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Entrepreneurial Risk Taking in Family Firms: The Wellspring of the Regenerative Capability

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Abstract

Research on entrepreneurial risk taking by family firms has grown rapidly over the past decade. In this article, I revisit my earlier study's objectives and contributions and analyze the key changes that have taken place in the literature since its publication. My analyses highlight the ever-broadening definition of entrepreneurship and entrepreneurial risk taking by family firms and the explosive growth of research on their antecedents and consequences, increasingly adopting an international perspective. I offer suggestions to improve theory building and methodological choices while adopting a multilevel perspective that enables the recognition of microfoundations and temporal issues. This research can clarify the role of entrepreneurship as the source of family firms' regenerative capability.

Keywords

entrepreneurship, risk taking, capability, regenerative capability

Research on family firms, their entrepreneurial activities, and their contributions to society has grown rapidly since the publication of my article in 2005.[1] I must admit I do not read my work once it appears in print as I worry that I will find all sorts of imperfections that I should have discovered before publication. Thus, receiving an invitation to write my reflections on one of my articles was a major challenge and a source of anxiety—I have to look back with a critical but forgiving eye to distill lessons learned and discuss how to move this area of research forward. Therefore, to organize my thoughts, I will first briefly describe the article's motivation and key findings. I will then reflect on the major challenges I experienced writing it; some of these challenges still persist in family firm research today. Finally, I will share some thoughts on the next important steps to advance scholarship in this area of research and family business in general. My presentation makes clear that entrepreneurial risk taking is an important foundation for family firms' regenerative capability that gives them the capacity to change, adapt, transform, and evolve, especially at times of uncertainty.

Origins and Objective of the Article

A confluence of events made this article possible. The early 2000s was a period of great ferment and transformation in the study of family firms, in the United States and Europe. My foray into the family business area began with a few invitations from conferences organized by several leading universities to explore the relevance of my entrepreneurship research to family firms. Concerned that the field was dominated by discussions of family dynamics, researchers interested in family business were looking elsewhere for inspiration and guidance as to what to study next and how to generate insightful but rigorous and relevant research. Family firms' strategic choices were at the center of this emerging interest, hence the attention given to my work on corporate entrepreneurship

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(CE), technology strategy, governance, and internationalization. Similarly, I was interested in contextualizing my theory building activities (Zahra, 2007), and family firms provided an interesting and distinct setting where I could do so. These firms have their unique dynamics, identity, and governance systems that made contextualization an attractive proposition.

Early on, my work focused on family firms' internationalization (Zahra, 2003) and strategic choices (Astrachan, Zahra, & Sharma, 2003). However, while reviewing the existing literature for these studies, I became aware of the then widely held belief that family firms are conservative. This struck me as odd, knowing that many of these companies have survived profound changes in their industries and the economy as a whole. Indeed, some of the best-known corporate and product brands around the globe are those of family firms! The realization that many view family firms as conservative pushed me to delve more deeply into the literature. I followed this with a series of interviews in family firms, which further heightened my awareness of the value these companies place on reinventing themselves ("strategic renewal"), innovating, and venturing into new fields. This gave me the idea to write the article.

An Overview of the 2005 Article

The article proposes that understanding entrepreneurial risk taking in family firms requires attention to family ownership and involvement. Invoking agency theory, and using survey data from 209 U.S. manufacturing companies, it was apparent that family involvement promotes a focus on investing in new technologies and pursuing radical innovation. Family ownership also encourages domestic and international venturing. Conversely, having CEOs with long tenure inhibits investments in radically new technologies, depresses radical innovation, and reduces ventures. Having the founder as CEO has practically no effect (see Table 3, p. 36).

In retrospect, two things stand out about the article and its findings. First, without formally stating it, the article departs from the common assumption that family firms are conservative by nature—either because of their culture, problems encountered in resource assembly, or concern over family wealth, control, or legacy. True, some family firms are (or become) conservative for a variety of reasons. And, of course, sometimes it is prudent to be conservative. Yet we see many family firms adapting, succeeding, growing, and undergoing major strategic renewal efforts. Family firms also invest in R&D and other innovative activities (De Massis, Frattini, Pizzurno, & Cassia, 2015; Patel & Chrisman, 2014), aiming to create value. These are vital signs of willingness to engage in entrepreneurial risk taking. Thus, one of the most striking features of the article is advocating alternative, rival hypotheses. The point was simple: There is credible literature and theory to support both sides of the argument, and we need empirical evidence to determine the superiority of the claims made. The weight of theoretical assertions pervading the literature then made it important to give arguments and counterarguments a fair hearing and let the data speak for itself. This was what the article did.

