

Research Space Journal article

Influence of socioemotional wealth on non-family managers' risk taking and product innovation in family businesses

Ng, P., Dayan, M. and Makri, M.

This is the accepted version of:

Ng, P.Y., Dayan, M. and Makri, M. (2021), "Influence of socioemotional wealth on nonfamily managers' risk taking and product innovation in family businesses", <u>Cross Cultural</u> <u>& Strategic Management</u>, Vol. ahead-of-print No. ahead-ofprint. <u>https://doi.org/10.1108/CCSM-03-2021-0058</u>

Influence of socioemotional wealth on non-family managers' risk taking and product innovation in family businesses

Abstract

Purpose: There is a growing interest in understanding family firms' strategic behavior using the socioemotional wealth perspective. This study explores how family socioemotional wealth (SEW) dimensions influence non-family managers' attitudes toward risk in the context of product innovation. We also examine whether managerial risk-taking mediates the relationship between SEW and product innovation.

Design/methodology/approach: The study uses a sample of 150 family firms in the United Arab Emirates and collects data from family owners and non-family managers via self-administered questionnaires. We use SmartPLS structural equation modeling to test the conceptual model and the proposed hypotheses.

Findings: The results indicate that SEW influences non-family managers' risk-taking behavior in different magnitudes and directions, thus impacting firms' product innovation. Moreover, risk-taking partially mediates the relationship between SEW dimensions and product innovation.

Originality/value: While product innovation could be seen as a loss scenario for family firms due to the potential loss of SEW, growth, continuity, and reputation outweighed the desire to maintain control for the firms in this sample. Thus, these firms encourage non-family managers to take risks in product innovation.

Keywords socioemotional wealth, managerial risk-taking, product innovation, non-family manager, Middle East

Paper type Research paper

Introduction

Scholars agree that socioemotional wealth (SEW) is the "single most important feature of a family firm's essence that separates it from other organizational forms" (Berrone et al., 2012, p. 260). Gómez-Mejía et al. (2007) defined SEW as the "affective endowment" of familyfirm owners, including the family's desire to exert control, maintain clan affiliation within the firm, assign reliable family members to important positions, preserve a strong family identity, and carry on the family dynasty. This compulsion is free of efficiency or economic instrumentality considerations, such that SEW preservation is prioritized over options that could yield better economic results (Garcés-Galdeano et al., 2016), often including innovation outcomes (Filser et al., 2018). In terms of innovation-related decisions, Gómez-Mejía et al. (2014) suggested that ceteris paribus, family firms invest less in research and development (R&D) than non-family firms because launching new products and entering new markets may induce significant changes in the way the family-owned firm is organized and thus a loss of family control. Gomez-Mejia et al. (2007) argued that "family principals are more willing to make strategic choices associated with a greater probability of failure than their non-family counterparts if this is necessary to preserve socioemotional wealth" and are also "more willing than non-family principals to make strategic choices that imply belowtarget performance relative to their own past performance in order to preserve socioemotional wealth" (p. 106). Simply put, family firms are unique in that family members' strategic decisions are often guided by their emotions and at times, family-centric objectives can be at odds with sound business decisions.

These studies have been instrumental in enhancing our understanding of family firms' idiosyncrasies. However, they treated the SEW construct as a collective whole when, in fact, it comprises several dimensions, such as the unrestricted exercise of personal power vested in family members (Jones *et al.*, 2008); emotional attachment of family members to the business

(Gomez-Mejia *et al.*, 2007); family members' identification with the firm (Cabrera-Suárez *et al.*, 2014); social ties with suppliers, customers, and their community; and the renewal of family bonds through dynastic succession (Berrone *et al.*, 2012). This delineation of the SEW construct is referred to as the "FIBER model."¹ It can help us explore how the various dimensions of the construct impact strategic decisions differentially.

The role of non-family managers has seldom been highlighted in the family business literature, especially in relation to innovation outcomes (Calabrò et al., 2019). The limited pool of talent among family members drives family firms to employ non-family managers in various positions (Hiebl and Li, 2020), which risks reducing SEW (Berrone et al., 2012) because non-family managers have individual ambitions and priorities that might not be consistent with the SEW preservation motives of family members (Chrisman et al., 2014). Nevertheless, family firms still resort to external expertise, such as by appointing non-family managers to expand their business capabilities and increase the probability of firm survival (Miller et al., 2013). Non-family managers bring in new ideas, information and knowledge, social ties, and human capital beyond what family members could offer (Fang *et al.*, 2017; Stewart and Hitt, 2012). Being part of a small and medium-sized enterprise (SME) allows close-knit relationships to develop easily between non-family managers and the family, especially if they are entrusted with key responsibilities and decision-making power (Sundaramurthy, 2008). One could argue that, over time, their assimilation into the family could encourage non-family managers to behave in a way that aligns with the family firm's interest in preserving SEW, including in terms of risk-taking propensity (Hiebl, 2013).

¹ FIBER is an acronym used to describe the five elements comprising the construct of socioemotional wealth. These elements are Family control and influence, Identification of family members with the Firm, Binding social ties, Emotional attachment of family members, and Renewal of the family bonds through dynastic succession (Beronne, *et al.*, 2012).

This study seeks to fill this gap by examining the differential effects of SEW dimensions on managerial risk-taking by non-family managers and, in turn, on one key innovation outcome: product innovation in family SMEs. Specifically, we explore how non-family managers responsible for innovation decisions are affected by the controlling families SEW. We adopt FIBER, the multidimensional SEW scale proposed by Berrone *et al.* (2012) to examine how the SEW dimensions impact managerial risk-taking. The study investigates (1) how the SEW dimensions affect managerial risk-taking by non-family managers and ultimately product innovation, and 2) whether managerial risk-taking mediates the relationship between each of the SEW dimensions and product innovation. The study develops and tests hypotheses using a sample of 150 small-to medium-sized family firms in the United Arab Emirates (UAE) to examine how family ownership affects the risk-taking propensities of non-family managers in charge of innovation-related decisions in these firms.

This study adds to the literature in several ways. First, we advance SEW theory by delineating the effects of various SEW dimensions on non-family managers' risk-taking and product innovation (Filser *et al.*, 2018). We demonstrate that SEW is a multidimensional construct whose dimensions influence non-family managers' risk-taking behavior differently. Second, we establish that in family firms, the family's SEW preservation motives affects non-family managers' attitudes toward risk and in turn, their risk-taking propensity. Put differently, the non-family manager is the change agent that can positively mediate the relationship between SEW and product innovation. Finally, our study enhances the explanatory power of SEW theory by integrating it into a different contextual perspective. While most studies employing the SEW framework were conducted in Western cultures, we offer empirical evidence in the Arab Middle East context, where family firms are a prominent

organizational form². Family firms in this region are considered extremely risk-averse and less open to new ways of thinking and modus operandi (PWC, 2016). Nevertheless, the United Arab Emirates aims to become the most innovative country in the world³. Such a unique context in which family firms are extremely risk-averse provides a fruitful ground on which to explore the link between different SEW dimensions and innovation outcomes.

