The impact of board of directors' characteristics on the internationalization of family SMEs

THE IMPACT OF BOARD OF DIRECTORS' CHARACTERISTICS ON THE INTERNATIONALIZATION OF FAMILY SMEs

Pongelli, C., Majocchi, A., Bauweraerts, J., Sciascia, S., Caroli, M., & Verbeke, A.

(Forthcoming, 2023).

Journal of World Business, 58(2), 101412 (**Accepted on November 19th, 2022**)

Abstract

Family small and medium-sized enterprises (SMEs) face both general bounded rationality challenges and a unique expression of bounded rationality in their internationalization process: the bifurcation bias, a concept aligned with modern transaction cost theory (TCT). We argue that efficient governance in family SMEs, and especially features of the Board of Directors' composition, can help alleviate bounded rationality. Complementing TCT with upper echelons theory (UET), we investigate which Board characteristics in family SMEs contribute to efficient governance and the ensuing strategy decisions. We focus specifically on strategy decisions in the internationalization sphere. Our empirical analysis of survey data from 328 Belgian family SMEs, operating out of a small open economy, reveals that family SMEs internationalize more if their Boards are 'open', 'inclusive', 'experienced' and 'active'. These Board characteristics, all reflective of efficient governance, i.e., providing the Board with the capacity to alleviate bounded rationality constraints, positively contribute to internationalization, especially (and perhaps paradoxically) when the family SME is managed by a CEO who is also a family member.

Keywords

Family Firms; Internationalization; Board of Directors; SMEs; Bounded Rationality, Bifurcation Bias.

1. Introduction

Over the past two decades, studies at the intersection between family business and international business have improved our understanding of the factors that make family firm internationalization unique (Arrègle et al., 2017). On the one hand, several studies have shown that family firms have specific features which tend to hinder internationalization, whether in terms of exports or foreign direct investments. Examples of features that can hinder

internationalization include, *inter alia*, the desire to keep family control over international operations, the reluctance to accept nonfamily expertise and external capital, as well as the supposed 'natural' tendency to play it safe in international markets, in order to safeguard the family's socio-emotional wealth (SEW) (e.g., Calabrò et al., 2017; Pongelli et al., 2021a; Ray et al., 2018). On the other hand, various studies have identified distinct characteristics of family firms such as the long-term commitment of family members to the company and the presence of robust social capital and reputation that could function as unique levers driving internationalization (e.g., Claver et al., 2009; Graves & Thomas, 2006).

Recent literature reviews have tried to synthesize the large body of work in this area, (e.g., Arrègle et al., 2021; Debellis et al., 2020; Pukall & Calabrò, 2014). These reviews highlight two main reasons – though also considering other parameters – for the contradictory empirical results produced so far. *First*, family business scholars have convincingly argued that family firms are heterogeneous and that sources of such heterogeneity should be taken into consideration: family firms with different attributes will tend to show different internationalization profiles and internationalization-related trajectories. *Second*, international business scholars have emphasized the need for a comprehensive theoretical framework that – beyond describing the minutiae of the internationalization process – can conceptualize in a parsimonious fashion the likely linkages between family firm governance features and internationalization levels and paths.

We build upon the recent evidence that corporate governance features are an important factor in differentiating family firms' approaches to internationalization (Arrègle et al., 2012; Calabrò et al., 2013; Calabrò et al., 2017). We think that this evidence permits further integration between family business and international business research, and we focus in particular on the role of the Board of Directors in this realm. We propose that specific characteristics of the Board and its members can contribute to reducing bounded rationality

challenges, including potentially dysfunctional decision-making hampering family firm internationalization.

The role of the Board is distinctive in the specific context of family SMEs for its critical function in balancing business and family-related goals (Basco & Voordeckers, 2015), but evidence of its impact on internationalization is still fragmented. This study aims to fill this gap by investigating which characteristics make the Board an efficient governance tool to foster internationalization. An efficient Board then means that its membership has particular features helping the family SME leverage its firm-specific advantages (FSAs) for internationalization purposes, while at the same time preventing such advantages from turning into obvious liabilities (Kano et al., 2021).

We develop a set of hypotheses building on modern Transaction Cost Theory (TCT) as developed in the contemporary international business literature (Verbeke & Kano 2016), whereby we devote special attention to one expression of bounded rationality critical to family firms, namely the 'bifurcation bias' (BB) (Kano & Verbeke, 2018). We complement this lens with insight from Upper Echelons Theory - UET (Hambrick & Mason, 1984) to identify Board members' attributes that can function more broadly as economizing mechanisms in family firms and promote internationalization.

Based on a sample of 328 Belgian family SMEs, we show empirically that Boards being (a) more *open*, meaning here, open towards nonfamily members; (b) more *inclusive*, meaning here, having women who serve on the Board; (c) more *experienced*, referring here to having experience in international markets; and (d) more *active*, i.e., having a high intensity of activities – will be associated with a higher level of internationalization. Higher internationalization is clearly not always 'better': context matters, but for family SMEs operating out of a small open economy at the center of a much larger regional market, as is the

case with Belgium in the European Union, internationalization reflects a willingness and ability to identify and engage with market opportunities across borders.

Our findings suggest that the presence of a Board with these characteristics is helpful to mitigate a variety of bounded rationality constraints that family SMEs typically encounter when contemplating entry into foreign markets. For instance, identifying and engaging with foreign market opportunities will be more likely, *ceteris paribus*, if Board membership is open to nonfamily members because of the choice-set of individuals that becomes available to scrutinize and drive these opportunities, including those further removed from the firm's heritage activities and locations. Moreover, openness to nonfamily members especially, reflects BB reduction. It reduces the propensity towards excessive emphasis on nurturing and safeguarding family-related resources, family heritage activities and related markets at the expense of nonfamily ones, thereby typically dismissing or underestimating the net benefits of internationalization.

Further, our results paradoxically show that the *economizing* role of these Board features, in terms of facilitating internationalization is stronger when the SME is managed by a family CEO. This individual might otherwise, in the absence of such Board characteristics, be expected to act as the anchor for maintaining BB. Our analysis thus highlights a complementary perspective to the now widely accepted governance view that hiring external managers in family firms (and having a nonfamily CEO) can be instrumental to higher international activity, whether in terms of its scale or geographic scope (Banalieva & Eddleston, 2011; D'Angelo et al., 2016).

Overall, our study augments current scholarly analysis at the intersection between family business and international business research by highlighting governance attributes that can mitigate both general bounded rationality constraints and more specific family-related preferences incompatible with efficiency goals (Hennart, 2007; Verbeke & Ciravegna, 2018).

On the one hand, our study contributes to general research on family business by indicating that efficient governance softens dysfunctional decision-making in family firms and can prevent the dark side of SEW from emerging (Kellermanns et al., 2012). On the other hand, we also provide actionable guidelines for family SMEs when crafting their governance structure to facilitate successful internationalization.

2. Theoretical background

2.1 Transaction cost theory and bifurcation bias in family SMEs

SMEs in general face a variety of bounded rationality challenges associated with internationalization. The question therefore arises which particular governance features could alleviate these general bounded rationality problems. Furthermore, SMEs controlled by an owning family may face an additional and unique bounded rationality challenge. Indeed, family firms are characterized by the presence of an 'idiosyncratic firm-level bundle of resources and capabilities' (Habbershon, Williams, & MacMillan, 2003, p. 451) emerging from the interaction between the family and the business system. This interaction does not necessarily have a negative connotation, but it can become a liability in the context of internationalization choices, namely if excessive emphasis is placed on family-related or heritage 'assets', including here family resources, family-heritage activities and markets, thereby leading to biased decisions (Verbeke & Kano, 2012). The observation that family-related resources, heritage activity types and markets may indiscriminately be preferred over nonfamily ones, with the latter ignored or considered to be *commodity-like* by default and devoid of value or strategic significance, is at the root of BB (Kano & Verbeke, 2017). Here, BB expresses a unique form of bounded rationality: the family firm intrinsically suffers from a positive affect bias that favors any resource, activity or market closely related to the family, and it tends to display a negative affect vis-à-vis resources, activities or markets unrelated to the family (Verbeke & Kano, 2012; Kano & Verbeke, 2017). The BB approach shares with SEW theory the idea that family firms'

decisions tend to be driven by family-related goals and, more specifically, by the need to preserve 'the stock of affect-related values that a family derives from its ownership position' although it might result in reduced performance (Gomez-Mejia et al., 2010, p. 225). While accepting that family-centered goals can be a fundamental driver of family firms' strategic decisions, the BB perspective helps identifying which governance mechanisms could contribute to mitigating the occurrence of the dysfunctional BB.

In the context of internationalization decisions, the BB concept can help integrate modern family business and international business thinking. Indeed, while sharing some general tenets with SEW – i.e., the unifying theoretical lens in family business research (Melin et al., 2014) – the BB approach derives directly from Transaction Cost Theory (TCT). The TCT perspective is an influential branch of comparative institutional analysis. Its main purpose is to identify which governance characteristics are the most efficient in particular contexts, as compared to alternative governance features (Narula & Verbeke, 2015). In the international business context that is fraught with cross-border distance challenges it is critical to use governance for economizing purposes, *inter alia* to reduce bounded rationality problems as a precondition for value creation (e.g., Hennart, 1994). For instance, the firm's choice to engage with a foreign market opportunity will largely depend on the capacity of its governance system to gain intelligence about this opportunity and to design a viable strategy meant to exploit such opportunity. Absent the governance-related capacity to gain intelligence and to act upon it, firms will tend to forego international business opportunities.

The TCT approach thus investigates which governance features are superior to other ones, to conduct particular types of transactions. Some governance features can support the firm in making better decisions. Below, we discuss general governance features that can be helpful in this respect, but it is also important to focus here on the one element that is unique to the family firm and is critical to its capacity for economizing on bounded rationality: what can be

done in terms of governance to economize on BB? If this bias remains unchecked, then the family firm is likely to prioritize areas close to family heritage resources, activities and markets at the expense of efficiency and value creation.

While some family-related goals seem compatible with economizing and associated value creation if they are instrumental to increase the firm's economic wealth, other family-related goals are just oriented to feeding parochial family desires and pursued at the expense of business-related goals (Kano & Verbeke, 2018). The BB approach sheds light on – and offers a deeper understanding of – this second situation, in this instance because the dysfunctional prioritization of family-related goals leads to discarding attractive international business opportunities unrelated to family resources or family heritage activities and markets. It is not the presence of family-related goals *per se* that will reduce internationalization but rather the ways in which family-related goals are pursued.

Paradoxically, if the family firm can overcome its intrinsic BB, then family-related resources can also be the basis for developing unique FSAs (Kano et al., 2021). Family managers, for example, develop idiosyncratic knowledge of the firm's products and industry thanks to their family membership from birth or longer tenure in the business (Patel & Fiet, 2011). In addition, they may also represent a loyal and committed human resource base that works towards the continuity of the business and the preservation of the family image vis-à-vis external stakeholders (Arrègle et al., 2007). In such instances, what is denoted in TCT as family-based human-asset specificity, can facilitate internationalization in different foreign markets, assuming that the FSAs deployed are non-location bound (Verbeke, Yuan, & Kano, 2020).

It is now widely accepted that various distinctive traits of family firms affect family business internationalization and the scholarly discussion has been moving its attention towards the inherent heterogeneity that characterizes family firms (Arrègle et al., 2017). But the question as to which specific governance features can help the family firm leverage its FSAs has

remained largely unanswered (Bennedsen & Foss, 2015). As a result, scholars have started investigating the economizing governance mechanisms that allow family firms to reduce bounded rationality and that promote value creation, building upon the family firms' strengths. For instance, Arrègle et al., (2012) have shown that family firms with significant minority (nonfamily) shareholders tend to have a larger scale and scope of internationalization. As another example, Kraus and colleagues identified supposedly optimal configurations of external (nonfamily) resources that allow family firms to internationalize successfully (Kraus et al., 2016). Finally, Majocchi et al. (2018), using a TCT approach and investigating a large sample of European SMEs, found that employing family managers with substantial international experience led to higher export levels.

This study complements the above stream of research by drawing attention to the role of the Board as an economizing mechanism. Building on studies recognizing the critical role of the Board for family SMEs' internationalization and integrating the above TCT approach with insights from UET (see the next section), we investigate how Board's characteristics could influence the internationalization of family SMEs.

2.2. The Board of Directors and Upper Echelon Theory

Corporate Boards are a critical governance mechanism responsible for overseeing the overall direction and functioning of the organization (Huse, 2007). Although the term 'governance' is sometimes associated with large, publicly listed firms, the literature on governance in private firms of smaller size has been mounting (Huse, 2000). This is a context in which board members are typically appointed for their knowledge and skills, rather than for meeting legal requirements (Garg et al., 2018; Westphal & Garg, 2021). The extant literature has grouped the manifold roles that a Board usually fulfills in the modern corporation into two main categories: 'service' and 'control' (Zattoni et al., 2015). First, Boards help shaping and

defining the firm's corporate strategy (which can be viewed as service) and second, on behalf of shareholders, Boards monitor the senior executives who implement corporate strategy, so that they would behave in the interest of the principals-shareholders (Dalton et al., 1998).

In the context of family firms, the monitoring role of the Board could be viewed as limited to the extent that ownership and control are concentrated in the hands of one or few families. However, a growing stream of literature has argued that family owners and managers can use their leading position within the firm to pursue family-related interests at the expense of both minority (nonfamily) shareholders and other stakeholders such as banks, suppliers or employees (Morck, Wolfenzon & Yeung, 2005). According to this view, in the specific context of family firms, Boards not only provide guidance and key relationships, but also control dysfunctional, internal family behaviors, such as nepotism, a typical manifestation of BB (Van Den Heuvel et al., 2006). In so doing, the Board performs *family-oriented* service and control tasks with the aim of keeping the family and the family business focused on pursuing wealth creation (Basco & Voordeckers, 2015).