Second, the article focuses primarily on *entrepreneurial risk taking*, those activities essential for promoting and sustaining entrepreneurial efforts and initiatives that ensure family firm renewal. While such activities take many forms, they contribute to growing the new business essential to generating new revenue streams. In turn, this enhances wealth and value creation while serving the goals of the business as well as the family by protecting its legacy. The article refers to this as building the family firm's *regenerative capability* (Zahra, 2005, p. 25), a concept I return to later.

From Idea to Print: Some Key Challenges

Despite the intuitive appeal of the research question at hand, writing the article proved to be extremely difficult. Notably, conceptualizing entrepreneurial risk taking was difficult. The construct was (and is) loosely defined in the literature, and multiple indicators were used in prior research (for discussion, see Bettinelli, Fayolle, & Randerson, 2014; Bettinelli & Randerson, 2016; Brumana, Minola, Garrett, & Digan, 2017; Cruz & Justo, 2017; Cruz & Nordqvist, 2012; Eddleston, Kellermanns, & Zellweger, 2012; Lumpkin, Brigham, & Moss, 2010). Furthermore, the construct appears to be multidimensional. Yet the relationships among its dimensions were (and are) ill defined. To address these concerns, I reviewed the existing literature thoroughly, ultimately deciding to use six indicators: using domestic alliance, using alliances in foreign countries, entering new domestic markets, entering new foreign markets, investing in emerging radical technologies, and pursuit of radical product innovation and introduction. The measures for domestic and foreign market entry were simple count figures. Each of the other four dimensions was measured using multi-item (survey based) indexes that were cross-checked using simple correlations with data collected from subsets of the sampled firms (Zahra, 2005, pp. 30-31).

Another challenge arose from the fact that definitions of family firms varied considerably in the literature, perpetuating debates about their appropriate measurement. A mystifying array of definitions populate the literature, slowing empirical research down. Therefore, I followed precedent in the existing literature and adopted a two-step approach: (a) I asked survey respondents “Is this company family owned?” and (b) I classified companies based on equity held by a single family. This generated two (overlapping) sets of figures. To avoid misclassification, I used the smaller set of companies when I performed the analyses.

Furthermore, longitudinal archival data about family firms were not easily available, making the use of mail surveys a necessity. The limitations of survey data are well known; survey data are subject to biases, sensitive to respondents’ moods and emotions, and may lack representation, reliability, and validation. The cross-sectional nature of most survey data also makes it impossible to account for time lags. Gaining access to family firm respondents is also difficult, since most of these organizations keep a low profile when it comes to sharing data. Aware of these limitations, I attempted to obtain information from at least two respondents (Zahra, 2005, p. 30) to establish interrater reliability, alleviating concern over source bias. Furthermore, I used secondary data to validate the survey data where possible (pp. 30-32), again to reduce concern over source bias. I have also added a large number of controls to ensure valid results. These efforts were improvements over common practice in family business research then. In retrospect, questions about selection and different types of endogeneity might have marred the findings.

To test the hypotheses, I employed canonical analysis, a technique best used when both the criterion and predictor variables sets are highly interrelated as was the case in this study. What the technique does especially well is to capitalize on the covariance within each set of variables. Still, the technique does not allow inferences on causality. Despite its limitations, using this technique was new to empirical research on family firms. At the time, there was an appreciation of the need for new approaches other than regression analyses to better understand the relationships at hand.

As the aforementioned comments would suggest, a relevant and timely research question, careful attention to methodological issues, the application of an innovative analytic technique, and a simple argument that is grounded in an established theory appear to have contributed to the popularity of the article.

Entrepreneurial Risk Taking Revisited

Since the publication of the article (Zahra, 2005), much has been done to link entrepreneurship and family firms. This research embodies conceptual and empirical contributions as well as meta-analyses along with several books, specialized conferences, and special journal issues. The flowering of this research suggests that my intuition and initial question were on target and remain relevant today.