Theoretical Framework and Hypotheses Development

The desire to preserve SEW is so pervasive that it becomes a driver in a variety of decision contexts, including environmental investments, entrepreneurial orientation (Garcés–Galdeano *et al.*, 2016), compensation, diversification, earnings management, corporate social responsibility (Cruz *et al.*, 2014; Zientara, 2015), acquisitions (Gómez-Mejía *et al.*, 2019), top management team contracts (Cruz *et al.*, 2010), board appointments (Jones *et al.*, 2008; Goel *et al.*, 2013), R&D activities (Patel and Chrisman, 2014), and innovation (Hauck and Prügl, 2015; Brinkerink and Bammens, 2018; Filser *et al.*, 2018). Regarding the latter, the question of how family-specific characteristics influence innovation inputs and outputs is an ongoing debate in the literature (Fitz-Koch and Nordqvist, 2017; Miller *et al.*, 2015; Hauck and Prügl, 2015; Garcés–Galdeano *et al.*, 2016). In family firms, R&D investments involve socioemotional trade-offs due to the weakened family influence resulting from the use of external resources and potential debt financing (Chrisman and Patel, 2012). Gómez-Mejía *et al.* (2014) argued that family firms, in an attempt to maintain family control, invest less in R&D than non-family firms do, even in high-technology sectors where such investments reduce business risk. However, family firms will not completely ignore the economic

² Family businesses have been reported to account for more than 90% of commercial activities in the Gulf region (Rettab and Azzam, 2011).

³ It has been voted as the most innovative Arab country according to the Global Innovation Index (Cornell University *et al.*, 2020).

concerns of their decisions. The negative relationship between family ownership and R&D investments is moderated by performance hazard: When faced with greater performance hazards, family firms are more willing to invest in R&D to mitigate that risk, making firm survival a higher priority than SEW preservation.

While family firms' primary concern is SEW preservation (except when faced with performance hazard), they can be motivated by potential gains, and the possibility of expanding the existing stock of socioemotional wealth by enhancing the family's reputation (Gómez-Mejía et al., 2014) is also enticing. Product innovation is crucial to a family firm's survival and success (Chirico and Salvato, 2016), as it allows firms to enjoy competitive advantage temporarily or in the long term, depending on the efforts and resources invested in it. Investments in product innovation can involve socioemotional trade-offs, such as weakened family control, emotional attachment, and identification with the business stemming from the use of external talent or the need to take on additional debt from institutional investors (Chrisman and Patel, 2012). At the same time, successful innovation decisions could enhance the family's SEW because of their positive reputational and legacybuilding effects. Simply put, investments in innovation can erode family control, attachment, and identification but can also enhance social ties and create a dynasty that lasts through generations. In sum, the five FIBER dimensions may pull the family into two different directions. This study indirectly examines this mixed effect by exploring how family control, attachment, and identification, as well as social ties and dynastic succession, relate to nonfamily managers' risk-taking propensity. These issues are explored below.

Family Control and Influence and Managerial Risk Taking of Non-family Managers

Family business researchers agree that family ownership and control affect strategic decisions (Chua *et al.*, 1999; Schulze *et al.*, 2003). The controlling family may exert a direct influence

by appointing a family CEO or an indirect influence by nourishing an organizational climate driven by the family's affective needs. Even if the family does not actively participate in decisions related to innovation, their needs and desires can be made very clear to the non-family manager responsible for making those decisions. In family SMEs where family owners work more closely with managers, control and influence can impact the non-family managers' degree of risk-taking in such a way that it aligns with the family's preferences. Since the primary consideration in strategic decisions is the protection of affective endowment rather than financial gain, non-family managers in family SMEs will mirror the family owner's loss aversion and make decisions that pose less risk to the firm's survival (Zellweger *et al.*, 2012; Hu and Hughes, 2020). Put differently, in family SMEs, the close relationship between family members and non-family managers may cause the family to influence managers and induce them to avoid risk-taking decisions that may threaten the family's SEW endowment. Based on the first dimension of FIBER, we suggest that family control and influence negatively impact the extent of the risk non-family managers are willing to take. We thus propose the following:

H1a: Family control and influence have a negative effect on managerial risk-taking by nonfamily managers.

Identification of Family Members and Managerial Risk-taking of Non-family Managers According to the second dimension of FIBER, a family becomes inextricably connected to and identified with a business that bears its name (Berrone *et al.*, 2010). This results in blurred family–firm boundaries, where the firm is perceived internally and externally as an extension of the family (Berrone *et al.*, 2012). Family firm owners seek to project a positive image of the firm both internally and externally because family members strongly identify with the business and because any form of public condemnation could cause emotional devastation (Micelotta and Raynard, 2011). Family SMEs are less likely to engage in risky ventures to protect their reputation and hence SEW. In the current research context, Arab family SMEs often use the family name as a trade name. The sense of belonging and identification derived from the family business, especially if it bears the family name, makes family owners even more cautious, especially when outcomes are uncertain (such as in new product launches). The family business represents "the lifeblood of the family," particularly for SMEs (Kellermanns *et al.*, 2012, p. 89); thus, the costs involved with possible business failure are often overshadowed by the rewards of the venture's success. Employees, including non-family managers, experience this strong sense of identification through their daily interactions with family owners and other family employees. Non-family managers may feel pressured by these expectations, even if they are not part of the family (Fang *et al.*, 2017). Simply put, the strong identification of family members with the firm will result in less risk-taking behavior among non-family managers. We thus propose the following:

H1b: The identification of family members with the firm has a negative effect on managerial risk-taking by non-family managers.

Binding Social Ties and Managerial Risk-taking of Non-family Managers

The third dimension of SEW is the maintenance of close social relationships within the family and between the family and a wide range of internal and external stakeholders (Sieger *et al.*, 2011; Ardito *et al.*, 2019), including non-family employees (Miller and Le Breton-Miller, 2005) and long-term vendors and suppliers, who become viewed as members of the family over time. The binding social ties maintained by family firms perpetuate feelings of closeness, unity, loyalty, and pride (Pieper, 2010) within the family and between family and non-family managers. To maintain their social ties, family firms actively pursue the welfare of their internal and external stakeholders, even if this fails to yield any visible financial

results or is potentially risky to the firm (Brickson, 2007). This desire to maintain close social ties induces family and non-family managers to take innovation-related risks by acquiring long-term debt or by increasing capital expenditures (Gómez-Mejía_et al., 2019) to remain competitive and grow the business (Chrisman and Patel, 2012; Basco, 2014). A stagnant family business risks losing qualified and long-standing non-family managers and staff to other employers if they perceive the prospects of the firm to be poor (Vallejo, 2009). This FIBER dimension behaves in a manner different from those discussed above, in that risk is acceptable for the sake of preserving social ties. In our research context, the Arab world is built on a nomadic heritage of living in groups, where communities are closely-knit and participate together in the search for food and shelter. Placing this nomadic tendency in a business setting, we expect social ties to be extremely important in this context and a source of emotional support for the family. The collectivist nature of the Arab family business cultivates a dynamic and close-knit bond between non-family managers and the family (Samara, 2020). Such strong social ties could help the family firm overcome its risk aversion and motivate non-family managers to take more risk in their innovation-related decisions. We thus propose the following:

H1c: Binding social ties has a positive effect on managerial risk-taking by non-family managers.

Emotional attachment of Family Members and Managerial Risk-taking of Non-family Managers

The fourth FIBER dimension is emotional attachment of family members, which involves the affective component of SEW (Berrone et al., 2012). According to Ashforth and Humphrey (1995, p. 98), emotions form an "integral and inseparable part of everyday organizational work," However, emotions are highly pervasive in family firms and influence firms'

decision-making processes due to the blurred nature of the boundaries between the family and the firm (Baron, 2008). Owing to the social ties that family members maintain both inside and outside the firm, the firm becomes the place where their needs for affect, intimacy, and belonging are met. The firm fuels family members' sense of legacy, and negative emotions linked to the possibility of losing the firm through ventures with uncertain outcomes are to be avoided (De Massis *et al.*, 2016). Emotional attachment of family members is associated with stronger concern for the firm's future and, in turn, with more cautious decision-making (Dayan *et al.*, 2019; Miller and Le Breton-Miller, 2005). Put differently, high emotional attachment and fear of loss among family members "may prevent the firm to reap the fruits of their entrepreneurial efforts" (Schepers *et al.*, 2014, p. 39) since the implementation of the appropriate levels of autonomy in decision-making and risk-taking are impeded (Kallmuenzer *et al.*, 2018). In a way, high emotional attachment of family members holds the firm back from fulfilling its dynastic potential. In the same vein, nonfamily managers would be influenced by such fear and be cautious when making strategic decisions. We thus propose the following:

H1d: Emotional attachment of family members has a negative effect on managerial risktaking by non-family managers.