The composition of the Board in a family SME can expand the knowledge and skills available to the firm, thus reducing bounded rationality and promoting more effective strategy decisions. A properly composed and well-functioning Board can have significant economizing effects in the context of internationalization, for instance by favoring rigorous assessment of international opportunities and measurement of international performance (Kano & Verbeke, 2018). The economizing on bounded rationality that the Board achieves based on its knowledge and skills, can help family firms make better international expansion decisions and safeguard against the dysfunctional prioritization of family-related goals.

Despite its relevance, research on the effects of the Board on family business internationalization is still fragmented. Investigating a sample of Italian listed family firms, Majocchi and Strange (2012) found that firms with a higher proportion of outside directors on

the Board tended to be associated with higher levels of internationalization. They argued that outside directors are a potential source of valuable expertise and competencies that promote internationalization. Similarly, Herrera-Echeverri et al. (2016) showed in a sample of Latin American family firms that those family firms with a higher participation of independent Board members were more likely to exhibit higher levels of exports. Furthermore, Calabrò and Mussolino (2013) showed a positive relationship between the presence of formal and informal governance mechanisms and international sales. Overall, these studies confirm the role performed by the Board as a powerful tool to mitigate the negative aspects of family control, while amplifying those specificities that represent the unique strengths of family firms. Our study includes a broad set of Board characteristics in support of alleviating both the general bounded rationality challenges facing SMEs and the more specific, dysfunctional effects arising from the prioritization of family-related goals. Here, we include Board diversity (including Board openness to nonfamily), Board international experience and the intensity of Board activities as catalysts for decision-making on internationalization in family SMEs.

UET provides particularly useful, complementary insight as to why the above-mentioned Board characteristics can be instrumental to reducing the above challenges that might hamper internationalization. According to UET, organizational outcomes – including the ones related to internationalization – are manifestations of executives' attributes (Hambrick & Mason 1984; Hambrick, 2007). From the UET perspective, senior leaders such as top-level executives and directors frame and make decisions based on their personal interpretations of the contextual situation the firm faces, and their interpretations depend on their experiences, values, and personalities (Hambrick, 2007). Therefore, decisions and actions reflect the idiosyncrasies of key decision-makers, partly captured by their demographic characteristics and traits (Carpenter et al., 2004). In our context, focused on Board features, the Board's overall

cognition will be shaped by its composition, and this will be a key driver of the firm's strategy, including internationalization decisions.

Visible traits such as family membership, gender and age can be viewed as proxies for executives' or Directors' cognitive frames, but Hambrick (2007), the most influential UET scholar, noted himself the incompleteness of this approach. Indeed, focusing only on these visible traits does not capture all dimensions that drive cognition and strategic decision making (Hambrick, 2007; Hambrick & Mason, 1984; Lawrence, 1997). Neely Jr et al. (2020), in a recent UET metacritique, have called for augmenting extant UET scholarship to include dimensions relevant to cognition that are missing at present. We respond to this call and argue that by combining UET with TCT, we can gain a better understanding of family SME internationalization. Here, TCT focuses on governance features that can alleviate both general bounded rationality challenges and more specific BB ones, with UET drawing attention to the importance of Board members' traits, experiences, knowledge and skills for the cognitive framing that will prevail in family SME Board functioning.

3. Hypotheses development

3.1. Board diversity

A key parameter we address is Board diversity. Higher diversity on the Board is not without challenges because it can generate separation among Board members with negative consequences for their communication, cohesion and perceived mutual reliability (Li & Hambrick, 2005). However, if diversity takes the form of *variety* (Harrison & Klein, 2007), it can generate positive effects for the firm. In the context of internationalization, diversity is deemed to increase the access to – and processing of – intelligence by Board members, and to improve their knowledge, skills and creativity (Basco & Voordeckers, 2015). Aligned with this view, we argue that the 'diversity stock' of knowledge and skills can boost internationalization

by promoting a broader range of perspectives, generating more strategic alternatives and increasing the search for relevant information (Rivas, 2012).

Diversity in the Board room could foster value-creating practices in support of internationalization through improved decision-making and wider resources available, and it could also reduce dysfunctional behaviors related to the presence of BB in family SMEs. Board diversity not only frames and improves cognition at the firm's strategic decision-making levels, but it can also affect external stakeholder cognition. It helps the family firm signal to the market that is has overcome family entrenchment and that it is exposing management to external and varied expertise. Diversity within the Board reinforces the Board members' service role of boundary spanners (Hillman & Dalziel, 2003), connecting the family to the outside community. These important signals given through the Board can help family firms improve the firm's image and lead to better relationships with primary stakeholders such as suppliers, partners and customers (Hillman et al., 2002), but also for instance employees and local institutions. Board diversity also allows amplifying extant family-related strengths in the realm of reputation and strong relationships with external actors (Deephouse & Jaskiewicz; 2013; Berrone et al., 2012). Thus, coopting external voices into family firms through Board governance can further promote family firms' reputation, provide value to critical stakeholders and potentially mitigate BB.

The first source of diversity we consider is the presence of external, nonfamily Board members. Nonfamily involvement in the Board is a crucial dimension of diversity in family firms. Enlisting external Board members supplies the family firm with a new and larger set of resources, such as Board members' experiences, know-how, skills, reputation and relationships, which might complement the controlling family's reservoir of heritage resources, activities and locations, and thereby support internationalization (Hitt et al., 2006). The need to open the Board to nonfamily members and to include a different perspective can be acute in family firms, namely if family members' relative homogeneity in terms of experience, approach to business,

and more generally their cognitive framing is particularly pronounced due to their common background. Nonfamily involvement on the Board can then provide 'heterogeneity in expertise, skills and information that can be valuable to internationalization efforts' (Arrègle et al. 2012, p. 1120). From a TCT perspective, better business intelligence and improved processing of this intelligence will ensue, as well as economizing on BB. Board diversity reflects how much family firm governance is open to external involvement and inclusive of 'alternative' voices in strategic decision-making. From an UET perspective, this inclusivity will also affect the Board's cognitive framing as a group.

Positive effects on internationalization can also occur when, in addition to including nonfamily members, the Board members differ on demographic attributes like gender and age (Ali et al., 2014; Bear et al., 2010). With respect to gender diversity, women have recently **been** recognized as 'unsung heroes' in family firms (Eddleston, & Sabil, 2019). It has been suggested that a female presence enhances the independence of the Board and improves corporate reputation (Brammer et al., 2009). Prior studies acknowledge that the involvement of women on the Board brings different values, distinct working styles, more wisdom and a positive atmosphere to the Boardroom (Huse & Solberg, 2006). This holds especially when women do not simply have a 'token' role, but their presence reflects at the very least a consistent minority (Torchia et al., 2011). Moreover, several studies also indicate that women may bring a more diverse network compared to their male counterparts as well as higher capabilities to maintain weak ties (Ibarra, 1992; 1993, Miller & del Carmen Triana, 2009). As such, the simultaneous presence of male and female cognitions not only contributes to better quality decisions (Rogelberg & Rumery 1996) but also helps the family SME in accessing more varied information and relationships.

Age diversity could also have beneficial effects on internationalization. Individuals born during a specific era and embedded in a particular political and socio-historic phase, tend to

mature towards having a common system of values and beliefs. This may result in highly predictable behaviors and preferences. In contrast, age diversity is related to diverse risk propensity, adaptability and capability to formulate innovative strategies (Cheng et al., 2010). For instance, a recent study revealed the beneficial effect on internationalization of a higher involvement of Millennials, to the extent that these individuals were more globally oriented, more open to newness, and more comfortable with technology (Cirillo et al., 2021). Thus, the attributes of younger and older Board members complement one another, and the family SME might be able leverage these differences to enhance its strategic decision-making (Ali et al., 2014). From the TCT perspective, the assumption here is again one of improved access to intelligence and the processing thereof. From an UET perspective, the Board's group cognition is broadened and thereby its ability to address more effectively international market opportunities.

Gender and age diversity can also help economizing on bounded rationality in general, in addition to generating other types of benefits, including some related to economizing on opportunism, and more broadly on bounded reliability (Kano & Verbeke, 2015). Overall, our contention, in terms of cognition, is that Board diversity generates new attitudes and new beliefs, challenging decision-makers' opinions and forcing them to consider the family business from a different point of view. In sum, diverse directors: 'are more likely to raise questions that add to, rather than simply echo, the voice of management' (Selby, 2000, p. 239). Especially in an innovative and multifaceted business environment, diversity can foster more comprehensive assessments of new strategic avenues for internationalization that align family needs with business ones.

The following hypotheses assume that especially family SMEs will, *ceteris paribus*, be intrinsically less favorably inclined towards international expansion than nonfamily ones, because of the relative absence of the requisite knowledge and skills, and related cognitive

framing to internationalize, and because of unique bounded rationality challenges, including BB:

Hypothesis 1a: In family SMEs, the presence of nonfamily members on the Board of Directors will be associated with higher levels of internationalization.

Hypothesis 1b: In family SMEs, higher gender diversity on the Board will be associated with higher levels of internationalization.

Hypothesis 1c: In family SMEs, higher age diversity on the Board will be associated with higher levels of internationalization.

3.2. Board international experience

As Board governance includes providing guidance to management for planning and effectively implementing key strategic activities, Boards have become more focused on their members' knowledge and skills. Board members should have the ability to do more than fulfilling their fiduciary duties (Klarner et al., 2021). For the purpose of SME internationalization, it is important that at least some Board members would have core internationalization knowledge through professional experience gained with other firms, as this provides specialized experiential knowledge on how to organize and manage the firm in international contexts (Hollender et al., 2017; Stoian et al., 2018). From an UET cognitive perspective, it allows the Board to improve the firm's understanding of foreign markets and customers as well as its ability to foresee and respond to changes in host environments (Lages et al., 2008).

Since domestically operating family SMEs often do not have much familiarity with foreign contexts or good international networks (Lu & Beamish, 2001; Johanson & Vahlne, 2009), the international experience of Board members can be critical. For instance, internationally experienced Board members can provide reliable network linkages to help the family firm exploit new sales channels or enter broader networks in foreign countries. This

contribution represents a straightforward economizing on bounded rationality, but the beneficial impact of Board members' international experience on family SME's internationalization is not limited to this general effect. Their experience can also play a role in preventing dysfunctional, family-driven decisions related to inexperience and the negative affect bias discussed earlier. Internationally experienced Board members can, for instance, provide support with selecting optimal locations for international market expansion and provide information on location advantages that family members would be unable to gather on their own. Since location choices in family firms may be driven by family-related preferences, especially in SMEs where international expansion efforts are often conducted by family members directly, optimal locations might be excluded just because family members do not want to spend too much time in unfamiliar contexts, or because entering those countries would require the adaptation of products that family members simply do not want to change (Kano & Verbeke, 2018). Indeed, a typical international business pitfall for family firms that might be mitigated by a highly experienced Board, is the lack of consideration of brand or product adaptations required by the foreign market. Family firms may be unwilling to modify the brand name of their products for marketing and sales purposes in a foreign country because this name is considered a heritage asset linked to the family firm's identity (Deephouse & Jaskiewicz, 2013). From an UET cognitive perspective, Board members with much international experience can help remove such tunnel vision in the family SME, make it attuned to the specific needs of foreign markets, and help design the best business model for those markets.

A Board of Directors whose membership includes more international experience can go a long way towards eliminating broad bounded rationality constraints as well as dysfunctional strategic decision-making related to BB in family SMEs, with positive implications for the firm's internationalization trajectory. Hence, our second hypothesis is the following:

Hypothesis 2: In family SMEs, the higher international experience on the Board of Directors will be associated with higher levels of internationalization.

3.3. Intensity of Board activities

Boards of Directors are typically underutilized in family SMEs (Van den Heuvel et al., 2006). In many SMEs, the frequency of Board meetings is limited to the minimum number required by law. Consequently, the Board members who are not directly involved in the management of the firm are generally less informed about the firm's activities and limit their contribution to a purely formal role. To the best of our knowledge, the direct effects of the intensity of Board activities on family business internationalization have not yet been investigated. This is perhaps surprising because such intensity is critical to the actual role of the Board as provider of key services to the firm (Arzubiaga et al., 2018).

From an UET perspective, a more active Board is more likely to overcome any initial cognitive incongruences introduced by the presence of nonfamily members and by age and gender diversity (Li & Hambrick, 2005). Frequent meetings enable changes in cognitive frames: Board members get to know one another personally, exchange information, come to understand each other's positions and develop 'relational embeddedness' (Uzzi, 1996; 1997). This supports mutual expectations of reliability, and it improves joint problem solving. Board members frequently discussing the challenges facing the firm, increases the likelihood that family-driven decisions will be questioned and possibly improved upon. Again, a more active Board means access to more and better intelligence shared by all Board members, and improved processing of this intelligence.

As to the possible linkages with BB, a more active Board will find it easier to communicate with the family and to be heard effectively. Regular meetings not only enhance the cohesion and understanding among members, thus fostering a positive and proactive work environment in the boardroom, but also generate more opportunities for Board members to

develop empathetic relationships with the owning family and to improve proper accountability (Ward, 1998).

As a result, Board members can become insiders within the company, with positive implications for their role in both serving and monitoring the family business. A more active Board will thus be more aware of the presence and salience of family-related goals, thereby understanding better when and how strategic decisions might be excessively driven by a dysfunctional prioritization of family-related resources and family heritage activities and providing unbiased counsel accordingly. Biased decisions related to internationalization are often introspective and can result in the loss of international business opportunities (Segaro et al., 2014). In addition, management reporting to an active Board of Directors and the requirement to meet its (higher) expectations can change management's own cognitive framing and stimulate professionalism in the family firm.

In summary, a highly active Board of Directors can alter this Board's group cognition, and also change the cognitive framing by both the controlling family's members and the firm's senior management. As a governance mechanism economizing on bounded rationality, it can also prevent biased and introspective strategic decisions in family SMEs, with positive implications for internationalization. Following the above analysis, our third hypothesis is the following:

Hypothesis 3: In family SMEs, a more active Board of Directors (in terms of frequency of meetings) will be associated with higher levels of internationalization.