The fundamental question being addressed in this research remains: *Under what conditions are family firms willing to engage in entrepreneurial risk taking activities and to what consequences*? A considerable number of articles and reviews have attempted to address this issue since 2005 (e.g., Bettinelli et al., 2014; Bettinelli, Sciascia, Randerson, & Fayolle, 2017; Goel & Jones, 2016; Lumpkin, Steier, & Wright, 2011; Michael-Tsabari, Labaki, & Zachary, 2014; Randerson, 2016; Randerson, Bettinelli, Fayolle, & Anderson, 2015). Collectively, these publications have broadened the scope of research focusing more generally on family firm entrepreneurship. Studies also reflect the growing globalization of research on family firms and their entrepreneurial activities. Researchers have also begun albeit cautiously and slowly to adopt a multilevel perspective in their research (McKenny, Payne, Zachary, & Short, 2014) while exercising better care in their methodological choices. This is significant progress but, as my comments below suggest, greater creativity in theory building and testing, and stronger (and perhaps more careful attention) to integration are essential to generate meaningful and relevant research.

Broadening the Scope of Inquiry

Perhaps, the most striking change in research since 2005 has been the broadening of the definition of entrepreneurial risk taking to focus on all types of entrepreneurial activities in family firms. Researchers have also studied a much broader set of antecedents and consequences than proffered in my article (Zahra, 2005), as discussed below.

The Domain of Entrepreneurial Risk Taking. In my article, I focused on entrepreneurial risk taking, capturing it using six indicators. I had suggested that it is a complex construct that needs considerable conceptual and empirical refinement. Subsequently, researchers have focused on the attitudes that permeate family firms, determining their disposition and willingness to engage in entrepreneurship by capturing these firms *entrepreneurial orientation* (*EO*) and its various dimensions (e.g., Bettinelli et al., 2017; Goel & Jones, 2016; Lumpkin et al., 2010; Miller & Le Breton Miller, 2011; Naldi, Nordqvist, Solberg, & Wiklund, 2007; Randerson, 2016). Clearly, research on EO in family firms has accelerated, in spite of the acknowledged conceptual and definitional inconsistencies and deficient measures used to capture the concept (Randerson, 2016).

The growth in research on family firms' EO reflects the importance of the concept and the ready availability of recognized and valid measures—as well as objective data to capture this measure (Miller & Le Breton Miller, 2011). Still, this growth seems to overlook the fact that EO reflects a disposition to be proactive, risk taking, competitively aggressive, and future-oriented (Miller, 1983). This disposition does not always translate into action or resource commitment for entrepreneurial initiatives. In contrast, the entrepreneurial risk taking construct refers more directly to those actions that lead to the creation of business regardless of the approach a company employs. Consistent with this view, Covin and Lumpkin (2011) note that EO measures combine both disposition and behavioral dimensions. This recognition invites further research to better understand conditions under which EO is transformed from a disposition into concrete organizational action that breeds and fosters entrepreneurship. Researchers need also to ask: When does EO become an organizational capability, or even part of the firm's entrepreneurial capability?

Relatedly, in an effort to capture the different facets of entrepreneurial risk taking, researchers have studied corporate, international (Sciascia, Mazzola, Astrachan, & Pieper, 2012), strategic (Lumpkin et al., 2011; Webb, Ketchen, & Ireland, 2010), and transgenerational (Cruz & Nordqvist, 2012; Jaskiewicz, Combs, & Rau, 2015; Sciascia et al., 2012) aspects of family entrepreneurship. In so doing, researchers have borrowed liberally in theory and methods from other literatures, fueling the growth of scholarship in this area. These efforts are essential to improve scholarship, but have notable limitations. Such research translations are not always true to the original source, as some constructs are dropped (and others added) without compelling logic. Definitions of entrepreneurial risk taking seems also to vary from one study to another, making the accumulation of research findings. As a result, we still do not have a clear or compelling answer to two simple questions: What is entrepreneurial risk taking? And, how different is it from other types of risks that family firms experience?