Renewal of Family Bonds Through Dynastic Succession and Managerial Risk-taking of Non-family Managers

The final dimension of SEW, transgenerational sustainability (i.e., the intentional handing down of a business to future generations) is one of the principal priorities of SEW (Zellweger and Astrachan, 2008; Zellweger *et al.*, 2012). Since the firm embodies the family's legacy and beliefs, it is viewed as much more than an asset that can easily be traded. Within the family, the firm is perceived as a long-term family venture that is to be passed on to future

generations (Berrone *et al.*, 2010; De Massis *et al.*, 2016). Consequently, the ability to maintain and pass on the firm to future generations is a key goal among family firms (Zellweger *et al.*, 2012) and has a significant influence on the firm's long-term decisionmaking (Izzo and Ciaburri, 2018). Given that high-risk/high-return strategies can increase long-term firm value (Brinkerink and Bammens, 2018; Chrisman *et al.*, 2015), a strong desire for dynastic succession can propel family firms to pursue long-term viability through R&D (Shen, 2018). While the desire to maintain control and exercise influence holds family owners back from investing in R&D (Gómez-Mejía *et al.*, 2014; Chrisman and Patel, 2012), the desire for dynastic succession can help family owners take the risks required to increase their long-term sustainability (Gu *et al.*, 2019). The prevalent cultural trait of collectivism that characterizes the Arab family firm context (Samara, 2020) suggests that non-family managers are committed to the family's desire to maintain their legacy and are more willing to take on risk in order to grow the business. Thus, the final dimension of FIBER, dynastic succession, behaves similarly to binding social ties in that risk is acceptable for the sake of long-term survival. We thus propose the following:

H1e: The renewal of family bonds through dynastic succession has a positive effect on managerial risk-taking by non-family managers.

Managerial Risk-taking of Non-family Managers and Product Innovation

Although innovation is a main driver of organizational growth, it has high failure rates (Rubera and Kirca, 2012; Ng and Hamilton, 2015) and is often unappealing to family SMEs. Ling *et al.* (2008) stated that innovation requires large investments of effort, time, and resources, such as increased R&D expenses and managerial attention, but the return on these investments is uncertain. Due to the uncertainty involved, many managers are unwilling to risk investments in innovation, especially new product development (Chirico and Salvato,

2016; Wu, 2008). However, many other managers do take that risk by focusing on the potential gains from product innovation rather than the potential losses (Ling *et al.*, 2008). García-Granero *et al.* (2015) posited that managerial risk-taking influences firms' ability to innovate and that managers with a greater affinity for risk-taking are more likely to obtain better results from innovation. In support of this position, García-Piqueres *et al.* (2019) argued that a greater risk-taking proclivity among managers increases their willingness to invest and commit resources to knowledge creation and exploitation, and thus product innovation. Hence, we propose the following:

H2: Managerial risk-taking by non-family managers has a positive effect on product innovation.

SEW and Product Innovation

The literature on the relationship between family businesses and innovation outcomes offers conflicting results. The empirical findings on the relationship between family control and innovation outcomes are neither entirely positive nor negative (Block, 2012; De Massis *et al.*, 2018; Calabrò *et al.*, 2019). The willingness of the family to undertake strategic choices associated with uncertain outcomes depends on its SEW priorities (Zellweger *et al.*, 2012) which can be highly heterogeneous, thus producing mixed results (Miller and Le-Breton-Miller, 2014). An innovation paradox has emerged whereby, while family businesses have a higher ability to innovate, they are less willing to do so (Chrisman *et al.*, 2015; De Bellis *et al.*, 2020) to protect the family's affective endowment. Duran *et al.* (2016) found that family-controlled firms invested less in innovation output. While their study shed light on the impact of SEW on innovation input and output, it proxied SEW using family ownership and control. Only a handful of studies have delineated the impact of different SEW dimensions on

innovation. For example, Hauck and Prügl (2015) used family influence, ownership, and control to conclude that SEW factors influenced innovation in positive and negative ways, and Filser *et al.* (2018) used the FIBER dimensions of SEW to examine how they affected family firm innovativeness.

While Filser *et al.* (2018) advanced towards a more refined treatment of SEW, they did not consider the influence of non-family managers' risk-taking behavior on product innovation (Zahra, 2005; Naldi *et al.*, 2007; Kraiczy *et al.*, 2015). They studied only the firm's capacity to innovate and overlooked innovation outcomes such as product innovation. Product innovation uses a range of methods to develop or adopt new activities, products, or services (Vora *et al.*, 2012) and go beyond the existing state of the art (Linton, 2019), which requires substantial initiatives and resources. We posit that the collectivist nature of the Arab family business implies that the influence of SEW extends to other players in family firms, such as non-family managers who make innovation-related decisions. We hypothesize that non-family managers' risk-taking propensity is an important mediator in the relationship between the family firm's SEW and product innovation. Thus, investment in product innovation is a strategic decision associated with uncertain outcomes that involves non-family managers' decision-making orientation, which is heavily influenced by the SEW priorities of the controlling family. We thus propose the following:

H3: Managerial risk-taking by non-family managers mediates the relationship between the FIBER dimensions of SEW and product innovation.

The proposed hypotheses are illustrated in Figure 1 below.

INSERT FIGURE 1 HERE

Methods

Sample and Data Collection

Our target population was family SMEs that fit the definition of a "family firm," which this study considered a firm in which 51% of the ownership belonged to one family and at least one member of the top management team belonged to the same family (Andersson et al., 2018). The relationships presented in Figure 1 were tested using data collected from 150 Emirati family businesses with fewer than 250 employees.

Our sample consisted of family businesses affiliated with the Khalifa Fund for Enterprise Development (KFED) and a university in the UAE. The initial sample comprised 238 Emirati family businesses, which, through initial telephone screening, confirmed that a non-family manager oversaw innovation activities. Structured questionnaires were disseminated to these businesses; 176 questionnaires were returned, of which 26 with doubtful responses were excluded from the final sample (N= 150, response rate = 63%). The family businesses in our sample varied in size, from a low of 10 full-time employees to a high of 250, with an average size of 88.3 employees. Of the 150 firms, 27% operated in the manufacturing industry, 22% in the construction industry, 19% in the wholesale sector, 18% in the retail sector, and 16% in the service sector. Further details regarding the sample are provided in Table 1.

INSERT TABLE 1 HERE

The survey questionnaires were distributed and collected personally by a full-time research assistant affiliated with the university. Each family firm was provided with two different sets of questionnaires: one to be filled in by the family owner-manager and the other by the non-family manager responsible for innovation-related decisions. Questions capturing SEW dimensions and firm characteristics (control variables) were included in the questionnaires completed by family owner-managers. Managerial risk taking and product innovation questions were included in the questionnaires completed by non-family managers. Data were collected from two respondents from each company to avoid single-source bias (Zacca *et al.*, 2017). A native Arabic speaker fluent in English translated the survey instruments from English to Arabic. Then, the research team and translator made the necessary changes and reconciled any discrepancies (Zacca and Dayan, 2018).

As part of the instrument validation, we first contacted four randomly selected members of family businesses in Abu Dhabi to assess the content and meaningfulness of the survey items (Zacca *et al.*, 2015; Dayan *et al.*, 2013). We then contacted three researchers who were working in relevant domains to provide us with feedback on our scale items. We modified the items based on feedback received from family business members and researchers.