3.4. The moderating role of the family leader as CEO

An extensive body of prior literature in general management acknowledges that the interactions between the Board and the CEO influence the quality of Board decisions (e.g., Boyd et al., 2011; Combs et al., 2007). This is even more likely when the CEO has broad managerial discretion and is a member of the owning family, as is the case in many family SMEs (Hambrick

& Wowak, 2021; Feltham et al., 2005). Under these circumstances, the CEO's role in decision-making could interact with the hypothesized influence of Board features on the firm's strategy (Bettinelli, 2011; Zona, 2016). Here, the role of the CEO in leveraging the family firm's strengths when internationalizing must be considered.

We hypothesize that the effect of a more diverse, internationally experienced and active Board on internationalization will be positively moderated by having a family CEO. The presence of the latter allows leveraging family firm strengths more easily because of the CEO's unique knowledge of the company and because there is a direct conduit between the Board and the controlling family. At the same time the Board can use its knowledge and skills to affect the family CEO's cognition and to prevent dysfunctional behavior in the BB sphere. On the one hand, the Board will have better access to intelligence about the FSAs that can make internationalization successful, and on the other hand it will be able to counter any narrow, family-oriented view focused solely on family-related resources, heritage activities and locations.

For firms that have already hired a nonfamily CEO, it could be argued that this choice in and by itself suggests that the bifurcation bias has (at least in part) been overcome. Prior studies indeed confirm this view and find that having a family leader makes family firms less likely to internationalize (Bauweraerts et al., 2019) or to succeed outside of proximate countries (Banalieva & Eddleston, 2011). This is because family firms with a family CEO have a higher likelihood of prioritizing family-heritage over the opportunities provided by international business expansion (Pongelli et al., 2021b). However, these prior studies did not account for Board composition. It is precisely when a family CEO runs the company that the positive influence of Board characteristics on decision-making becomes increasingly important, both to leverage family related firm-specific advantages and to economize on BB. We thus expect a

more diverse, more internationally experienced and more active Board to have a stronger positive effect on internationalization in family SMEs led by a family CEO.

Based on these arguments, we posit:

Hypothesis 4: In family SMEs, the positive association between Board diversity in terms of:

- (4a) nonfamily representation,

-(4b) female gender representation,

- (4c) age

and internationalization levels will be stronger when the CEO is a family member.

Hypothesis 4d: In family SMEs, the positive association between Board international experience and internationalization levels will be stronger when the CEO is a family member.

Hypothesis 4e: In family SMEs, the positive association between a more active Board and internationalization levels will be stronger when the CEO is a family member.

4. **Method**

4.1. Sample

The empirical data we used in this study are derived from the Bel-First database of Bureau Van Dijk and a survey we conducted. The Bel-First database includes accounting and financial information on all active Belgian companies. Through our survey, we collected information on ownership, governance, management, and export behaviors of family SMEs headquartered in Belgium. This national context is particularly interesting to conduct our analysis, because family firms represent more than 80% of all Belgian firms (Lambrecht & Broukaert, 2018). Furthermore, Belgium is a small open economy that is highly reliant on foreign trade to generate GDP growth: recent evidence shows that Belgium is the 6th largest exporter in Europe (World Bank, 2020). In this small open economy, most SMEs (except for those active in sheltered sectors, or in sectors devoid of international economic activity) have largely open access to

business opportunities in the EU market that is approximately 25 times larger than the national market. The one-tier Board system characterizing Belgian firms is relatively common in Latin and Anglo-Saxon countries (Umans et al., 2020), thereby facilitating comparability with prior corporate governance research in those institutional contexts.

To build our sample, we applied several criteria to select firms from the Bel-First database. *First*, we only selected limited liability companies with the legal form of 'Société Anonyme' since they have the legal obligation to appoint a Board of Directors and to publish annual accounts (Lardon et al., 2017). *Second*, we focused on SMEs, thereby adopting the European Commission's definition of this type of firm. According to this definition, an SME is a firm with fewer than 250 employees, an annual turnover of maximum 50 million euros, or a (annual) balance sheet total of maximum 43 million euro. *Third*, to limit translation problems in our survey, we only selected companies located in the French-speaking area of Belgium. We recognize that this choice creates a limitation of our study, because the Flemish and French language cultures are distinct subnational cultures, but at the same time, most of the formal institutions relevant to business (tax laws; corporate governance regulations; labour laws; etc.) are largely the same across the country. *Fourth*, we excluded firms with fewer than 10 employees since the Board is more likely to have a 'rubber stamping' role in these companies, as compared to the influence of the owner-entrepreneurs (Arzubiaga et al., 2018). *Fifth*, we also excluded companies belonging to a larger corporate entity, such as subsidiaries of multinational enterprises. In such companies, the linkages between local Board decisions and export activities are difficult to isolate from parent company and group-level strategies (Gaur et al., 2019). Finally, consistent with most governance and internationalization studies, we also removed firms from the social, educational and financial sectors. Applying these criteria, we identified 3,987 private SMEs.

We addressed a mail survey to the CEOs of these 3,987 firms. In a small open economy, the CEO is expected not only to have an overarching view of the SME's functioning, but also an in-depth understanding of the firm's internationalization motives, strategy and related processes (or the reasons for the absence thereof), especially in family firms (Zattoni et al., 2015). After two waves of sending out the survey, we collected 396 questionnaires. Consistent with prior literature, we classified a firm as a family firm if multiple members of a single family own at least 50% of the shares (Miller et al., 2013). After excluding 59 nonfamily firms and 9 incomplete questionnaires, our final sample included 328 family SMEs, reflecting a final response rate of 8.22%. To ensure the representativeness of our sample, we compared the mean of the 397 sampled SMEs and the 3,987 SMEs from our survey population based on several firm characteristics derived from the Bel-first database (e.g., number of employees, firm age, value added per workers and the ratio of cash and cash equivalents to total assets), without observing significant differences.

To detect potential non-response bias, we ran an independent sample *t*-test to compare the means of our study's variables between earliest and latest respondents (Kanuk & Berenson, 1975). For this purpose, we split our sample into two groups based on the average response time (i.e., 26 days) and found no significant differences. Additionally, we replicated the procedure by distinguishing between the earliest 20% of respondents and the last 20% of respondents. Again, no significant differences were observed, suggesting that non-response bias is not a major problem in our study. Moreover, our research relies on both primary data from the survey and secondary data extracted from the Bel-first database, which alleviates concerns about common method bias (Podsakoff et al., 2012).

4.2. Variables

In line with previous studies (Cerrato & Piva, 2012; Fang et al., 2018), we used a 1-year lag between the dependent variable and the other variables to increase the confidence in the direction of the causality in our model.

Dependent variable. Consistent with recent studies (Garrido-Prada et al., 2019; Zúñiga-Vicente et al., 2019), we capture internationalization with an entropy index calculated as follows:

$$Entropy = \sum_{i=1}^{6} P_i \ \ln(\frac{1}{P_i})$$

where P_i is the share of the i-th regional segment in the firm's total sales. We made a distinction among six different regional segments: domestic (i.e., Belgium), the expanded European Union, Asia, North America, Latin America, and a residual region labelled 'Rest of the World'. When sales are concentrated in a single country, the entropy measure equals 0, whereas its maximum value is 1.79 in the hypothetical case of a company with a perfectly balanced distribution of sales of 16.67% in all six regions. As compared to simple internationalization indicators such as the ratio of foreign sales to total sales (FSTS) or the number of export destinations, the entropy index accounts for the different weight of sales in different countries by including simultaneously the number of countries and the distribution of foreign sales (D'Angelo et al., 2016).

Independent variables. To investigate the impact of Board diversity on internationalization, we consider three sources of diversity: *Nonfamily representation on the Board* (*NFRB*), *Women's representation on the Board* (*WIB* – to measure gender diversity), and *Board age diversity*. NFRB is the percentage of nonfamily directors sitting on the Board (Calabrò & Mussolino, 2013). WRB is calculated as the number of women directors divided by the total number of Board members (Torchia et al., 2018). Board age diversity is measured by

the coefficient of variation of age computed as the ratio of the standard deviation of Board age to mean of Board age (Ali et al., 2014).

Board international experience was captured through the number of directors with previous work experience in international locations divided by Board size (Zenou et al., 2020). In order to assess the *Intensity of Board Activities,* we adopted the approach used in previous studies, and measured the number of Board meetings per year (Chou et al., 2013).

Moderating Variable. The presence of a *Family CEO* is measured as a dummy variable. It equals 1 if the CEO is a family member, 0 otherwise (Bauweraerts et al., 2019).

Control variables. To account for the impact of the other usual determinants of internationalization, we measured the following control variables. Some prior research suggests that older (Ruzzier & Ruzzier, 2015) and larger (Wolff & Pett, 2012) firms may have better access to critical resources to penetrate foreign markets. Although this is increasingly debatable in small open economies and in the digital age, we controlled for firm age and size. *Firm age* is measured as the natural logarithm of the number of years since the firm's foundation, while *firm size* is calculated as the natural logarithm of the number of full-time employees (D'Angelo et al., 2016). We also considered the role of innovation efforts (as a conventional firm-specific advantage) in fostering internationalization sales (Halilem et al., 2014) by including a measure of *R&D intensity,* which was computed as the ratio of R&D expenditures to total sales (Majocchi et al., 2018). To account for the influence of cash availability on internationalization, the variable *liquidity* was incorporated. Liquidity is measured as the ratio of cash and cash equivalents to total assets (Nam & An, 2017). As the literature provides theoretical and empirical support for the impact of *productivity* on internationalization, we added this variable measured as the value added per worker (Bauweraerts et al., 2019).

Extant studies reveal that family ownership is an important factor in explaining variations in internationalization behaviors among family firms (Calabrò et al., 2013).

Accordingly, *family ownership*, that is the percentage of shares held by a single family (D'Angelo et al., 2016), was included as a control variable. Because foreign owners can bring greater knowledge of the international environment to foster international expansion, we included the control variable *foreign ownership,* which is operationalized as the percentage of shares held by foreign investors (Cerrato & Piva, 2010).

Previous studies have highlighted intergenerational differences in the degree of internationalization (Fang et al., 2018), and we therefore controlled for the firm's *generational stage*, which was captured through an ordinary scale measuring whether the family firm is controlled by the first- (coded as 1), second- (coded as 2), or third- and later-generation (coded as 3). As previous research points out that directors' tenure affect internationalization (Barroso et al., 2011), we controlled for *Board tenure* which is the average tenure in years of all directors serving on the Board (Iliev & Roth, 2018).

Because the family's willingness to perpetuate its legacy across generations is likely to affect internationalization propensity (Fang et al., 2018), we considered the effect of the renewal of family bonds through dynastic succession (RFB). As a critical component of socioemotional wealth (Berrone et al., 2012), RFB is captured through a 4-item subscale measuring family owners' preoccupation with RFB, and using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) (Cronbach's $\alpha = 0.89$). Finally, we controlled, for industry affiliation by including control variables for 5 sectors: manufacturing, wholesale, retail, services, and high technology industries. We provided a summary of the variables included in this study in Table 1.

[Insert Table 1]

4.3. Results

We report the descriptive statistics and correlations in Table 2. On average, family firms have 37.8 % of NFRB and 18.2 % of WRB, while 52.7% of them have a family CEO. The value of

1.81 for generational stage implies that 42.1% of family firms are owned by the first generation, 35.1% by the second, and 22.8% by the third and later generations. Ownership is highly concentrated in the hands of the family since the mean value of family ownership is 82.10%, whereas foreign ownership is relatively low with a mean value of 3.60%.

As to the impact of our proposed key variables, we observe that the degree of internationalization is positively correlated with NFRB ($p < 0.05$), WRB ($p < 0.01$), Board international experience ($p < 0.01$) and intensity of Board activities ($p < 0.01$). In contrast, we observe a negative correlation between the presence of a family CEO ($p < 0.05$) and internationalization. Although the levels of correlation among variables are relatively low, we also checked for potential multicollinearity problems by calculating Variance Inflation Factors (VIFs). The average VIF value was 1.72 with a maximum of 2.61 for the family ownership variable. All VIFs were thus below the usually recommended threshold of 5 (O'Brien, 2007), suggesting that multicollinearity is likely not a major concern in our models. We should note, however, that the relevance of VIF scores to measure multicollinearity in the context of complex IB research problems, has recently been disputed (Lindner et al., 2020)

[Insert Table 2]

To test our hypotheses, we used a Tobit regression methodology that accounts for the high percentage of zero values of our dependent variable (30.18%) and we set zero as a lower bound (Bowen & Wiersema, 2004). This approach has been widely used in internationalization studies to address the censored nature and specific distribution of the entropy measure (D'Angelo et al., 2016; Majocchi et al., 2018). We show the results in Table 3. The values of the Pseudo *R*-squared are relatively satisfactory, but we did perform several link tests using the *linktest* command in Stata to confirm that our models were correctly specified (Hailpern & Visintainer, 2003). We used a Tobit procedure and regressed the entropy index on the prediction

and the prediction squared. In all models, the prediction squared has no explanatory power, suggesting that our models were correctly specified.

Model 1 in Table 3 is our baseline model in which we included only the control variables. *Firm size* (β = 0.102; $p < 0.01$), *R&D intensity* (β = 0.987; $p < 0.01$), *productivity* (β = 0.084; $p < 0.10$), *generational stage* (β = 0.124; $p < 0.01$) and *Board tenure* (β = 0.052; $p < 0.05$) are all positively related to internationalization, whereas *family ownership* (β = -0.108; $p < 0.05$) appears to exert a negative influence. These results confirm previous findings on the effect of *firm size* (D'Angelo et al., 2016), *R&D intensity* (Golovko & Valentini, 2011), *productivity* (Bauweraerts et al., 2019), *generational stage* (Fang et al., 2018), *Board tenure* (Rivas, 2012) and *family ownership* (Majocchi & Strange, 2012) on internationalization.

Model 2 adds our main independent variables. We observe that the coefficients of *NFRB* (β = 0.121; $p < 0.05$), *WRB* (β = 0.096; $p < 0.01$), *Board international experience* (β = 0.228; $p < 0.01$) and *intensity of Board activities* (β = 0.098; $p < 0.01$) are positive. These results are aligned with hypotheses 1a, 1b, 2 and 3, which suggested a positive impact of *NFRB, WRB,* Board international experience and intensity of Board activities respectively on internationalization. However, hypothesis 1c on the proposed impact of *Board age diversity* was not supported. We found no significant effect here.

