

Table 5: Conditional Effects Analysis

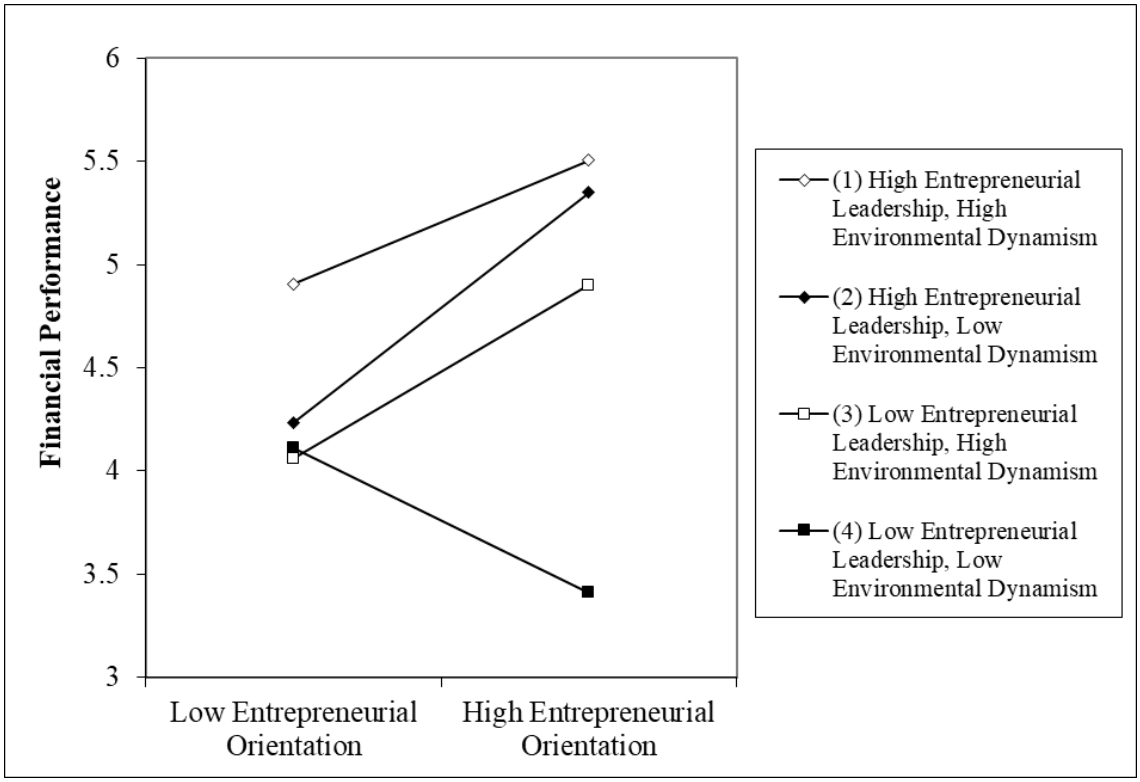

Figure 1: The Relationships between Entrepreneurial Orientation, Entrepreneurial Leadership, Environmental Dynamism and Financial Performance in Family Firms.