We employed partial least squares (Smart PLS v.3.0) PLS to assess the psychometric properties of the small sample size, as PLS is not as sensitive to small sample sizes as are other structural modeling methods (e.g., covariance-based structural equation modeling; Hair *et al.*, 2017). Moreover, PLS is considered an appropriate modeling method for our study due to the lack of quantitative studies on SEW dimensions (Hair *et al.*, 2011).

Measures and Variables

SEW. The study measured SEW using the FIBER dimensions developed by Berrone *et al.* (2012). The FIBER items have been validated in recent studies (e.g., Filser *et al.*, 2018; Gast *et al.*, 2018; Ng *et al.*, 2019). Family owner-managers answered statements about their SEW priorities using a five-point Likert-type scale (1 = "strongly disagree" to 5 = "strongly agree"). Family control and influence, identification of family members with the firm , and emotional attachment of family members were measured using five items with a Cronbach's alpha of 0.85, 0.85, and 0.75, respectively. Binding social ties and renewal of family bonds through dynastic succession were measured using four items with a Cronbach's alpha of 0.77 and 0.68, respectively.

Product innovation. The dependent variable of product innovation was measured using scales from prior studies (Prajogo and Sohal 2006; Ruiz-Jimenez and Fuentes-Fuentes, 2015). Four items were used to operationalize this construct: "The degree of newness of our firm's new product/services," "The use of latest technological innovation in our new product/services," "The speed of new product/service development," and "The number of new products/services that our firm has introduced on the market." Scales were accompanied by a five-category Likert scale (1 = "not at all" to 5 = "extensively"). All four items yielded a Cronbach's alpha of 0.82.

Managerial risk-taking. We evaluated the risk-taking behavior of non-family managers in family firms using the validated scales developed by Covin and Slevin (1989), which are often used in entrepreneurial-orientation studies. Non-family managers were asked to reflect on their attitude toward risk using a five-point Likert-type scale (1 = "strongly disagree") to 5 = "strongly agree"). All items had a Cronbach's alpha of 0.88. An example of a managerial risk-taking item is "Top managers of our company tend to invest in high-risk projects." Control variables. Consistent with other studies, we controlled for firm age (Age; Rubera and Kirca, 2012), firm size (using the logarithm of the number of employees; Covin et al., 2016), venture life cycle (VLC) using dummy variables representing four venture life cycles (startup, growing, mature, and declining), and industry (IND) based on their main line of business (manufacturing, retailing, services and others). Empirical studies have demonstrated that the number of family members (NFM) impacts family firm innovation (Kraiczy et al., 2014). Thus, we controlled for the number of family members currently working in the firm. In addition, an intergenerational effect has been found to influence innovation in family firms (Hauck and Prügl, 2015). We thus controlled for generation (GEN) effects using dummy variables representing four generations (first, second, third, fourth, and higher).

Data Analysis

Table 2 summarizes the study's internal consistency and validity statistics. We applied the commonly accepted rule of thumb on internal item reliability and deleted items with loadings of less than 0.60 (Hair *et al.*, 2017). These items were from the following FIBER dimensions: identification of family members (IFM4), binding social ties (BST4), emotional attachment of family members (EAFM5), and renewal of family bonds (RFB4), as shown in italics in Table 2.

INSERT TABLE 2 HERE

Next, we assessed the validity of the measurement model, focusing on convergent and discriminant validity. The average variance extracted (AVE) for all measures was higher than 50%, indicating high convergent validity. This result indicates that more than half of the variance in the latent variables was explained by their indicators (Fornell and Larcker, 1981). The composite reliability scores were analyzed for convergent validity. The composite reliability scores were between 0.78 and 0.93 (for renewal of family bonds and risk-taking, respectively), indicating high levels of construct validity (Hair *et al.*, 2011).

We used the Fornell–Larcker (FL) criterion to identify discriminant validity issues. As Table 2 shows, the AVE scores were above 50% for family control and influence, identification of family members, binding social ties, renewal of family bonds and product innovation. The scores for emotional attachment of family members and managerial risktaking were very close to 50% (49% for both). As Table 3 shows, the squared correlation estimates were lower than the variance-extracted estimates for each construct. Moreover, the heterotrait-monotrait (HTMT) ratios were all lower than the cut-off points of 0.85, and the upper confidence bounds (97.5%) were less than 1.0 (Henseler *et al.*,2015). Thus, the FL and HTMT criteria allowed us to be confident about the discriminant validity of the study's constructs.

INSERT TABLE 3 HERE

Results

Figure 2 shows the results of the structural model. Our proposed model explains a significant proportion of the variance in the outcome variable ($R^2 = 0.152$ for product innovation) and the mediating variable ($R^2 = 0.148$ for risk-taking). Of the five control variables, none was significantly associated with product innovation.

INSERT FIGURE 2 HERE

Path coefficients were estimated using the bootstrapping technique with 5000 resampling (Hair *et al.*, 2017). Table 4 presents the hypothesis results. Except for the path between family control and control and non-family managers' risk-taking (H1a), all other path coefficients (for H1b, H1c, H1d, H1e, and H2) were found to be significant.

INSERT TABLE 4 HERE

The results (see Figure 2) indicate no significant association between family control and influence and the risk-taking of non-family managers ($\beta = 0.093$, t = 0.794, n.s.), rejecting H1a. We explored this further by examining how family control and influence affected managerial risk-taking in the face of declining performance. Prior studies (e.g., Gomez-Mejia *et al.*, 2014) have suggested that the focus of family firms can shift from SEW preservation to economic considerations when performance declines, as family members are more willing to take risks when the firm's survival is threatened. We thus examined the interactive effect of performance (defined as PERF) with family control and influence on managerial risk-taking by non-family managers. We found that managerial risk increased as performance decreased ($\beta = -0.166$, t= 1.524, p < 0.10). The result of the post-hoc analysis is shown in Table 5.

INSERT TABLE 5 HERE

The negative but statistically significant coefficient for identification of family member ($\beta = -0.262$, t = 2.297, p < 0.01) indicates that the risk-taking of non-family managers decreases as identification of family members increases, supporting H1b. The results also indicate positive and significant associations between binding social ties and the risk-taking of non-family managers ($\beta = 0.162$, t =1.503, p < 0.10) and between renewal of family bonds and risk-taking ($\beta = 0.233$, t = 2.214, p < 0.01), supporting H1c and H1e. Contrary to our expectation that emotional attachment of family members would have a significantly negative effect on risk-taking, we find a significantly positive relationship between them ($\beta = 0.180$, t =1.925, p < 0.05), rejecting H1d. Finally, risk-taking was found to be positively related to product innovation ($\beta = 0.341$, t = 3.129, p < 0.01), supporting H2.

Mediating effects

Following Hayes' (2009) method and employing 5,000 bootstrap samples with Smart-PLS v.3.0, we tested the mediating role of managerial risk-taking by non-family managers in the relationship between the FIBER dimensions of SEW and product innovation. Hayes (2009) recommended examining the significance of each indirect effect, along with the direct effects between the exogenous (e.g., FIBER dimensions) and endogenous (e.g., product innovation) constructs. We obtained the values for these indirect and direct effects using SmartPLS. The 95% bias-corrected confidence interval with 5,000 bootstraps indicated that all indirect effects except for FCI were statistically significant at the 0.10 level. Table 6 shows the full set of total, direct, and indirect effects. The results show significant indirect effects of identification of family members ($a_2 \times b_1 = -0.09^{**}$), binding social ties ($a_3 \times b_1 = 0.055^{*}$), emotional attachment of family members ($a_4 \times b_1 = 0.061^{**}$), and renewal of family bonds ($a_5 \times b_1 = -0.08^{**}$) on product innovation via risk-taking.