In model 3, we included the dummy variable *family CEO* and found that it has a negative influence on internationalization, corroborating previous findings (Bauweraerts et al., 2019). Models 4 to 8 allow us to explore the moderating effect of the family CEO. As expected, *family CEO* interacts positively with *NFRB* (β = 0.057; $p < 0.05$), *WRB* (β = 0.052; $p < 0.05$), *Board international experience* (β = 0.102; $p < 0.05$) and *Intensity of Board activities* (β = 0.068; $p < 0.01$). These results suggest that family SMEs with a family CEO have a higher level of internationalization when accompanied by higher levels of NFRB, WRB, Board international experience and intensity of Board activities. In contrast, we did not observe any moderating

effects of the family CEO on the relationship between Board age diversity and internationalization. The above suggests support for hypotheses 4a, b, d, e and the absence thereof for hypothesis 4c.

[Insert Table 3]

Because of the nonlinear nature of Tobit models, the correct interpretation of the interaction terms is rather complex since the regression coefficients reported in Table 3 do not inform us about their marginal effects (Wiersema & Bowen, 2009). Indeed, the magnitude and even the sign of the marginal effect can vary across observations. Accordingly, we calculated and reported the marginal effects of our variables of interest at the most meaningful values of our moderating variable (i.e., 1 and 0 depending on the presence or not of a family CEO) while keeping all other model variables at their sample mean value. Additionally, we followed Hoetker's (2007) recommendation and presented the graphical illustration of our interaction effects in Figures 2, 3, 4 and 5 to offer a more nuanced understanding of their true meaning.

As shown in Table 4, the marginal effects of NFRB (0.134; $p < 0.01$) and WRB (0.118; $p < 0.05$) are positive and significant when the firm is led by a family CEO, whereas no significant effects are found in the presence of a nonfamily CEO. These results are further corroborated in Figures 2 and 3 since we observe that the slope of the positive lines between NFRB/WRB and internationalization are steeper in family-led firms, those lines being much flatter in nonfamily-led firms. Consistent with our arguments, the graphs reveal that family-led firms internationalize even more than nonfamily-led firms at high levels of NFRB and WFRB. This result tentatively confirms the positive role of a diverse and authoritative Board in family firms, especially when the role of the family in the firm is significant as in the case of a family CEO. From a theory perspective, one could argue that such Board composition allows alleviating **both the general** bounded rationality challenges and **the** more family-SME specific

ones, including BB, typically expected **in** firms with a less diverse and more family-oriented Board structure.

Again, our analysis of the marginal effects of Board age diversity did not unveil any significant effect. With respect to Board international experience, we see that its marginal effect is higher in the presence of a family CEO (0.142; $p < 0.01$) than a nonfamily CEO (0.062; $p < 0.10$). Figure 4 complements these results by highlighting the stronger positive relationship between Board international experience and internationalization when a family CEO leads the firm. From a theory perspective, Board international experience could be interpreted as a resource that changes group cognition and alleviates bounded rationality problems associated with international market entry. At the same time, we acknowledge that there may an endogeneity factor at play here, in the sense that family firms with international growth ambitions, will coopt Board-level resources that can be leveraged to internationalize. In this context, Figure 4 also does suggest that nonfamily-led firms remain more internationalized than family-led firms even if this difference diminishes as Board international experience increases. The CEO herself or himself can thus also be viewed as a governance resource aimed at reducing bounded rationality that hampers internationalization.

Lastly, we observe that the marginal effect of more intense Board activities is positive and higher in the presence of a family CEO (0.159; $p < 0.01$) than a nonfamily CEO (0.093; $p < 0.05$). Figure 5 substantiates our findings by showing that the relationship between more intense Board activities and internationalization is more positive when a family CEO is at the helm of the company. In this instance, and similar to the impact of NFRB and WRB, it appears that family-led firms internationalize more than nonfamily-led firms at high levels of Board activity. Again, this is aligned with our perspective that activating the governance resources embedded at the Board level, and the knowledge and skills these resources represent, can be instrumental to internationalization, especially for family-led companies.

[Insert Table 4 and Figures 2, 3, 4 and 5]

4.4. Robustness checks and additional analyses

To ensure the validity of our findings, we conducted several robustness checks and performed many additional analyses. *First*, based on prior empirical research (Pisani et al., 2018), we replicated our analyses with a more restricted measure of extra-regional foreign sales by computing the ratio of sales outside the EU divided by total sales. We opted for this indicator because international sales of Belgian companies are mainly concentrated in EU countries that are relatively close geographically and institutionally, with this latter proximity supported by the EU institutions themselves. In our sample, sales in EU countries accounted for 42.74% of foreign sales. We thought it was important to complement our internationalization analysis with a measure capturing the impact of interregional distance, since bounded rationality constraints could be even more pronounced in family firms operating outside their home-region (Verbeke et al., 2020). The Tobit regression analyses reported in Table 5 provide additional support to our initial findings.

Second, we considered the potential non-random distribution of family CEOs and the endogeneity of CEO selection. Appointing a family versus nonfamily CEO is unlikely to be a random decision. Firms that internationalize less may be more inclined to appoint a family CEO, perhaps partly as a rational decision to match the business needs with the CEO's qualities, including deep knowledge of the proximate environment, but also partly as an expression of BB, namely if the family CEO is expected to provide protection of family heritage assets and practices, even if entirely dysfunctional.

Other unobserved factors could affect the selection of a family CEO and indirectly internationalization, causing endogeneity problems. To address these issues, one possible solution is to employ a propensity-score matching method that involves determining a treatment group and a control group (Rosembaum & Rubin, 1983). In our case, the treatment group

includes family firms with a family CEO while the control group consists of family firms with a nonfamily CEO. The propensity score is then calculated on the basis of the treatment model, using a probit estimation that includes all control variables from our analysis as matching covariates, as they could affect the likelihood of having a family CEO. Based on this treatment model, we computed the outcome model using Stata's *eteffect* command that allows controlling for endogeneity concerns resulting from the potential correlation of *family CEO* with unobserved factors. We also considered the role of our main independent variables (i.e., NFRB, WRB, Board age diversity, Board international experience and intensity of Board activities), at one standard deviation below the mean (reflecting 'low' levels) and one above the mean (reflecting 'high' levels), to obtain a more complete assessment of the effect of the family CEO. The average 'treatment effects of the treated' (ATETs) are shown in Table 6 and provide additional support to our findings. The results confirm that companies with a family CEO internationalize less except when they also have high levels of NFRB, WRB and intensity of Board activities. Moreover, with high levels of Board international experience, the lower internationalization of firms that have family CEOs is moderated (i.e., the ATET becomes less negative). In contrast, Board age diversity has no impact; the ATET values at low and high levels of Board age diversity are very close to each other.

[Insert Tables 5 and 6]

Third, we performed regression analyses (all available from the authors upon request) using different econometric approaches. The results obtained with the traditional ordinary least squares (OLS) model were in line with those reported in Table 4 so that our main conclusions hold. Following Baum's (2008) recommendation, we also ran the regressions using a generalized linear model (GLM) which is appropriate for modelling proportions such as those reported in our entropy index. Again, the sign and the statistical significance of the parameters were unaffected.

Fourth, we also tested whether the relationship between all board-related variables (*NFRB, WRB, Board age diversity, Board international experience and intensity of Board activities*) and internationalization is curvilinear, without any significant results as an outcome.

Fifth, we investigated the possibility that under conditions of strong family control, i.e. significant ownership and/or when the CEO is also chairperson of the Board (CEO duality), a family member as CEO might weaken the ability of the Board attributes to mitigate bounded rationality constraints in the sphere of internationalization. To address the point, we ran different tests. To test if the effect of the family CEO on Board-internationalization is conditioned by the level of family ownership and CEO duality, we included a three-way interaction between our Board-related variables: family CEO, family ownership and CEO duality. However, we did not obtain significant results. We then split the sample by distinguishing between high and low family ownership based on different measures. We considered high (low) family ownership, as family ownership above (below) the average/median or one standard deviation above (below) the mean/median. We also distinguished between family SMEs where CEO duality is present versus absent. Again, we did not find any significant results.

Sixth, following prior studies (Villalonga & Amit, 2006, Bennedsen, Nielsen, Perez-Gonzales, & Wolfenson, 2007) that suggest qualitative differences across generations of family firms, we also checked whether the impact of Board characteristics varies according to the CEO's generation. We replicated the analyses in the subsample of family-led firms and used a dichotomous variable distinguishing between family-founder CEOs and later-generation CEOs as moderator of the relationship between our different board-related variables and internationalization. However, we did not find any significant moderating effects.

Finally, we conducted a post hoc analysis to explore whether the intensity of Board activities moderates the relationship between Board diversity (*NFRB, WRB, Board age*

diversity) and *international experience* on the one hand, and internationalization on the other. Past research suggests that higher intensity of Board activities – meaning more frequent interactions, discussions and information exchanges among directors – improves the Board's functioning and effectiveness in family SMEs (Arzubiaga et al., 2018). In our context, a higher intensity of Board activities could therefore potentially enhance the Board's ability to leverage further the advantages of diversity and international experience for internationalization. However, the post hoc analysis (available upon request) did not indicate such further leveraging: no significant coefficients were observed for the interaction terms in the regressions.

5. Discussion and Conclusion

5.1 Findings

This study has investigated the role of different Board features to explain family SME internationalization and export levels, using the TCT and UET lenses. The TCT lens suggests that SMEs in general face bounded rationality challenges in the realm of internationalization that can be reduced through proper governance design. In addition, family firm status makes these SMEs intrinsically more vulnerable to one particular bounded rationality problem that needs to be overcome. This challenge takes the form of an affect bias, namely BB, whereby all resources, activities and markets associated with the family firm's heritage are interpreted as highly valuable and 'with the firm for the long run', whereas all resources, activities and markets not associated with the family firm's heritage are viewed as 'commodity-like' and therefore of lesser value or importance. As a result, the intelligence gathering and processing about international opportunities is hampered.

When applying TCT in business studies generally, it is assumed that the governance of transactions (which involve resources, activities and locations) is driven by economizing considerations. Here, transactions that are more vulnerable to problems of bounded rationality

and opportunism (and more broadly bounded reliability) typically become the subject of more complex contracting, including the processes of *ex ante* selection of the 'right' resources, activities and locations, and the *ex post* governance thereof. This explains, for instance, why firms typically put a lot of effort into selecting a CEO and why CEO contracts will be more complex than contracts for an entry-level employee. The same holds for Board members' selection. The Board's composition will affect the firm's governance efficiency (as to its capacity to economize) as well as ensuing strategy formation. This economizing assumption is broadly consistent with UET, which views the portfolio of Board members, carefully selected based on their characteristics (demographic traits, experiences, knowledge and skills) as instrumental to the Board's collective cognition and therefore its capacity to identify and engage with international opportunities.

In the context of internationalization decisions, access to nonfamily as Board members (assuming these nonfamily individuals are selected based on their valuable knowledge and skills) will help the family firm overcome unfounded reticence against – and inability to discover and engage with – international market opportunities. Identifying and acting upon international market opportunities requires an openness towards new markets and towards foreign economic actors removed from heritage resources, activities and markets.

The Board's composition, if it includes nonfamily knowledge and skills, will change the Board's cognitive framing, and reduce bounded rationality challenges, both general ones and those related to BB. Similarly, if a family firm is led by a nonfamily CEO, this appointment in and by itself suggests that the controlling family has overcome its BB (at least in part), and *ceteris paribus* that a level of internationalization would be expected consistent with that found in nonfamily firms. In contrast, when a family CEO runs the company, the possibility of BB is real, and across a large sample of firms, one would expect a lower level of internationalization, unless other governance elements interact with the CEO's status. Here, consistent with UET,

one could expect Boards whose members are well-equipped with the experience, knowledge and skills required for internationalization to have the potential for positive interactions with family-CEOs, who know best their family SMEs' strengths and how to leverage these in new markets. For instance, if nonfamily members are present on the Board, we view this as an indication that unique experiences, as well as new knowledge and skills have been brought in, aligned with UET, and that efforts have been made to overcome bounded rationality challenges in general and the BB in particular.

We have shown that the presence of nonfamily Board members, female representation on the Board, the Board members' prior international experience, as well as the intensity of Board activities all constitute Board characteristics likely to increase internationalization of family SMEs. Contrary to our expectation, age-related diversity of the Board members in our sample did not appear to be associated with higher internationalization. Aligned with Arrègle et al. (2020), this result suggests that involvement of the incoming generation is not a key determinant of internationalization, thereby also shedding additional light on the contradictory results arising from the studies that tested this relationship (Calabrò et al., 2016; Fang et al., 2018). It is perhaps illusory to assume that a newer generation of Board members would necessarily command, for instance a better information processing capacity to address international expansion opportunities, than the generation that has run the company in the past, simply because it is a new generation.

Our results on the intensity of Board activities show that this dimension functions as a powerful mechanism for promoting internationalization. Prior studies that did not control for the intensity of Board activities, have therefore possibly missed this important link with internationalization, and the related models may thus have been underspecified. Our view is that focusing on just one specific aspect of the Board such as, for instance the proportion of external members, can generate biased results because the positive effects of having those

members serving on the Board could be offset by a low intensity of Board activities. Moreover, our results confirm recent evidence on the importance of having a portfolio of knowledgeable and skillful Board members (Klarner et al., 2021). Specifically, we suggest that the capabilities of an open, inclusive and experienced Board will reduce bounded rationality challenges, including the BB. However, this is only part of the story because these key resources must also be put to work to support SMEs' internationalization processes i.e., through frequent Board meetings.

Differently from prior studies, we did not limit our investigation to one specific feature of the Board. Following recent insight from UET studies (Hambrick & Wovak, 2021; Neely Jr et al., 2020), we adopted a more comprehensive approach to Board characteristics that might in our case be instrumental to higher internationalization. The Board of Directors functioning as a governance tool can be relatively complex, with various characteristics conditioning its ability to perform its service and monitoring roles (Hillman & Dalziel, 2003). It is therefore imperative to explore more comprehensively various Board features and to assess each of these features' impact, in isolation and combined.