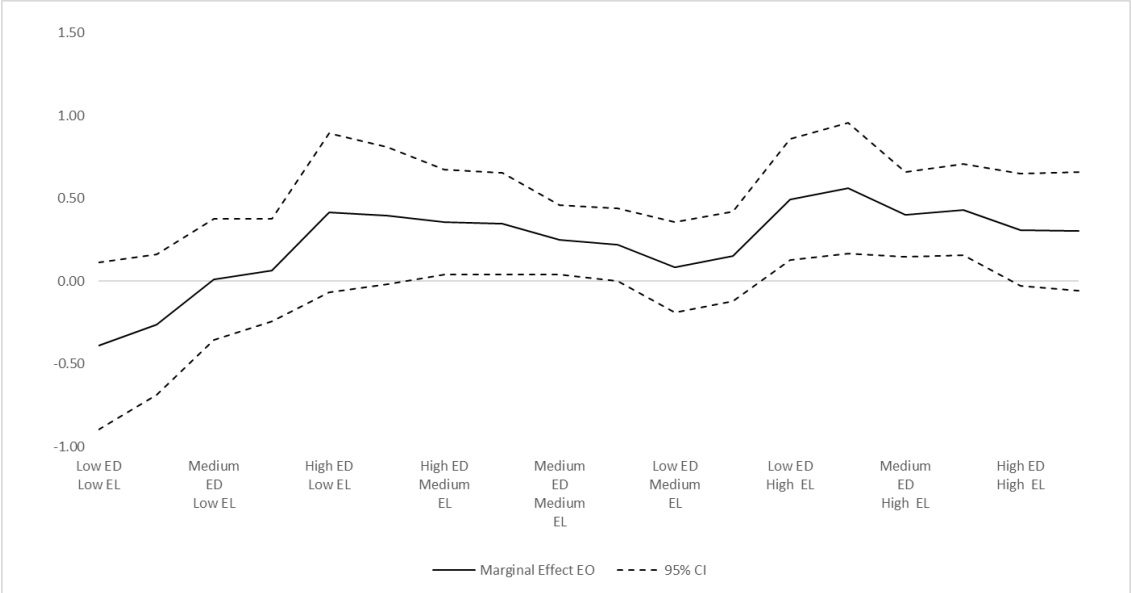

Figure 2: The Marginal Effect of EO on Financial Performance under varying levels of Entrepreneurial Leadership and Environmental Dynamism.

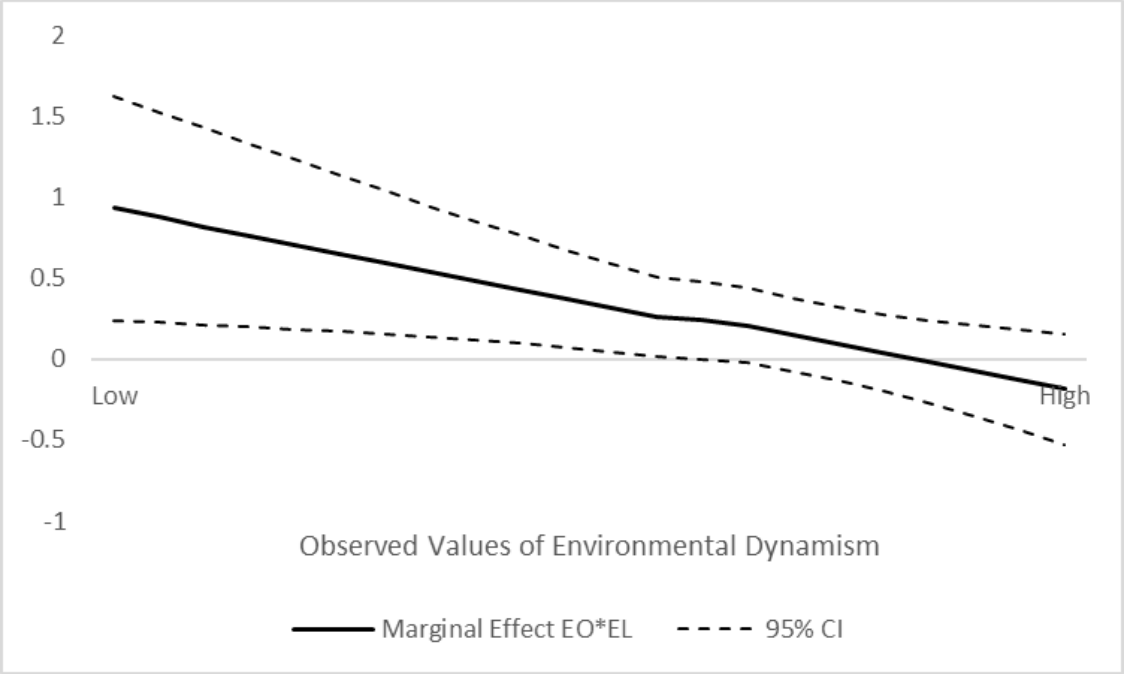

Figure 3: The Marginal Effect of the Interaction between EO and Entrepreneurial Leadership on Financial Performance under varying levels of Environmental Dynamism.