INSERT TABLE 6 HERE

These results suggest that the risk-taking of non-family managers mediates the relationship between the identification of family members and product innovation, between binding social ties and product innovation, between emotional attachment of family members and product innovation, and between renewal of family bonds and product innovation because the direct effects are not significant (IFM c' = 0.055^{ns} , BST c' = 0.005^{ns} , EAFM c' = -0.081^{ns} , and RFB c' = 0.002^{ns}) but the indirect effects are significant ($a_2 \times b_1 = -0.09^{**}$, $a_3 \times b_1 = 0.055^*$, $a_4 \times b_1 = 0.061^{**}$, and $a_5 \times b_1 = 0.08^{**}$ for identification of family members, binding social ties, emotional attachment of family members, and renewal of family bonds). Further, the results show that the risk-taking of non-family managers does not mediate the relationship between family control and influence and product innovation since the indirect effect is not significant ($a_1 \times b_1 = 0.032^{ns}$). Thus, H3 is partially supported. In support of H3, the R² results showed that an acceptable part of the variance of non-family managers' risk-taking and product innovation can be explained by the model (R² = 0.148 and 0.152 for risk-taking and product innovation, respectively).

Discussion and Conclusions

Socioemotional wealth is a central construct in family firm research, but its multidimensionality has rarely been addressed (e.g., Miller and Le Breton Miller, 2014; Ng *et al.*, 2019). We responded to the recent call to delineate the effects of SEW dimensions on family firm behavior—specifically, non-family managers' risk-taking behavior and subsequent product innovation. We argue that SEW is a complex construct whose dimensions may pull family businesses in opposite directions and induce mixed feelings among family and non-family members. Also, the dimensions of SEW can have different weights depending on the preferences of the owning family; while some family firms might place a

greater value on the sense of dynasty and transgenerational vision, others might emphasize the desire to maintain social ties as their main priority.

This study extends the work of Gómez-Mejía *et al.* (2014) on mixed gambles to suggest that family businesses can have mixed feelings about investing on product innovation. Inherently the innovation process is causally ambiguous and could trigger anxieties about potential SEW loss due to the need to hire new talent, take on additional debt, and change the modus operandi of the firm. On the other hand, this yearning to maintain control may be overshadowed by the family's intense desire to grow the firm and strengthen its social ties with suppliers and customers, as well as create more opportunities for more family members to join the firm and help strengthen the family's legacy.

While we hypothesized that the desire to maintain control negatively affects managerial risk-taking by non-family managers, we found no significant association between them. Families operating SMEs in the UAE have a *de facto* high degree of influence, and an increase in this already strong influence has no impact on the risk-taking of non-family managers. However, we established that, amid declining performance, when the fate of the family business is at stake, family members will seek to create a climate that induces nonfamily managers to take more risk. This result is in line with the findings of Gomez-Mejia *et al.* (2014) that the family's decision-making focus shifts to the financial implications of such decisions when the firm is faced with a performance hazard. Simply put, family control and influence are already high in the UAE context and the remaining dimensions of SEW are the ones that have a (differential) impact on non-family manager's risk-taking propensity. More specifically, we found that managerial risk-taking by non-family managers decreases as family members' identification with the firm increases. Thus, family owners whose identity is tied to the firm will create an organizational climate that hinders risk-taking because they are driven by a fear of identity loss. However, family owners who value social ties and the

inclusion of more family members in the business will inspire non-family managers to take risks. Contrary to our expectation, we found that emotional attachment of family members to the firm had a positive relationship with managerial risk-taking by non-family managers. We posit that firms whose identities are characterized by emotional attachment and meaningful personal relations are oriented toward the enhancement of well-being and maximization of welfare for not only the family but also the employees, suppliers and customers. Put differently, the emotional attachment to the family business and the altruism that accompanies it, may not be restricted to the family circle but may indeed transcend the family's boundaries to include other stakeholders (Berrone *et al.*, 2012).

Implications for Research

This study was motivated by the growing interest in how the five SEW dimensions affect family firms' strategies (Shen, 2018) and in the role of non-family employees in strategic decision making (Fang *et al.*, 2017). The results suggest that the multidimensional SEW construct we operationalized using the FIBER model includes dimensions that can create mixed feelings for the family: while the family may be driven by a desire to maintain control and influence, that desire can compete with the desire to expand the firm's boundaries, expand its reputation, strengthen its social ties, and renew family bonds. Put differently, due to the conflicting SEW priorities stemming from family and business priorities, family members may experience internal conflict. Indeed, every strategic decision in family firms leads to a dilemma and feelings of ambivalence since the family needs to constantly evaluate the probable gains and losses of their decisions in financial and socioemotional terms (Firfiray and Gómez-Mejía, 2021; Gómez-Mejía *et al.*, 2019). Future research can examine whether these decisions that are meant to serve the interests of the owning family only (Miller and Le Breton-Miller 2014) or whether and under what conditions decisions are

meant to serve the interests of other stakeholders as well (employees, community, customers etc.). Also, scholars can examine whether the ambivalence that family firms experience leads to avoidance, domination, compromise, or holism (Ashforth *et al.*, 2014). Ashforth *et al.* (2014) had identified four strategies for management of ambivalent emotions which include avoidance, domination, compromise, and holism. These strategies consist of moving towards, moving away from, or moving against the object of ambivalence (Firfiray and Gómez-Mejía, 2021). As such, examining avoidance, domination, compromise and holism as mediators in the relationship between the FIBER model and strategic decisions, is a fruitful avenue for future research.

Managerial Implications

The UAE is a unique context in that family control and influence are high and it is very clear who is at and who will remain at the helm. At the same time, UAE is a country with more than 80% of international workforce while the nationals make up less than 20% (Szuchman, 2012). Therefore, it is quite common for a family firm to employ non-family managers. Our focus here has been those non-family managers who are under the "spell" of the family. We have established that investing in innovation is a mixed gamble for family firms, one that has the potential for both gains and losses. While prior studies suggest that family firms are lossaverse and underinvest in R&D (unless faced with a performance hazard) to preserve SEW, we find that family firms may have mixed feelings about product innovation: on the one hand, their identification with the firm puts them into SEW-protection mode; on the other, their desire for growth, continuity, and improved reputation propels them to take risks. In short, innovation decisions, despite their potential for loss of control, can offer family firms a great opportunity to strengthen their reputation, create more opportunities for family member employment, and enhance social ties. For the firms in our sample, the potential for gains

outweighed that for losses. *Ceteris paribus*, these firms support product innovation decisions by creating an organizational climate that encourages managerial risk-taking.

Our findings can be useful to practitioners advising family firms, especially on the centrality of emotional attachment of family members, binding social ties, and the renewal of family bonds through intra-family succession. Innovation related decisions can elicit feelings of ambivalence and practitioners consulting the family should bring awareness to that internal conflict. While for some family managers, this ambivalence might lead them to stick to what they know, hold on to the status quo and prioritize family-centric decisions, others may utilize the feelings of ambivalence to broaden their horizons and make decisions that are more stakeholder-centric.

Study Limitations

We tested our hypotheses using family firms in the UAE. Family firms in this setting may exhibit much lower variance in family control levels than do family firms in Western cultures. Future studies should examine other cultures for cross-cultural comparisons (Cruz *et al.*, 2020). Family firms in the Arab world face distinct pressures in terms of innovation, and we cannot assume that other countries would behave similarly (Almutairi *et al.*, 2020). Our sample also consisted of owners and the non-family managers of family firms with fewer than 250 employees. Hence, our results may be generalizable only to this size of family firm. It is unclear whether similar findings can be replicated among larger family firms, which usually employ a greater number of non-family employees; thus, the organizational climate driven by the family's affective needs might wane. Moreover, the vibrant research on innovation in family firms could be advanced if our conceptual model were expanded to include other explanatory variables. For instance, future studies could investigate other moderators, such as environmental hostility or competitive intensity (Gupta and Batra, 2016).