Our empirical evidence also provides insight into the relationship between the Board and the CEO in family SMEs. We show that the positive role of the Board in the family SME's internationalization process can be strengthened or weakened depending on the status of the CEO as a family member. This is aligned with our view that if the CEO is not a family member, family SMEs can reach high levels of internationalization with low levels of Board diversity, international experience and activity: we consider the presence of a nonfamily CEO as indicative that the firm has brought in valuable external experience, knowledge and skills, and has been able to eliminate its intrinsic BB, with such bias potentially hindering international endeavors. In contrast, when the CEO is a family member, no indication is given on this particular governance dimension that the BB has been overcome. In such a context, the

functioning of a diverse, internationally experienced and highly active Board becomes much more important: first, to overcome bounded rationality challenges, including the BB, and second, through its interactions with the family CEO, to leverage the family firm's strengths in international markets.

Our empirical results reveal that family SMEs with a family leader internationalize less than those with a nonfamily CEO, but as Board diversity increases (with the exception of the age diversity dimension that has no impact), as well its international experience and the intensity of its activities, the gap between family-led and nonfamily-led SMEs becomes smaller. At high levels of Board gender diversity and intensity of activities, SMEs with a family CEO even show significantly higher levels of exports than the firms with a nonfamily CEO. These firms appear to achieve 'the best of both worlds' (Arregle et al., 2012, p. 1136), leveraging their family business related strengths – building upon the family CEO's knowledge – while at the same time mitigating bounded rationality challenges, including those associated with BB, through the presence of an effective Board.

The results of our additional analyses further suggest that the level of ownership and CEO duality do not affect the impact of having a family CEO. Given the characteristics of our sample, these findings should be considered with a cautionary note. Most family SMEs in our sample are characterized by strong family control, with an average level of family ownership equaling 82.1% and with a limited standard deviation (8.5%). With respect to CEO duality, the family CEO is also Chairman of the Board in more than 90% of the cases. With such a small variance in family ownership and with the dominant occurrence of being CEO and Board Chair at the same time, it unsurprising that these variables would fail to show a significant effect.

5.2. Contributions

Our study contributes to the scholarly debate on the sources of heterogeneous internationalization behaviors in the context of family SMEs. Prior research has attempted to identify which mechanisms permit family firms to minimize the liabilities of family ownership, and at the same time leverage family-business related strengths. Scholars have looked at different sources of heterogeneity such as strategy (Hennart et al., 2019), external (nonfamily) managers (Calabrò et al., 2013) and external capital (Arrègle et al., 2012). We have focused primarily on the role of the Board, and we have relied on TCT and UET to highlight how governance dimensions in this realm can help family firms in accessing new knowledge and skills and in overcoming bounded rationality challenges, including BB, so as to facilitate internationalization.

Neely Jr et al. (2020) recently called for integrating UET with other theoretical perspectives in order to better grasp the mechanisms driving firm leaders' cognition: we did this by combining UET with TCT. For instance, by investigating simultaneously the potentially dysfunctional effects of the controlling family's members on the family SME's operations through their affect bias, and the potentially economizing role of Board members' characteristics, we assessed the joint effects of these actors' varying cognitions, in the spirit of Hambrick and Wowak, (2021). We also assessed the interaction between the Board having features conducive to economizing and the presence of a family CEO: we suggested that the joint effect of these varied cognitions can be instrumental to higher internationalization. Combining the TCT and UET approaches to investigate family firm internationalization can thus be helpful in comparing the relative efficiency of different governance configurations. Here, a focus on a single governance dimension, such as the proportion of external members on the Board, would lead to misleading results. Similarly, the SEW approach (Gomez-Mejia et al., 2010, p. 229) with its focus on family wealth preservation, argues that family firms prefer 'to diversify only in local areas where they can take advantage of their experience and

knowledge rather than to diversify internationally where they are inexperienced new players.' In contrast, our narrative suggests that where a focus on SEW becomes dysfunctional, in our context by hindering internationalization, specific governance interventions can alleviate such negative effects, with particular combinations of Board members' features such as their international experience and the CEO's status, affecting the outcome for the family SME. Appropriate governance interventions can help family firms to grow internationally while still pursuing family related goals under the 'bright side' of SEW (Kellermanns et al., 2012; Yang, Li, Stanley, Kellermanns, & Li, 2020).

Our study also highlights the importance of female involvement in Boards as instrumental to internationalization. We show that gender diversity matters, in accordance with studies showing how gender diversity can promote innovation (Bauweraerts et al., 2022, Idris, 2009; Welbourne, Cycyota, & Ferrante, 2007). A cooperative mindset open to diverse points of view and a propensity towards tolerance and collaboration among Board members are important in this regard (Bettinelli et al., 2019). We speculate that similar mechanisms are likely at work in the processes of Boards identifying and engaging effectively with international market opportunities. Here also, the impact of this Board feature appears stronger when the CEO is a family member: in such cases, family business related strengths are leveraged while bounded rationality challenges are mitigated, with significant benefits for internationalization.

Finally, our study contributes to managerial practice. It informs shareholders, Board members and senior executives in family SMEs about specific governance features that can alleviate family-related preferences incompatible with efficiency goals. By providing theoretical and empirical evidence on the importance of having an open, inclusive, experienced and active Board, the findings of our study provide concrete guidelines to family SMEs and their main stakeholders on how to compose a Board that will respond positively to international market opportunities.

5.3 Limitations and future research

Our study does have a few noteworthy limitations that open new avenues for future research. *First*, our empirical setting is that of family SMEs from a small home country with easy access to the entire European Union market, thus raising the issue of generalizability of our findings. To alleviate somewhat the possible impact of this limitation, we did measure in the robustness section our dependent variable with only extra-European exports: our results do hold, but future studies based on multi-country contexts in terms of country-of-origin, would likely add new insight. This limitation prevented us from controlling for institutional factors shown to be important determinants of internationalization in family firms (Arrègle et al., 2017). *Second,* we focused on exports as the sole entry mode. This mode is the most relevant for the majority of family SMEs, but future research could contemplate investigating the impact of Board composition on other entry modes and on the choices among these modes. *Third*, given the data at hand, we could not investigate the possible contributions that family members with distinct experiences could provide themselves to limit BB in family firms (for instance their experience in other companies, before joining their own family firm). What is the impact of family members with different levels of professionalization and diversity interacting among each other? What is the impact of Boards with the features we described when interacting with a more professionalized and diverse (family) management? We leave these questions to future research. *Fourth*, we focused on SMEs, but further research could investigate whether our findings hold for large, publicly traded, family firms. Even though BB-related bounded rationality is potentially present in all family firms regardless of their size or financial ownership structure (Verbeke & Kano, 2012), the findings of Miller et al. (2013) related to performance do suggest that size could be important to internationalization and its outcomes.

References

Ali, M., Ng, Y. L., & Kulik, C. T. (2014). Board age and gender diversity: A test of competing linear and curvilinear predictions. *Journal of Business Ethics*, *125*(3), 497-512.

Arrègle, J. L., Naldi, L., Nordqvist, M., & Hitt, M. A. (2012). Internationalization of family–controlled firms: A study of the effects of external involvement in governance. *Entrepreneurship Theory and Practice*, *36*(6), 1115-1143.

Arrègle, J. L., Hitt, M. A., Sirmon, D. G., & Very, P. (2007). The development of organizational social capital: Attributes of family firms. *Journal of Management Studies, 44*(1), 73-95.

Arrègle, J. L., Duran, P., Hitt, M. A., & Van Essen, M. (2017). Why is family firms' internationalization unique? A meta–analysis. *Entrepreneurship Theory and Practice*, *41*(5), 801-831.

Arrègle, J. L., Chirico, F., Kano, L., Kundu, S. K., Majocchi, A., & Schulze, W. S. (2021). Family firm internationalization: Past research and an agenda for the future. *Journal of International Business Studies*, *52*(6), 1159-1198.

Arzubiaga, U., Kotlar, J., De Massis, A., Maseda, A., & Iturralde, T. (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.

Banalieva, E. R., & Eddleston, K. A. (2011). Home-region focus and performance of family firms: The role of family vs non-family leaders. *Journal of International Business Studies*, *42*(8), 1060-1072.

Baum, C. F. (2008). Modelling proportions. *Stata Journal*, *8*(2), 299-303.

Basco, R., & Voordeckers, W. (2015). The relationship between the board of directors and firm performance in private family firms: A test of the demographic versus behavioral approach. *Journal of Management & Organization, 21*(4), 411-435.

Bauweraerts, J., Sciascia, S., Naldi, L., & Mazzola, P. (2019). Family CEO and board service: Turning the tide for export scope in family SMEs. *International Business Review*, *28*(5), https://doi.org/10.1016/j.ibusrev.2019.05.003.

Bauweraerts, J., Rondi, E., Rovelli, P., De Massis, A., & Sciascia, S. (2022). Are family female directors catalysts of innovation in family small and medium enterprises? *Strategic Entrepreneurship Journal*, *16*(2), 314-354.

Bennedsen, M., Nielsen, K. M., Pérez-González, F., & Wolfenzon, D. (2007). Inside the family firm: The role of families in succession decisions and performance. *The Quarterly Journal of Economics*, *122*(2), 647-691.

Bennedsen, M., & Foss, N. (2015). Family assets and liabilities in the innovation process. *California Management Review*, *58*(1), 65-81.

Barroso, C., Villegas, M. M., & Pérez-Calero, L. (2011). Board influence on a firm's internationalization. *Corporate Governance: An International Review*, *19*(4), 351-367.

Bear, S., Rahman, N., & Post, C. (2010). The impact of board diversity and gender composition on corporate social responsibility and firm reputation. *Journal of Business Ethics*, *97*(2), 207-221.

Berrone, P., Cruz, C., & Gómez-Mejia, L. R. (2012). Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, *25*(3), 258-279.

Bettinelli, C. (2011). Boards of directors in family firms: An exploratory study of structure and group process. *Family Business Review*, *24*(2), 151-169.

Bowen, H. P., & Wiersema, M. F. (2004). Data analysis with discrete and censored dependent variables and truncated samples. In D. Bergh, & D. Ketchen (Eds.). Research methodology in strategy and management (pp. 87-134). Oxford: Elsevier.

Boyd, B. K., Haynes, K. T., & Zona, F. (2011). Dimensions of CEO-board relations. *Journal of Management Studies*, *48*(8), 1892–1923.

Brammer, S., Millington, A., & Pavelin, S. (2009). Corporate reputation and women on the board. *British Journal of Management*, *20*(1), 17-29.

Calabrò, A., & Mussolino, D. (2013). How do boards of directors contribute to family SME export intensity? The role of formal and informal governance mechanisms. *Journal of Management & Governance, 17*(2), 363-403.

Calabrò, A., Torchia, M., Pukall, T., & Mussolino, D. (2013). The influence of ownership structure and board strategic involvement on international sales: The moderating effect of family involvement. *International Business Review, 22*(3), 509-523.

Calabrò, A., Brogi, M., & Torchia, M. (2016). What does really matter in the internationalization of small and medium-sized family businesses? *Journal of Small Business Management, 54*(2), 679-696.

Calabrò, A., Campopiano, G., Basco, R., & Pukall, T. (2017). Governance structure and internationalization of family-controlled firms: The mediating role of international entrepreneurial orientation. *European Management Journal*, *35*(2), 238-248.

Carpenter, M. A., Geletkanycz, M. A., & Sanders, W. G. (2004). Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition. *Journal of Management*, *30*(6), 749–778.

Cerrato, D., & Piva, M. (2012). The internationalization of small and medium-sized enterprises: the effect of family management, human capital and foreign ownership. *Journal of Management & Governance*, *16*(4), 617-644.

Cheng, L. T. W., Chan, R. Y. K., & Leung, T. Y. (2010). Management demography and corporate performance: Evidence from China. *International Business Review, 19*, 261–275.

Chou, H. I., Chung, H., & Yin, X. (2013). Attendance of board meetings and company performance: Evidence from Taiwan. *Journal of Banking & Finance, 37*(11), 4157-4171.

Cirillo, A., Maggi, B., Sciascia, S., Lazzarotti, V., & Visconti, F. (2021). Exploring family millennials' involvement in family business internationalization: Who should be their leader?. *Journal of Family Business Strategy*, 1-11. https://doi.org/10.1016/j.jfbs.2021.100455

Claver, E., Rienda, L., & Quer, D. (2009). Family firms' international commitment: The influence of family-related factors. *Family Business Review, 22*(2), 125-135.

Combs, J. G., Ketchen Jr, D. J., Perryman, A. A., & Donahue, M. S. (2007). The moderating effect of CEO power on the board composition–firm performance relationship. *Journal of Management Studies*, *44*(8), 1299-1323.

D'Angelo, A., Majocchi, A., & Buck, T. (2016). External managers, family ownership and the scope of SME internationalization. *Journal of World Business*, *51*(4), 534-547.

Dalton, D. R., Daily, C. M., Ellstrand, A. E., & Johnson, J. L. (1998). Meta-analytic reviews of board composition, leadership structure, and financial performance. *Strategic Management Journal, 19*(3), 269-290.

Debellis, F., Rondi, E., Plakoyiannaki, E., & De Massis, A. (2020). Riding the waves of family firm internationalization: A systematic literature review, integrative framework, and research agenda. *Journal of World Business, 56*(1), 1-17.

Deephouse, D. L., & Jaskiewicz, P. (2013). Do family firms have better reputations than non-family firms? An integration of socioemotional wealth and social identity theories. *Journal of Management Studies, 50*(3), 337-360.

Eddleston, K. A., & Sabil, G. (2019). Women in family firms: Unsung heroes of business owning families. In V. L. Crittenden (Ed.), Go-to-market strategies for women entrepreneurs (pp. 185–194). Bradford: Emerald Publishing Limited.

Fang, H., Kotlar, J., Memili, E., Chrisman, J. J., & De Massis, A. (2018). The pursuit of international opportunities in family firms: Generational differences and the role of knowledge-based resources. *Global Strategy Journal*, *8*(1), 136-157.

Feltham, T. S., Feltham, G., & Barnett, J. J. (2005). The dependence of family businesses on a single decision-maker. *Journal of Small Business Management, 43*(1), 1-15.

Garg, S., Li, Q., Shaw, J.D. (2018). Undervaluation of directors in the board hierarchy: Impact on turnover of directors (and CEOs) in newly public firms. *Strategic Management Journal, 39*(2), 429–457.

Garrido-Prada, P., Delgado-Rodriguez, M. J., & Romero-Jordán, D. (2019). Effect of product and geographic diversification on company performance: Evidence during an economic crisis. *European Management Journal, 37*(3), 269-286.

Gaur, A. S., Pattnaik, C., Singh, D., & Lee, J. Y. (2019). Internalization advantage and subsidiary performance: The role of business group affiliation and host country characteristics. *Journal of International Business Studies, 50*(8), 1253-1282.

Golovko, E., & Valentini, G. (2011). Exploring the complementarity between innovation and export for SMEs' growth. *Journal of International Business Studies, 42*(3), 362-380.

Gomez-Mejia, L. R., Makri, M., & Kintana, M. L. (2010). Diversification decisions in family-controlled firms. *Journal of Management Studies, 47*(2), 223-252.

Graves, C., & Thomas, J. (2006). Internationalization of Australian family businesses: A managerial capabilities perspective. *Family Business Review, 19*(3), 207-224.

Hailpern, S. M., & Visintainer, P. F. (2003). Odds ratios and logistic regression: further examples of their use and interpretation. *The Stata Journal, 3*(3), 213-225.

Halilem, N., Amara, N., & Landry, R. (2014). Exploring the relationships between innovation and internationalization of small and medium-sized enterprises: A nonrecursive structural equation model. *Canadian Journal of Administrative Sciences, 31*(1), 18-34.

Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of Management Review, 32*(2), 334–343.

Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review, 9*(2), 193–206.

Hambrick, D. C., & Wowak, A. J. (2021). CEO sociopolitical activism: A stakeholder alignment model. *Academy of Management Review, 46*(1), 33-59.

Harrison, D. A., & Klein, K. J. (2007). What's the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of Management Review, 32*(4), 1199-1228.

Hennart, J. F., (1994). The 'comparative institutional'theory of the firm: some implications for corporate strategy, *Journal of Management Studies, 31*(2), 193-208.

Hennart, J. F., (2007). The Theoretical Rationale for a Multinationality/Performance Relationship, *Management International Review, 47*(3), 307-317.

Hennart, J. F., Majocchi, A., & Forlani, E. (2019). The myth of the stay-at-home family firm: How family-managed SMEs can overcome their internationalization limitations. *Journal of International Business Studies, 50*(5), 758-782.

Hillman, A., Cannella, A. A. & Harris, I. (2002). Women and racial minorities in the boardroom: how do they differ?. *Journal of Management*, *28*(6), 747– 63.

Hillman, A. & Dalziel, T. (2003). Board of directors and firm performance: integrating agency and resource dependence perspectives. *Academy of Management Review*, *28*(3), 383- 396.

Hitt, M. A., Bierman, L., Uhlenbruck, K., & Shimizu, K. (2006). The importance of resources in the internationalization of professional service firms: The good, the bad, and the ugly. *Academy of Management Journal, 49*(6), 1137-1157.

Hoetker, G. (2007). The use of logit and probit models in strategic management research: Critical issues. *Strategic Management Journal*, *28*(4), 331-343.

Hollender, L., Zapkau, F. B., & Schwens, C. (2017). SME foreign market entry mode choice and foreign venture performance: The moderating effect of international experience and product adaptation. *International Business Review, 26*(2), 250-263.

Huse, M., & Solberg, A. G. (2006). Gender-related boardroom dynamics: How Scandinavian women make and can make contributions on corporate boards. *Women in Management Review, 21*(2), 113-130.

Huse, M. (2000). Boards of directors in SMEs: a review and research agenda. *Entrepreneurship & Regional Development*, *12*(4), 271-290.

Huse, M. (2007). *Boards, governance and value creation: The human side of corporate governance*. Cambridge University Press, Cambridge, UK.

Ibarra, H. (1992). Homophily and differential returns: sex differences in network structure and access in an advertising firm. *Administrative Science Quarterly, 37*(3), 422–47.

Ibarra, H. (1993). Personal networks of women and minorities in management: a conceptual framework. *Academy of Management Review*, *18*(1), 56–87.

Iliev, P., & Roth, L. (2018). Learning from directors' foreign board experiences. *Journal of Corporate Finance, 51*, 1-19.

Johanson, J., & Vahlne, J. E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies, 40*(9), 1411-1431.

Kano, L. & Verbeke, A. (2015). The three faces of bounded reliability: Alfred Chandler and the micro-foundations of management theory, *California Management Review*, *58*(1), 97-122.

Kano, L., & Verbeke, A. (2018). Family firm internationalization: Heritage assets and the impact of bifurcation bias. *Global Strategy Journal*, *8*(1), 158-183.

Kano, L., Ciravegna, L. & Rattalino, F. (2021). The family as a platform for FSA development: Enriching new internalization theory with insights from family firm research. *Journal of International Business Studies*, *52*(1), 148-160.

Kanuk, L., & Berenson, C. (1975). Mail surveys and response rates: A literature review. *Journal of Marketing Research*, *12*(4), 440-453.

Kellermanns, F. W., Eddleston, K. A., & Zellweger, T. M. (2012). Article commentary: Extending the socioemotional wealth perspective: A look at the dark side. *Entrepreneurship Theory and Practice*, *36*(6), 1175-1182.

Klarner, P., Yoshikawa, T., & Hitt, M. A. (2021). A capability-based view of boards: A new conceptual framework for board governance. *Academy of Management Perspectives*, *35*(1), 123-141.

Kraus, S., Mensching, H., Calabrò, A., Cheng, C. F., & Filser, M. (2016). Family firm internationalization: A configurational approach. *Journal of Business Research*, *69*(11), 5473-5478.

Lages, L. F., Jap, S. D., & Griffith, D. A. (2008). The role of past performance in export ventures: a short-term reactive approach. *Journal of International Business Studies*, *39*(2), 304-325.

Lambrecht, J., & Broekaert, W. (2018). Baromètre Degroof Petercam des entreprises familiales. https://publications.degroofpetercam.be/wp-content/uploads/sites/1616/2018/06/Digital_Barometre-entreprises-familiales_FR-low.pdf, consulted on 11th January 2021.

Lardon, A., Deloof, M., & Jorissen, A. (2017). Outside CEOs, board control and the financing policy of small privately held family firms. *Journal of Family Business Strategy*, *8*(1), 29-41.

Li, J., & Hambrick, D. C. (2005). Factional groups: A new vantage on demographic faultlines, conflict, and disintegration in work teams. *Academy of Management Journal*, *48*(5), 794-813.

Lindner, T., Puck, J., & Verbeke, A. (2020). Misconceptions about multicollinearity in international business research: Identification, consequences, and remedies. *Journal of International Business Studies*, *51*(3), 283-298.

Lu, J.W. & Beamish, P.W. (2001). The internationalization and performance of SMEs. *Strategic Management Journal*, *22*(6–7), 565-586

Majocchi, A., D'Angelo, A., Forlani, E., & Buck, T. (2018). Bifurcation bias and exporting: Can foreign work experience be an answer? Insight from European family SMEs. *Journal of World Business*, *53*(2), 237-247.

Majocchi, A., & Strange, R. (2012). International diversification: The impact of ownership structure, the market for corporate control and board independence. *Management International Review*, *52*(6), 879-900.

Melin, L., Nordqvist, M., & Sharma, P. (2014). The SAGE Handbook of Family Business. Sage Publishing.

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

Miller, T., & del Carmen Triana, M. (2009). Demographic diversity in the boardroom: Mediators of the board diversity–firm performance relationship. *Journal of Management Studies*, *46*(5), 755-786.

Nam, H. J., & An, Y. (2017). Patent, R&D and internationalization for Korean healthcare industry. *Technological Forecasting and Social Change*, *117*, 131-137.

Narula, R., & Verbeke, A. (2015). Making internalization theory good for practice: The essence of Alan Rugman's contributions to international business. *Journal of World Business*, *50*(4), 612-622.

Neely, B. H., Jr., Lovelace, J. B., Cowen, A. P., & Hiller, N. J. (2020). Metacritiques of upper echelons theory: Verdicts and recommendations for future research. *Journal of Management, 46*(6), 1029–1062.

O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & Quantity, 41*(5), 673-690.

Patel, P. C., & Fiet, J. O. (2011). Knowledge combination and the potential advantages of family firms in searching for opportunities. *Entrepreneurship Theory and Practice*, *35*(6), 1179-1197.

Pisani, N., Muller, A., & Bogăţan, P. (2018). Top management team internationalization and firm-level internationalization: The moderating effects of home-region institutional diversity and firm global focus. *Journal of International Management*, *24*(3), 239-256.

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, *63*, 539-569.

Pongelli, C., Valentino, A., Calabrò, A., & Caroli, M. (2021a). Family-centered goals, geographic focus and family firms' internationalization: a study on export performance. *Entrepreneurship & Regional Development, 33*(7-8), 580-598.

Pongelli, C., Calabrò, A., Minichilli, A., Quarato, F., & Corbetta, G. (2021b). Out of the Comfort Zone! Family Leaders' Subsidiary Ownership Choices and the Role of Vulnerabilities. *Family Business Review, 34*(4), 404-424.

A critical review and integrative model. *Family Business Review*, *27*(2), 103-125.

Ray, S., Mondal, A., & Ramachandran, K. (2018). How does family involvement affect a firm's internationalization? An investigation of Indian family firms. *Global Strategy Journal*, *8*(1), 73-105.

Rivas, J. L. (2012). Diversity & internationalization: The case of boards and TMT's. *International Business Review, 21*(1), 1-12.

Ruzzier, M., & Ruzzier, M. K. (2015). On the relationship between firm size, resources, age at entry and internationalization: the case of Slovenian SMEs. *Journal of Business Economics and Management, 16*(1), 52-73.

Segaro, E. L., Larimo, J., & Jones, M. V. (2014). Internationalisation of family small and medium sized enterprises: The role of stewardship orientation, family commitment culture and top management team. *International Business Review, 23*(2), 381-395.

Selby, C. C. (2000). 'From male locker room to co-ed board room: a twenty-five year perspective'. In R. J. Burke and M.C. Mattis (eds), *Women on Corporate Boards of Directors: International Challenges and Opportunities*, pp. 239–251. Amsterdam: Kluwer Academic.

Stoian, M. C., Dimitratos, P., & Plakoyiannaki, E. (2018). SME internationalization beyond exporting: A knowledge-based perspective across managers and advisers. *Journal of World Business, 53*(5), 768-779.

Torchia, M., Calabrò, A., & Huse, M. (2011). Women directors on corporate boards: From tokenism to critical mass. *Journal of Business Ethics, 102*(2), 299-317.

Torchia, M., Calabrò, A., Gabaldon, P., & Kanadli, S. B. (2018). Women directors contribution to organizational innovation: A behavioral approach. *Scandinavian Journal of Management, 34*(2), 215-224.

Umans, I., Lybaert, N., Steijvers, T., & Voordeckers, W. (2020). Succession planning in family firms: family governance practices, board of directors, and emotions. *Small Business Economics*, *54*(1), 189-207.

Uzzi, B. (1996). The Sources and consequences of embeddedness for economic performance of organizations: the network effect. *American Sociological Review*, 61, 674-698.

Uzzi, B. (1997). Social structure and competition in interfirm networks: the paradox of embeddedness. *Administrative Science Quarterly,* 42, 35–67.

Van den Heuvel, J., Van Gils, A., & Voordeckers, W. (2006). Board roles in small and medium-sized family businesses: Performance and importance. *Corporate Governance: An International Review*, *14*(5), 467-485.

Verbeke, A., & Kano, L. (2012). The transaction cost economics theory of the family firm: Family–based human asset specificity and the bifurcation bias. *Entrepreneurship Theory and Practice, 36*(6), 1183-1205.

Verbeke, A., & Kano, L. (2016). An internalization theory perspective on the global and regional strategies of multinational enterprises. *Journal of World Business, 51*(1), 83-92.

Verbeke, A., Yuan, W., & Kano, L. (2020). A values-based analysis of bifurcation bias and its impact on family firm internationalization. *Asia Pacific Journal of Management, 37*(2), 449-477.

Villalonga, B., & Amit, R. (2006). How do family ownership, control and management affect firm value? *Journal of Financial Economics, 80*(2), 385-417.

Ward, J. L. (1988). The Active Board with Outside Directors and the Family Firm. *Family Business Review, 1*(3), 223-229.

Westphal, J., & Garg, S. (2021). Boards of directors and strategic management: Public firms and new ventures. In Duhaime I.M., Hitt M.A., Lyles M.A. (Eds.), *Strategic Management: State of the Field and Its Future*. Oxford University Press.

Wiersema, M. F., & Bowen, H. P. (2009). The use of limited dependent variable techniques in strategy research: Issues and methods. *Strategic Management Journal, 30*(6), 679-692.

Wolff, J. A., & Pett, T. L. (2000). Internationalization of small firms: An examination of export competitive patterns, firm size, and export performance. *Journal of Small Business Management, 38*(2), 34-47.

World Bank (2020). Exports of goods and services. https://data.worldbank.org/indicator/BX.GSR.GNFS.CD, consulted on 11th January 2021.

Yang, X., Li, J., Stanley, L. J., Kellermanns, F. W., & Li, X. (2020). How family firm characteristics affect internationalization of Chinese family SMEs. *Asia Pacific Journal of Management*, *37*(2), 417-448.

Zattoni, A., Gnan, L., & Huse, M. (2015). Does family involvement influence firm performance? Exploring the mediating effects of board processes and tasks. *Journal of Management*, *41*(4), 1214-1243.

Zenou, E., Allemand, I., Brullebaut, B., & Galia, F. (2020). Board recruitment as a strategic answer: Do companies' strategies for innovation influence the selection of new board members?. *Strategic Change*, *29*(1), 127-139.