The effects of risk-taking on product innovation may be delayed, and risk-taking may even produce negative organizational outcomes.

References

- Almutairi, S., Heller, M. and Yen, D. (2020), "Reclaiming the heterogeneity of the Arab states", *Cross Cultural & Strategic Management*, Vol. 28 No. 1, pp. 158– 176. https://doi.org/10.1108/CCSM-09-2019-0170
- Andersson, F. W., Johansson, D., Karlsson, J., Lodefalk, M., & Poldahl, A. (2018). The characteristics of family firms: exploiting information on ownership, kinship, and governance using total population data. *Small Business Economics*, 51(3), 539-556.
- Ardito, L., Messeni Petruzzelli, A., Pascucci, F., and Peruffo, E. (2019), "Inter-firm R&D collaborations and green innovation value: The role of family firms' involvement and the moderating effects of proximity dimensions", *Business Strategy and the Environment*, Vol. 28 No.1, pp. 185–197.
- Arzubiaga, U., Kotlar, J., De Massis, A., Maseda, A., and Iturralde, T. (2018),
 "Entrepreneurial orientation and innovation in family SMEs: Unveiling the (actual) impact of the Board of Directors", *Journal of Business Venturing*, Vol. 33 No. 4, pp. 455–469.
- Ashforth, B. E. and Humphrey, R. H. (1995), "Emotion in the workplace: A reappraisal", *Human Relations*, Vol. 48 No. 2, pp. 97–125.
- Ashforth, B. E., Rogers, K. M., Pratt, M. G., and Pradies, C. (2014), "Ambivalence in organizations: A multilevel approach", *Organization Science*, Vol. 25 No.5, 1453-1478.
- Baron, R. (2008), "The role of affect in the entrepreneurial process". The Academy of Management Review, Vol. 33 No. 2, pp. 328–340.

- Basco, R. (2014), "Exploring the influence of the family upon firm performance: Does strategic behaviour matter?" *International Small Business Journal*, Vol. 32 No. 8, pp. 967–995.
- Berrone, P., Cruz, C., and Gómez-Mejía, L. R. (2012), "Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research", *Family Business Review*, Vol. 25 No.3, pp. 258–279.
- Berrone, Pascual, Cruz, C., Gómez-Mejía, L. R., and Larraza-Kintana, M. (2010), "Socioemotional wealth and corporate responses to institutional pressures: Do familycontrolled firms pollute less?" *Administrative Science Quarterly*, Vol. 55, pp. 82–113.
- Block, J. H. (2012), "R&D investments in family and founder firms: An agency perspective", *Journal of Business Venturing*, Vol. 27 No. 2, pp. 248–265.
- Brickson, S. L. (2007), "Organizational identity orientation: The genesis of the role of the firm and distinct forms of social value", *Academy of Management Review*, Vol. 32 No. 3, pp. 864–888.
- Brinkerink, J., and Bammens, Y. (2018), "Family influence and R&D spending in Dutch manufacturing SMEs: The role of identity and socioemotional decision considerations", *Journal of Product Innovation Management*, Vol. 35 No. 4, pp. 588–608.
- Cabrera-Suárez, M. K., Déniz-Déniz, M. D. L. C., and Martín-Santana, J. D. (2014), "The setting of non-financial goals in the family firm: The influence of family climate and identification", *Journal of Family Business Strategy*, Vol. 5 No. 3, pp. 289–299.
- Calabrò, A., Vecchiarini, M., Gast, J., Campopiano, G., De Massis, A., and Kraus, S. (2019), "Innovation in family firms: A systematic literature review and guidance for future research", *International Journal of Management Reviews*, Vol. 21 No. 3, pp. 317–355.

- Chirico, F., and Salvato, C. (2016), "Knowledge internalization and product development in family firms: When relational and affective factors matter", *Entrepreneurship Theory and Practice*, Vol. 40 No.1, 201–229.
- Chrisman, J. J., and Patel, P. C. (2012), "Variations in R&D investments of family and nonfamily firms: Behavioral agency and myopic loss aversion perspectives", *Academy of Management Journal*, Vol. 55 No. 4, pp. 976–997.
- Chrisman, J. J., Chua, J. H., De Massis, A., Frattini, F., and Wright, M. (2015), "The ability and willingness paradox in family firm innovation", *Journal of Product Innovation Management*, Vol. 32 No. 3, pp. 310–318.
- Chrisman, J. J., Memili, E. and Misra K. (2014), "Non-family managers, family firms, and the winner's curse: The influence of non-economic goals and bounded rationality," *Entrepreneurship Theory and Practice*, Vol. 38 No. 5, pp. 1103–1127
- Chua, J. H., Chrisman, J. J., and Sharma, P. (1999), "Defining the family business by behavior", *Entrepreneurship Theory and Practice*, Vol. 23, pp. 19–39.
- Cornell University, INSEAD, and WIPO. (2020), *The Global Innovation Index 2020: Who Will Finance Innovation?* Ithaca, Fontainebleau, and Geneva.
- Covin, J. G., Eggers, F., Kraus, S., Cheng, C. F., and Chang, M. L. (2016), "Marketingrelated resources and radical innovativeness in family and non-family firms: A configurational approach", *Journal of Business Research*, Vol. 69 No. 12, pp. 5620– 5627.
- Covin, J. G., and Slevin, D. P. (1989), "Strategic management of small firms in hostile and benign environments", *Strategic Management Journal*, Vol. 10 No.1, pp. 75–87.
- Cruz, A.D., Caffarena, L.C., and Solano, M.V. (2020), "Being different matters! A closer look into product differentiation in specialty coffee family farms in Central America", *Cross Cultural & Strategic Management*, Vol. 27 No. 2, pp. 165–188.

- Cruz, C. C., Gómez-Mejia, L. R., and Becerra, M. (2010), "Perceptions of benevolence and the design of agency contracts: CEO-TMT relationships in family firms", *Academy of Management Journal*, Vol. 53 No.1, pp. 69–89.
- Cruz, C., Larraza–Kintana, M., Garcés–Galdeano, L., and Berrone, P. (2014), "Are family firms really more socially responsible?" *Entrepreneurship Theory and Practice*, Vol. 38, pp. 1295–1316.
- Dayan, M., Ng, P. Y., and Ndubisi, N. O. (2019), "Mindfulness, socioemotional wealth, and environmental strategy of family businesses", *Business Strategy and the Environment*, Vol. 28 No. 3, pp. 466–481.
- Dayan, M., Zacca, R., and Di Benedetto, A. (2013), "An explorative study of entrepreneurial creativity: Its antecedents and mediators in the context of UAE firms", *Creativity and Innovation Management*, Vol. 22 No. 3, pp. 223–240.
- Debellis, F., De Massis, A., Petruzzelli, A. M., Frattini, F., and Del Giudice, M. (2021),
 "Strategic agility and international joint ventures: The willingness-ability paradox of family firms", *Journal of International Management*, Vol. 27 No.1, pp. 100739.
 <u>https://doi.org/10.1016/j.intman.2020.100739</u>
- De Massis, A., Ding, S., Kotlar, J., and Wu, Z. (2018), "Family involvement and R&D expenses in the context of weak property rights protection: an examination of non-stateowned listed companies in China", *The European Journal of Finance*, Vol. 24 No.16, pp. 1506–1527.
- De Massis, A., Frattini, F., Kotlar, J., Petruzzelli, A. M., and Wright, M. (2016), "Innovation through tradition: Lessons from innovative family businesses and directions for future research", *Academy of Management Perspectives*, Vol. 30 No. 1, pp. 93–116.

- Duran, P., Kammerlander, N., Van Essen, M., and Zellweger, T. (2016), "Doing more with less: Innovation input and output in family firms", *Academy of Management Journal*, Vol. 59 No. 4, pp. 1224–1264.
- Fang, H. C., Memili, E., Chrisman, J. J., and Penney, C. (2017). "Industry and information asymmetry: The case of the employment of non-family managers in small and mediumsized family firms", *Journal of Small Business Management*, Vol. 55 No. 4, pp. 632–648.
- Filser, M., De Massis, A., Gast, J., Kraus, S., and Niemand, T. (2018), "Tracing the roots of innovativeness in family SMEs: The effect of family functionality and socioemotional wealth", *Journal of Product Innovation Management*, Vol. 35 No.4, pp. 609–628.
- Firfiray, S., and Gómez-Mejía. L. R. (2021), "When is Ambivalence Good for Family Firms? Understanding the Impact of Family Managers' Emotional Ambivalence on Decision Making", *Entrepreneurship Research Journal*, Vol.11 No.3, 177-189.
- Fitz-Koch, S., and Nordqvist, M. (2017), "The reciprocal relationship of innovation capabilities and socioemotional wealth in a family firm", *Journal of Small Business Management*, Vol. 55 No.4, pp. 547–570.
- Fornell, C. and Larcker, D. F. (1981), "Structural equation models with unobservable variables and measurement error: Algebra and statistics", *Journal of Marketing Research*, Vol. 18 No. 3, pp. 382–388.
- García-Granero, A., Llopis, Ó., Fernández-Mesa, A., and Alegre, J. (2015), "Unraveling the link between managerial risk-taking and innovation: The mediating role of a risk-taking climate", *Journal of Business Research*, Vol. 68 No. 5, pp. 1094–1104.
- García-Piqueres, G., Serrano-Bedia, A.-M., and Pérez-Pérez, M. (2019), "Knowledge management practices and innovation outcomes: The moderating role of risk-taking and proactiveness", *Administrative Sciences*, Vol. 9 No. 4, pp. 75–97.

- Garcés-Galdeano, L., Larraza-Kintana, M., García-Olaverri, C., and Makri, M. (2016),
 "Entrepreneurial orientation in family firms: The moderating role of technological intensity and performance", *International Entrepreneurship and Management Journal*, Vol. 12 No. 1, pp. 27–45.
- Gast, J., Filser, M., Rigtering, J. C., Harms, R., Kraus, S., and Chang, M. L. (2018),
 "Socioemotional wealth and innovativeness in small-and medium-sized family enterprises: A configuration approach", *Journal of Small Business Management*, Vol. 56(sup1), pp. 53–67.
- Goel, S., Voordeckers, W., Van Gils, A., and van den Heuvel, J. (2013), "CEO's empathy and salience of socioemotional wealth in family SMEs: The moderating role of external directors", *Entrepreneurship & Regional Development*, Vol. 25 No. 3–4, pp. 111–134.
- Gómez-Mejía, L. R., Campbell, J. T., Martin, G., Hoskisson, R. E., Makri, M., and Sirmon,
 D. G. (2014), "Socioemotional wealth as a mixed gamble: Revisiting family firm R&D investments with the behavioral agency model", *Entrepreneurship Theory and Practice*, Vol. 38 No. 6, pp. 1351–1374.
- Gómez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J. L., and Moyano-Fuentes, J. (2007), "Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills", *Administrative Science Quarterly*, Vol. 52, pp. 106–137.
- Gómez-Mejía, L. R., Neacsu, I., and Martin, G. (2019), "CEO risk-taking and socioemotional wealth: The behavioral agency model, family control, and CEO option wealth", *Journal of Management*, Vol. 45 No. 4, pp. 1713–1738.
- Gu, Q., Lu, J. W., and Chung, C. N. (2019), "Incentive or disincentive? A socioemotional wealth explanation of new industry entry in family business groups", *Journal of Management*, Vol. 45 No. 2, pp. 645–672.

- Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2017), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 2nd ed., Sage, Thousand Oaks.
- Hair, J. F., Ringle, C. M., and Sarstedt, M. (2011), "PLS-SEM: Indeed a silver bullet", *Journal of Marketing Theory and Practice*, Vol. 19 No. 2, pp. 139–152.
- Hauck, J. and Prügl, R. (2015), "Innovation activities during intra-family leadership succession in family firms: An empirical study from a socioemotional wealth perspective", *Journal of Family Business Strategy*, Vol. 6 No. 2, pp. 104–118.
- Hayes, A. F. (2009), "Beyond Baron and Kenny: Statistical mediation analysis in the new millennium", *Communication Monographs*, Vol. 76 No.4, pp. 408–420.
- Hiebl, M. R. W. (2013), "Non-family CFOs in family businesses: Do they fit?", *Journal of Business Strategy*, Vol. 34 No. 2, pp. 45–51.
- Hiebl, M. R. and Li, Z. (2020), "Non-family managers in family firms: Review, integrative framework and future research agenda", *Review of Managerial Science*, Vol. 14 No. 4, pp. 763–807.
- Henseler, J., Ringle, C. M., and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, 1–21.
- Hoskisson, R. E., Chirico, F., Zyung, J., and Gambeta, E. (2017), "Managerial risk taking: A multitheoretical review and future research agenda", *Journal of Management*, Vol. 43 No.1, pp. 137–169.
- Hu, Q. and Hughes, M. (2020), "Radical innovation in family firms: A systematic analysis and research agenda", *International Journal of Entrepreneurial Behavior & Research*. DOI: 10.1108/IJEBR-11-2019-0658

- Izzo, M. F., and Ciaburri, M. (2018), "Why do they do that? Motives and dimensions of family firms' CSR engagement", *Social Responsibility Journal*, Vol. 14 No.3, pp. 633– 650.
- Jones, C. D., Makri, M., and Gomez–Mejia, L. R. (2008), "Affiliate directors and perceived risk bearing in publicly traded, family–controlled firms: The case of diversification", *Entrepreneurship Theory and Practice*, Vol. 32 No. 6, pp. 1007–1026.
- Kallmuenzer, A., Strobl, A., and Peters, M. (2018), "Tweaking the entrepreneurial orientation–performance relationship in family firms: The effect of control mechanisms and family-related goals", *Review of Managerial Science*, Vol. 12 No.4, pp. 855–883.
- Kellermanns, F. W., Eddleston, K. A., Sarathy, R., and Murphy, F. (2012), "Innovativeness in family firms: A family influence perspective", *Small Business Economics*, Vol. 38 No. 1, pp. 85–101.
- Kraiczy, N. D., Hack, A., and Kellermanns, F. W. (2015), "What makes a family firm innovative? CEO risk-taking propensity and the organizational context of family firms", *Journal of Product Innovation Management*, Vol. 32 No. 3, pp. 334–348.
- Kraiczy, N. D., Hack, A., and Kellermanns, F. W. (2014), "New product portfolio performance in family firms", *Journal of Business Research*, Vol. 67 No. 6, pp. 1065– 1073.
- Krueger, N., Bogers, M., Labaki, R. and Basco, R. (2021), "Advancing family business science through context theorizing: The case of the Arab world", *Journal of Family Business Strategy*. In press. https://doi.org/10.1016/j.jfbs.2020.100377
- Ling, Y. A. N., Simsek, Z., Lubatkin, M. H., and Veiga, J. F. (2008), "Transformational leadership's role in promoting corporate entrepreneurship: Examining the CEO-TMT interface", *Academy of Management Journal*, Vol. 51 No. 3, pp. 557–576.