Zona, F. (2016). CEO leadership and board decision processes in family-controlled firms: comparing family and non-family CEOs. *Small Business Economics*, *47*(3), 735-753.

Table 1. List of variables used in the models

Variables	Operationalization
Dependent variable	
Entropy	$\sum_{i=1}^{6} P_i \ \ln(\frac{1}{P_i})$ where P_i is the share of the i-th regional segment in the firm's total sales. Six different regional segments are identified: domestic (i.e., Belgium), the expanded European Union, Asia, North America, Latin America, and a residual region labelled 'Rest of the World'.
Independent variables	
Board diversity	
Nonfamily representation on the board (NFRB)	Percentage of nonfamily directors sitting on the board.
Women's representation on the board (WRB)	Percentage of female directors sitting on the board.
Board age diversity	Coefficient of variation of age computed to the ratio of the standard deviation of board age to mean of board age
Board experience	
Board international experience	Ratio of the number of directors with international experience to board size.
Intensity of Board activities	Number of board meetings per year.
Moderating variable	
Family CEO	Dummy variable that equals 1 if the CEO is a family member, 0 otherwise.
Control variables	
Firm age	Natural logarithm of the number of years since firm's foundation.
Firm size	Natural logarithm of the number of full-time employees.
R&D intensity	Ratio of R&D expenditures to total sales.
Liquidity	Ratio of cash and cash equivalents to total assets.
Productivity	Value added per worker.
Family ownership	Percentage of shares held by a single family.
Foreign ownership	Percentage of shares held by foreign investors.
Generational stage	Ordinary scale measuring whether the family firm was a first- (coded as 1), second- (coded as 2), or third- and later-generation (coded as 3) firm.
Board tenure	Average tenure (in years) of all directors sitting on the board.
Renewal of family bonds (RFB)	4 items related to family owners' preoccupation with RFB using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree): RFB1. Continuing the family legacy and tradition is an important goal for my family business. RFB2. Family owners are less likely to evaluate their investment on a short-term basis. RFB3. Family members would be unlikely to consider selling the family business. RFB4. Successful business transfer to the next generation is an important goal for family members.
Industry affiliation	Dummy variables for 5 sectors: manufacturing, wholesale, retail, services, high technologies.

Table 2. Descriptive statistics and correlation matrix

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Entropy	0.568	0.187	1.00																
2. NFRB	0.182	0.097	0.21***	1.00															
3. WRB	0.378	0.094	0.15**	0.16**	1.00														
4. Board age diversity	0.131	0.042	0.08	0.07	0.05	1.00													
5. Board international experience	0.124	0.039	0.20***	0.19***	0.15**	0.07	1.00												
6. Intensity of Board activities	4.214	2.021	0.23***	0.18***	0.15**	0.07	0.11*	1.00											
7. Family CEO	0.527	0.147	-0.15**	-0.14**	-0.11*	0.07	-0.14**	-0.12*	1.00										
8. Firm age	3.092	0.657	0.08	0.15**	0.06	0.05	0.07	0.04	0.08	1.00									
9. Firm size	3.850	0.823	0.20***	0.14**	0.07	0.07	0.05	0.07	0.04	0.11*	1.00								
10. R&D intensity	0.032	0.011	0.20***	0.14**	0.12*	0.07	0.06	0.11*	-0.16**	-0.08	0.06	1.00							
11. Liquidity	0.062	0.018	0.07	0.05	0.04	0.04	0.07	0.04	0.11*	0.03	0.06	-0.06	1.00						
12. Productivity	4.321	0.847	0.11*	0.07	0.11*	0.03	0.04	0.04	-0.12*	0.04	0.05	0.14**	0.03	1.00					
13. Family ownership	0.821	0.085	-0.15**	-0.11*	0.07	0.02	-0.07	-0.06	0.23***	0.05	0.04	0.03	0.07	0.04	1.00				
14. Foreign ownership	0.036	0.008	0.06	0.06	0.04	0.05	0.142**	0.07	-0.12*	0.06	0.07	0.04	0.05	0.07	-0.21***	1.00			
15. Generational stage	1.807	0.317	0.19***	0.16**	0.14**	0.08	0.11*	0.09	-0.11*	0.15**	0.08	0.07	0.08	0.04	0.03	0.15**	1.00		
16. Board tenure	11.152	4.517	0.15**	-0.11*	-0.11*	-0.14**	0.03	-0.12*	-0.05	0.05	0.04	0.04	0.02	0.05	0.08	-0.04	-0.07	1.00	
17. RFB	12.043	2.14	0.07	0.04	0.05	0.05	0.06	0.05	0.15**	-0.07	-0.05	0.11*	0.07	0.06	0.19***	-0.05	-0.12*	0.19***	1.00

N = 328. * $p < .10$; ** $p < .05$; *** $p < .01$.

Table 3. Tobit regression analysis

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Constant	-0.414***	-0.402***	-0.421***	-0.388***	-0.432***	-0.372***	-0.416***	-0.429***
	(0.094)	(0.090)	(0.105)	(0.084)	(0.109)	(0.080)	(0.102)	(0108)
Firm age	0.081	0.098	0.090	0.102	0.087	0.108	0.080	0.085
	(0.065)	(0.083)	(0.074)	(0.086)	(0.071)	(0.092)	(0.065)	(0.069)
Firm size	0.105***	0.107***	0.123***	0.109***	0.117***	0.113***	0.119***	0.118***
	(0.017)	(0.019)	(0.029)	(0.020)	(0.027)	(0.025)	(0.028)	(0.027)
R&D intensity	0.976***	0.917***	0.954***	1.025***	0.968***	1.021***	0.983***	0.976***
	(0.104)	(0.096)	(0.101)	(0.112)	(0.103)	(0.111)	(0.106)	(0.104)
Liquidity	0.218	0.217	0.231	0.219	0.228	0.237	0.229	0.221
	(0.214)	(0.214)	(0.227)	(0.216)	(0.224)	(0.233)	(0.224)	(0.218)
Productivity	0.081*	0.092*	0.082*	0.099*	0.096*	0.088*	0.084*	0.093*
	(0.036)	(0.042)	(0.039)	(0.045)	(0.044)	(0.041)	(0.040)	(0.042)
Family ownership	-0.107**	-0.100**	-0.096**	-0.104**	-0.099**	-0.089**	-0.093**	-0.102**
	(0.024)	(0.023)	(0.021)	(0.024)	(0.022)	(0.020)	(0.020)	(0.023)
Foreign ownership	0.078	0.072	0.068	0.082	0.079	0.085	0.072	0.070
	(0.055)	(0.049)	(0.047)	(0.059)	(0.055)	(0.062)	(0.050)	(0.059)
Generational stage	0.120***	0.128***	0.116***	0.122***	0.133***	0.108***	0.102***	0.126***
	(0.017)	(0.019)	(0.016)	(0.017)	(0.021)	(0.014)	(0.013)	(0.018)
Board tenure	0.052**	0.057**	0.055**	0.053**	0.059**	0.056***	0.060**	0.061**
	(0.016)	(0.018)	(0.017)	(0.017)	(0.019)	(0.018)	(0.021)	(0.021)
Renewal of family bonds	-0.043	-0.045	-0.053	-0.041	-0.056	-0.033	-0.046	-0.047
	(0.037)	(0.039)	(0.047)	(0.036)	(0.050)	(0.028)	(0.040)	(0.041)
NFRB		0.121**	0.118**	0.115**	0.108**	0.123**	0.128**	0.126**
		(0.040)	(0.038)	(0.036)	(0.034)	(0.041)	(0.042)	(0.041)
WRB		0.096***	0.102***	0.115***	0.112***	0.093***	0.106***	0.108***
		(0.018)	(0.020)	(0.024)	(0.023)	(0.017)	(0.021)	(0.022)
Board age diversity		0.068	0.087	0.076	0.064	0.084	0.075	0.077
		(0.052)	(0.070)	(0.060)	(0.048)	(0.067)	(0.059)	(0.061)
Board international experience		0.228***	0.220***	0.237***	0.217***	0.225***	0.216***	0.223***
		(0.027)	(0.025)	(0.030)	(0.023)	(0.026)	(0.022)	(0.026)
Intensity of Board activities		0.098***	0.095***	0.103***	0.089***	0.100***	0.092***	0.093***
		(0.012)	(0.011)	(0.014)	(0.010)	(0.013)	(0.010)	(0.011)
Family CEO			-0.157**	-0.154**	-0.161**	-0.160**	-0.158**	-0.163**
			(0.051)	(0.049)	(0.053)	(0.053)	(0.051)	(0.054)
NFRB* Family CEO				0.057**				
				(0.023)				
WRB*Family CEO					0.052**			
					(0.021)			
Board age diversity* Family CEO						0.048		
						(0.043)		
Board international experience*Family CEO							0.102**	
							(0.034)	
Board activism*Family CEO								0.068***
								(0.007)
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R^2	0.137	0.213	0.229	0.247	0.251	0.236	0.244	0.259
Log Likelihood	-248.57	-296.54	-297.85	-303.79	-307.64	-299.74	-302.66	-310.68
LR Chi2	18.04***	21.79***	22.67***	24.07***	24.98***	23.58***	24.41***	25.87***
Observations (left-censored)	328 (99)	328 (99)	328 (99)	328 (99)	328 (99)	328 (99)	328 (99)	328 (99)

** p < .10; **p < .05; ***p < .01*. Standard errors are reported within brackets.

Table 4. Marginal effects

Value of the moderator	Marginal effect of NFRB [a]	z-statistic
Family CEO (1)	0.134***	2.66
Nonfamily CEO (0)	0.038	1.17
Value of the moderator	Marginal effect of WRB [a]	z-statistic
Family CEO (1)	0.118**	2.58
Nonfamily CEO (0)	0.041	1.20
Value of the moderator	Marginal effect of board age diversity [a]	z-statistic
Family CEO (1)	0.048	1.18
Nonfamily CEO (0)	0.050	1.22
Value of the moderator	Marginal effect of board international experience [a]	z-statistic
Family CEO (1)	0.142***	2.78
Nonfamily CEO (0)	0.062*	1.62
Value of the moderator	Marginal effect of intensity of board activities [a]	z-statistic
Family CEO (1)	0.159***	2.89
Nonfamily CEO (0)	0.093**	2.28

** p < .10; **p < .05; ***p < .01. [a] Computed at the mean value.*

Table 5. Robustness checks

Variables	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14	Model 15	Model 16
Constant	-0.818***	-0.815***	-0.875***	-0.754***	-0.929***	-0.741***	-0.809***	-0.836***
	(0.187)	(0.188)	(0.195)	(0.169)	(0.219)	(0.166)	(0.182)	(0.191)
Firm age	0.108	0.119	0.115	0.131	0.104	0.137	0.121	0.110
	(0.071)	(0.092)	(0.087)	(0.106)	(0.072)	(0.110)	(0.089)	(0.079)
Firm size	0.209***	0.214***	0.247***	0.218***	0.234***	0.224***	0.228***	0.237***
	(0.041)	(0.040)	(0.058)	(0.039)	(0.052)	(0.049)	(0.050)	(0.053)
R&D intensity	1.214***	1.407***	1.287***	1.354***	1.426***	1.266***	1.373***	1.341***
	(0.401)	(0.426)	(0.384)	(0.415)	(0.434)	(0.378)	(0.426)	(0.411)
Liquidity	0.310	0.329	0.286	0.270	0.201	0.285	0.266	0.244
	(0.258)	(0.276)	(0.243)	(0.237)	(0.149)	(0.232)	(0.213)	(0.192)
Productivity	0.107*	0.118*	0.100*	0.094*	0.123*	0.115*	0.106*	0.125*
	(0.046)	(0.052)	(0.044)	(0.041)	(0.057)	(0.050)	(0.046)	(0.059)
Family ownership	-0.121*	-0.126*	-0.114*	-0.119*	-0.108*	-0.117*	-0.106*	-0.118*
	(0.052)	(0.056)	(0.048)	(0.051)	(0.043)	(0.049)	(0.042)	(0.052)
Foreign ownership	0.094	0.090	0.088	0.095	0.087	0.101	0.078	0.085
	(0.061)	(0.059)	(0.060)	(0.062)	(0.060)	(0.067)	(0.050)	(0.057)
Generational stage	0.128**	0.138**	0.135*	0.153**	0.158**	0.121*	0.132**	0.152**
	(0.041)	(0.049)	(0.068)	(0.059)	(0.062)	(0.055)	(0.041)	(0.057)
Board tenure	0.067***	0.068***	0.061***	0.059***	0.064***	0.062***	0.070***	0.066***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)
Renewal of family bonds	-0.042	-0.052	-0.053	-0.048	-0.044	-0.036	-0.051	-0.050
	(0.037)	(0.044)	(0.045)	(0.040)	(0.037)	(0.029)	(0.043)	(0.042)
NFRB		0.145**	0.151**	0.148**	0.155**	0.144**	0.158**	0.150**
		(0.044)	(0.047)	(0.045)	(0.048)	(0.043)	(0.049)	(0.046)
WRB		0.134**	0.129**	0.141**	0.136**	0.126**	0.130**	0.134**
		(0.047)	(0.044)	(0.050)	(0.049)	(0.041)	(0.044)	(0.047)
Board age diversity		0.089	0.097	0.094	0.087	0.090	0.082	0.088
		(0.076)	(0.083)	(0.080)	(0.074)	(0.076)	(0.069)	(0.075)
Board international experience		0.317***	0.326***	0.321***	0.319***	0.328***	0.320***	0.324***
		(0.036)	(0.041)	(0.039)	(0.036)	(0.042)	(0.040)	(0.039)
Intensity of Board activities		0.115***	0.118***	0.121***	0.110***	0.119***	0.113***	0.116***
		(0.026)	(0.028)	(0.030)	(0.023)	(0.029)	(0.024)	(0.025)
Family CEO			-0.189**	-0.180**	-0.184**	-0.192**	-0.181**	-0.185**
			(0.057)	(0.050)	(0.053)	(0.059)	(0.051)	(0.054)
NFRB* Family CEO				0.067**				
				(0.022)				
WRB*Family CEO					0.087***			
					(0.012)			
Board age diversity* Family CEO						0.057		
						(0.049)		
Board international experience*Family CEO							0.124**	
							(0.043)	
Intensity of Board activities*Family CEO								0.079***
								(0.009)
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R^2	0.130	0.218	0.235	0.249	0.257	0.239	0.247	0.263
Log Likelihood	-248.64	-296.84	-298.36	-305.66	-309.59	-299.88	-303.87	-311.63
LR Chi2	18.42***	21.98***	23.28***	24.78***	25.31***	23.58***	24.41***	26.02***
Observations (left-censored)	328 (75)	328 (75)	328 (75)	328 (75)	328 (75)	328 (75)	328 (75)	328 (75)

** p < .10; **p < .05; ***p < .01*. Standard errors are reported within brackets.

Table 6. Propensity score matching and endogenous treatment

	Family CEO
Low NFRB	-4.237***
	(-2.874)
High NFRB	1.922**
	(2.213)
Low WRB	-4.523***
	(-2.967)
High WRB	1.125**
	(2.168)
Low Board age diversity	-3.236**
	(-2.135)
High Board age diversity	-3.227**
	(-2.122)
Weak Board international experience	-5.142***
	(-3.123)
Strong Board international experience	-1.057**
	(2.108)
Low intensity of Board activities	-3.987***
	(-2.874)
High intensity of Board activities	1.036**
	(2.136)

* *p* < .10; ** *p* < .05; *** *p* < .01. z-statistics are reported within brackets.