- Linton, G. (2019), "Innovativeness, risk-taking, and proactiveness in startups: a case study and conceptual development", *Journal of Global Entrepreneurship Research*, Vol. 9 No, 1, pp. 20. <u>https://doi.org/10.1186/s40497-019-0147-5</u>
- Magistretti, S., Dell'Era, S., Frattini, F., Messeni Petruzzelli, A. (2020), "Innovation through tradition in design-intensive family firms", *Journal of Knowledge Management*, Vol. 24, pp. 823–839.
- Mazzelli, A., De Massis, A., Messeni Petruzzelli, A., Del Giudice, M., Khan, Z. (2020),"Ambidextrous search and performance in family versus nonfamily firms: A simulation model", *Long Range Planning*, Vol. 53, pp. 1–21.
- Micelotta, E. R., and Raynard, M. (2011), "Concealing or revealing the family? Corporate brand identity strategies in family firms", *Family Business Review*, Vol. 24 No. 3, pp. 197–216.
- Miller, D., I. Le Breton-Miller, and Lester, R. H. (2013), "Family firm governance, strategic conformity and performance: Institutional vs. strategic perspectives," *Organization Science*, Vol. 24 No. 1, pp. 189–209.
- Miller, D. and Le Breton-Miller, I. (2005), *Managing for the Long Run: Lessons in Competitive Advantage from Great Family Businesses*, Harvard Business Press.
- Miller, D., and Le Breton–Miller, I. (2014), *Deconstructing Socioemotional Wealth*, SAGE Publications Sage CA, Los Angeles.
- Miller, D., Wright, M., Breton-Miller, I. L., and Scholes, L. (2015), "Resources and innovation in family businesses: The Janus-face of socioemotional preferences", *California Management Review*, Vol. 58 No.1, pp. 20–40.
- Naldi, L., Nordqvist, M., Sjöberg, K., and Wiklund, J. (2007), "Entrepreneurial orientation, risk taking, and performance in family firms", *Family Business Review*, Vol. 20 No. 1, pp. 33–47.

- Ng, P. Y., Dayan, M., and Di Benedetto, A. (2019), "Performance in family firm: Influences of socioemotional wealth and managerial capabilities", *Journal of Business Research*, Vol. 102, pp.178–190.
- Ng, P. Y., & Hamilton, R. T. (2015), "Capabilities, strategy, and performance: The case of ICT firms in New Zealand", *Journal of Asia-Pacific Business*, Vol. 16 No.4, pp.302-327.
- Prajogo, D. I., and Sohal, A. S. (2006), "The integration of TQM and technology/R&D management in determining quality and innovation performance", *Omega*, Vol. 34 No.3, pp. 296–312.
- Patel, P. C. and Chrisman, J. J. (2014), "Risk abatement as a strategy for R&D investments in family firms", *Strategic Management Journal*, Vol. 35 No. 4, pp. 617–627.
- Pieper, T. M. (2010), "Non solus: Toward a psychology of family business", Journal of Family Business Strategy, Vol. 1 No.1, pp. 26–39.
- PWC. (2016), Family Business Survey, from PWC Middle East Region, available at: <u>https://www.pwc.com/m1/en/publications/family-business-survey/middle-east-family-business-survey-2016.pdf</u> (Accessed 13 March 2020).
- Rettab, B. and Azzam, A. (2011), "Performance of family and non-family firms with self-selection: Evidence from Dubai", *Modern Economy*, Vol. 2 No. 4, pp. 625.
- Rosenbusch, N., Brinckmann, J., and Bausch, A. (2011), "Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs", *Journal of Business Venturing*, Vol. 26 No. 4, pp. 441–457.
- Rubera, G. and Kirca, A. H. (2012), "Firm innovativeness and its performance outcomes: A meta-analytic review and theoretical integration", *Journal of Marketing*, Vol. 76 No. 3, pp. 130–147.
- Ruiz-Jiménez, J. M. and del Mar Fuentes-Fuentes, M. (2016), "Management capabilities, innovation, and gender diversity in the top management team: An empirical analysis in

technology-based SMEs", *BRQ Business Research Quarterly*, Vol. 19 No. 2, pp. 107–121.

Samara, G. (2020), "Family businesses in the Arab Middle East: What do we know and where should we go?", *Journal of Family Business Strategy*, available at: <u>https://doi.org/10.1016/j.jfbs.2020.100359</u> (accessed 22 March 2021).

- Schepers, J., Voordeckers, W., Steijvers, T., and Laveren, E. (2014), "The entrepreneurial orientation–performance relationship in private family firms: the moderating role of socioemotional wealth", *Small Business Economics*, Vol. 43 No. 1, pp. 39–55.
- Schulze, W. S., Lubatkin, M. H., and Dino, R. N. (2003), "Toward a theory of agency and altruism in family firms", *Journal of Business Venturing*, Vol. 18 No. 4, pp. 473–490.
- Shen, N. (2018), "Family business, transgenerational succession and diversification strategy: Implication from a dynamic socioemotional wealth model", *Cross Cultural & Strategic Management*, Vol. 25 No. 4, pp. 628–641.
- Sieger, P., Bernhard, F., and Frey, U. (2011), "Affective commitment and job satisfaction among non-family employees: Investigating the roles of justice perceptions and psychological ownership", *Journal of Family Business Strategy*, Vol. 2 No. 2, pp. 78–89.
- Stewart, A. and Hitt, M.A. (2012), "Why can't a family business be more like a nonfamily business? Modes of professionalization in family firms", *Family Business Review*, Vol. 25 No. 1, pp. 58–86.
- Sundaramurthy, C. (2008), "Sustaining trust within family businesses", *Family Business Review*, Vol. 21 No. 1, pp. 89–102.
- Szuchman, J. (2012). Archaeology, Identity, and Demographic Imbalance in the United Arab Emirates. *Heritage & Society*, 5(1), 35-52.

- Vallejo, M. C. (2009), "The effects of commitment of non-family employees of family firms from the perspective of stewardship theory", *Journal of Business Ethics*, Vol. 87 No. 3, pp. 379–390.
- Vora, D., Vora, J., and Polley, D. (2012), "Applying entrepreneurial orientation to a medium sized firm", *International Journal of Entrepreneurial Behavior & Research*, Vol. 18 No. 3, pp. 352–379.
- Wu, H.-L. (2008), "When does internal governance make firms innovative?", Journal of Business Research, Vol. 61 No. 2, pp. 141–153.
- Zacca, R. and Dayan, M. (2018), "Linking managerial competence to small enterprise performance within the dynamic capability logic", Journal of Small Business and Enterprise Development, Vol. 25 No. 2, pp. 256–976.
- Zacca, R., Dayan, M., and Ahrens, T. (2015), "Impact of network capability on small business performance", *Management Decision*, Vol. 53 No. 1, pp. 2–23.
- Zacca, R., Dayan, M. and Elbanna, R. (2017), "The influence of conflict and intuition on explorative new products and performance in SMEs", *Journal of Small Business and Enterprise Development*, Vol. 24 No. 4, pp. 950–970.
- Zahra, S. A. (2005), "Entrepreneurial risk taking in family firms", *Family Business Review*, Vol. 18 No. 1, pp. 23–40.
- Zellweger, T. M. and Astrachan, J. H. (2008), "On the emotional value of owning a firm", *Family Business Review*, Vol. 21 No. 4, pp. 347–363.
- Zellweger, T., Kellermanns, F., Chrisman, J., and Chua, J. (2012), "Family control and family firm valuation by family CEOs: The importance of intentions for transgenerational control", *Organization Science*, Vol. 23 No. 3, pp. 851–868.
- Zientara, P. (2015), "Socioemotional wealth and corporate social responsibility: A critical analysis", *Journal of Business Ethics*, Vol. 144 No.1, pp. 185–199