Figure 1. The conceptual model: Board characteristics and the internationalization of family SMEs

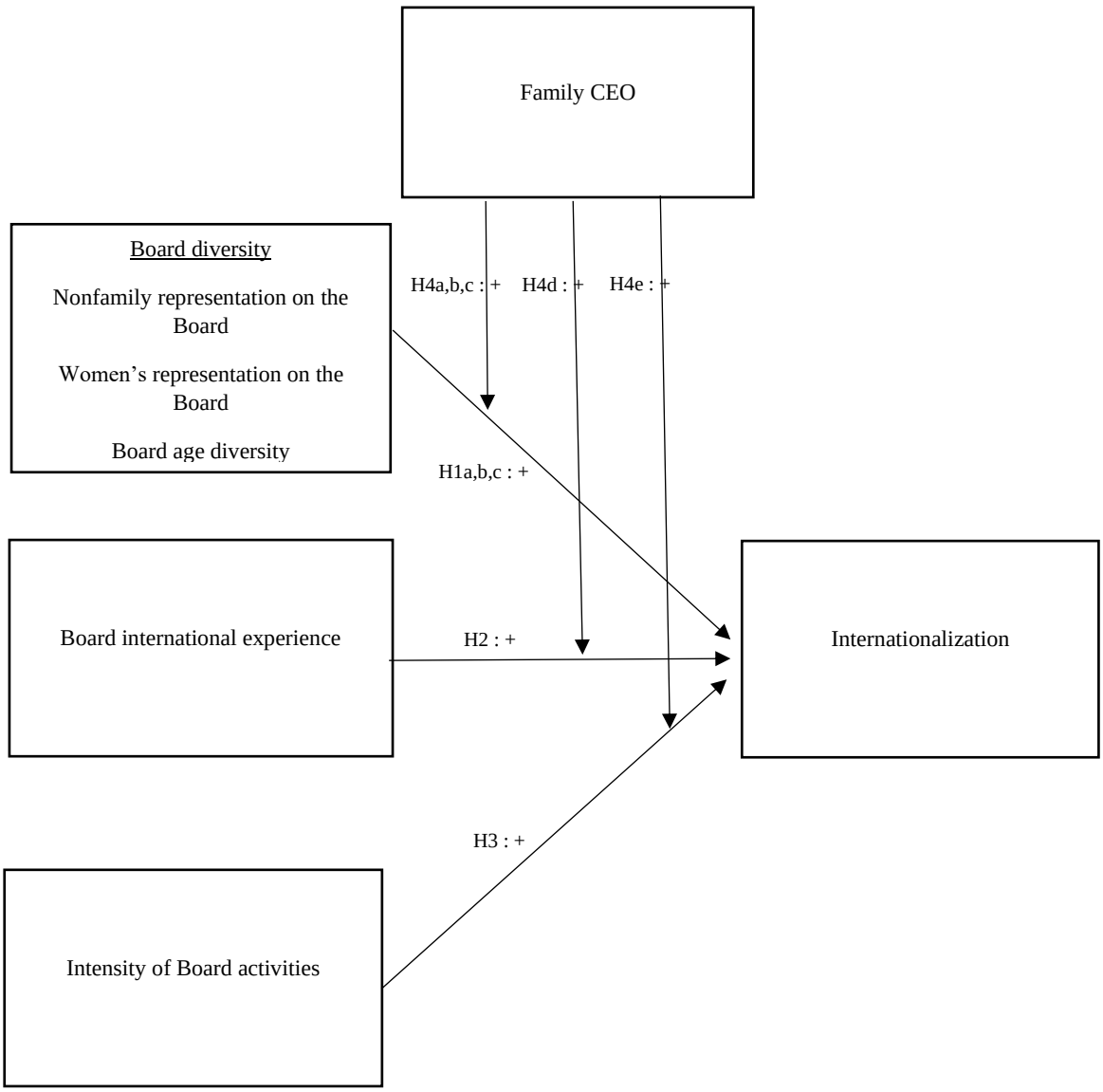

Figure 2. Interaction between nonfamily representation on the Board and family versus nonfamily CEO.

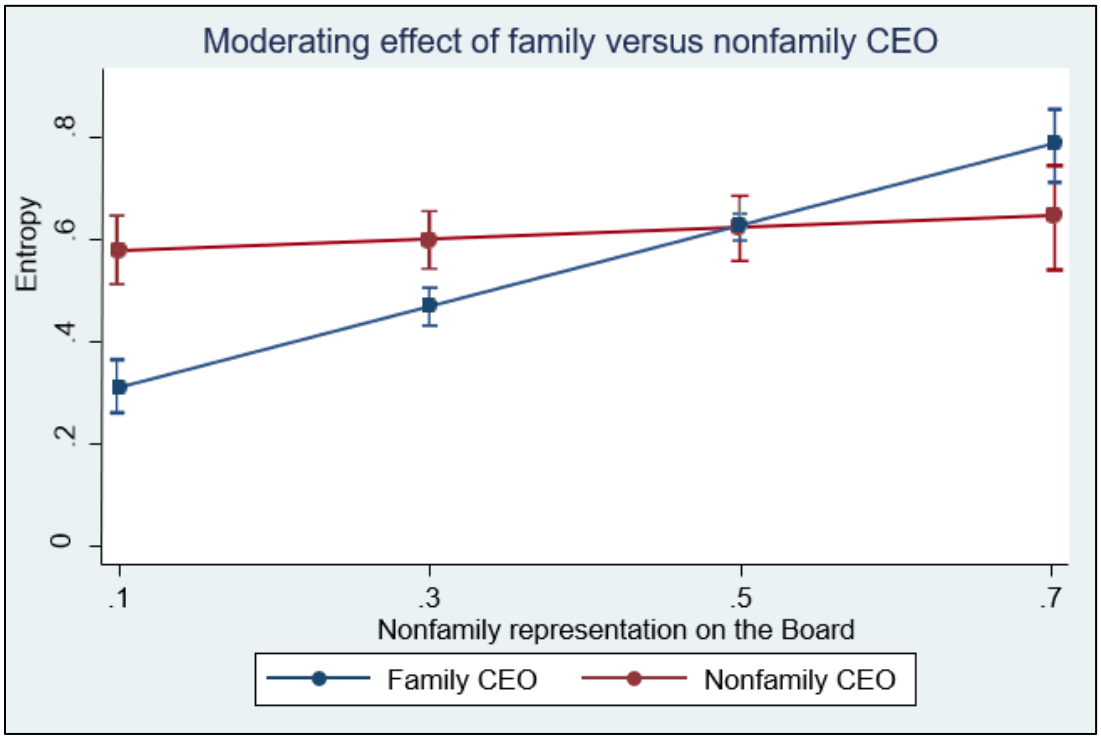

Figure 3. Interaction between women's representation on the Board and family versus nonfamily CEO.

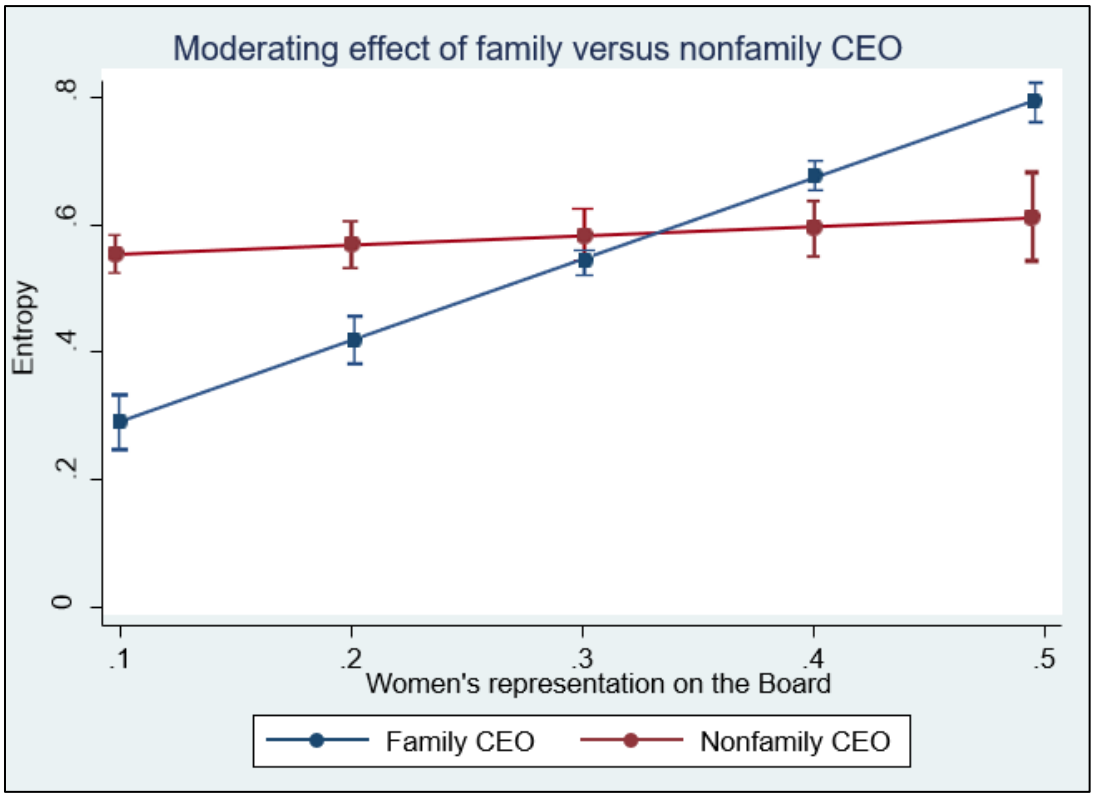

Figure 4. Interaction between Board **i**nternational experience and family versus nonfamily CEO.

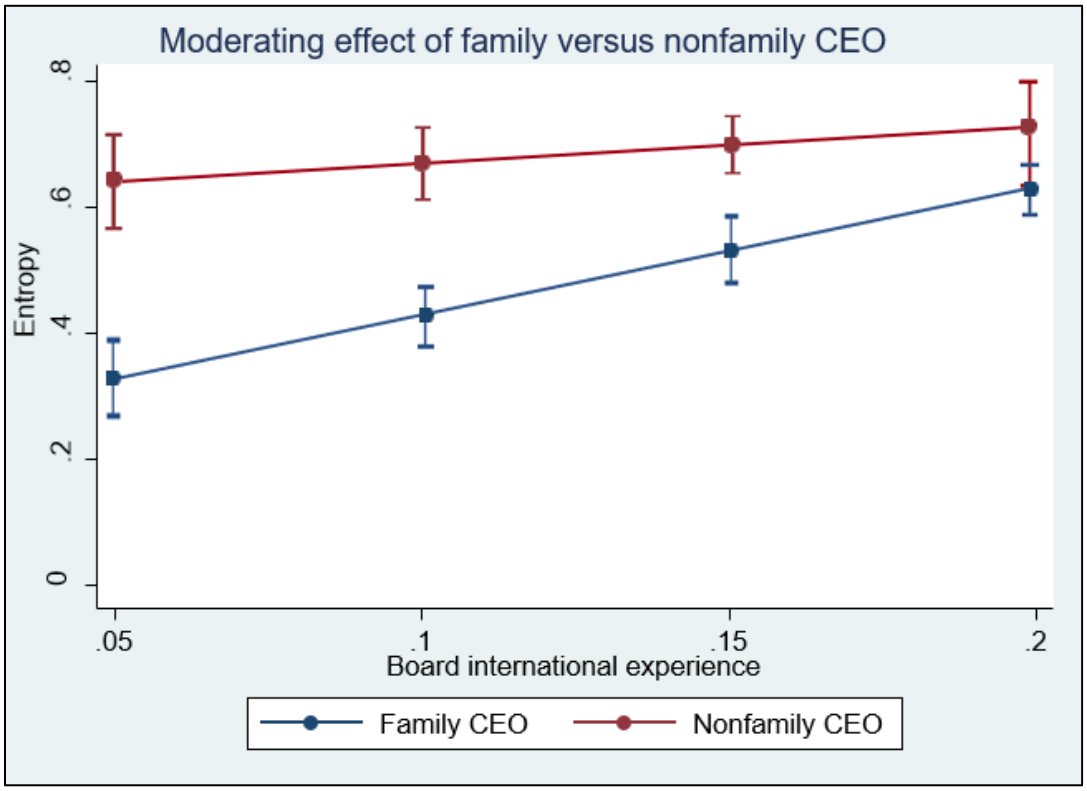

Figure 5. Interaction between intensity of Board activities and family versus nonfamily CEO.