Antecedents. Researchers have also examined a large number of variables that affect family firms' pursuit of entrepreneurship. These variables include governance systems and social identity (Miller & Le Breton Miller, 2011), social capital (Zahra, 2009), organizational cultures, long-term oriented ownership and tolerance for failure that encourages exploration, experimentation and risk taking (Brumana et al., 2017; Fitz-Koch & Nordqvist, 2017), business group membership (Choi, Zahra, Yoshikawa, & Han, 2015), the prominence of noneconomic (socioeconomic) goals (Kammerlander & Ganter, 2015; Sciascia & Bettinelli, 2016), family involvement and cohesion that allows risk taking and transfer of knowledge and learning (Zahra, 2012), and inclusion of nonfamily outsiders in operations (Sciascia, Mazzola, & Chirico, 2013; Wennberg, Wiklund, Hellerstedt, & Norquist, 2011). Other researchers have studied transgenerational shifts and their implications for family firms' entrepreneurship (Sciascia et al., 2013; Wennberg et al., 2011). The large number of antecedent variables just mentioned reflects the variety of family firms studied, research questions examined, and theories (e.g., agency, stewardship, resource based, learning, and knowledge based) applied in research. Still, the use of different conceptualizations of family firms' entrepreneurship exacerbates this problem, complicating creative integration and synthesis.

Over the past few years, the socioeconomic wealth (SEW) perspective gained widespread recognition in the study of family firms' decisions. It offers an important explanation of why some successful family firms may become conservative over time. Whereas agency scholars focus on misalignments of interest among organizational actors leading to an emphasis on short-term orientation, the SEW perspective offers a different explanation. It suggests that as wealth becomes more and more concentrated in the family firm, the owners' risk preferences shift as they work hard to protect their legacy and accumulated wealth. As a result, they are likely to take less risks, forgoing opportunities to engage in entrepreneurial activities. This is an intriguing proposition that deserves attention and careful consideration, especially in view of the fact that studies analyzing entrepreneurial risk taking frequently fail to account for accumulated wealth as an antecedent of this risk. Moreover, with the growing attention to the implications of firm heterogeneity for the strategic moves they make, it would be fruitful to determine where this argument holds empirically.

Consequences. Researchers have also examined the performance implications of EO for family firms. In particular, they have sought to document the value of CE, a prominent proxy for entrepreneurship, for family firms and their various dimensions (Brumana et al., 2017; Randolph, Li, & Daspit, 2017). For instance, Randolph et al. (2017) developed a typology of these activities (i.e., corporate venturing, innovation, and strategic renewal) in the context of four types of family firms highlighting the interaction between these firms' knowledge acquisition capabilities and transgenerational succession intention. Brumana et al. (2017) also conceptually analyzed how family firms launch new businesses, focusing on internal venturing activities. Brumana and colleagues highlight the interaction of two variables that can determine these ventures' success: the amount of autonomy granted to them and the degree of these ventures' relatedness to their parents. The authors also considered the changes that occur in these ventures over time.

Other researchers have also studied the role of family firms in promoting entrepreneurship within and across industries. For example, Zahra (2009) empirically shows that family firms often serve as a valuable source of funding for fledgling new ventures in their industries. For instance, they provide equity investments to these ventures as a way of diversifying their own risks while creating options for future joint ventures, alliances, or acquisitions. In turn, links to these new ventures also offer family firms a window into changing industry conditions and technological changes that can disrupt the existing order. These results complement the existing focus on internal corporate venturing activities in recent family firm research by focusing on these firms' external venturing and how they create value for family firms.

To summarize, in their study of family firms' entrepreneurship, researchers have freely transplanted concepts from multiple related areas (e.g., Sciascia & Bettinelli, 2016; Sciascia et al., 2012; Webb et al., 2010; Wright, Chrisman, Chua, & Steier, 2014). This has undoubtedly broadened the scope of inquiry and enriched discourse. Such efforts to borrow and import ideas from adjacent fields are common in the early stages of the development of a research area (Zahra & Newey, 2009), fueling creative scholarship. However, much of this effort is still ongoing, making it difficult for me to assess how much progress is being made. As a result, a plethora of concepts, definitions, and context-free theoretical arguments have emerged—making it difficult to assess, determine, and communicate important findings and appreciate their merits. For example, much of the attention in recent publications has centered on defining and conceptualizing entrepreneurship in family firms. Yet, as noted, it is unclear how the definitions being advanced in the context of family firms change, enrich, or challenge what we already know from other contexts. This problem is further compounded by the scarcity of constructive replications that examine differences among family (or different types of family) firms and nonfamily firms in their entrepreneurial activities. Another problem that continues to frustrate researchers attempting these comparisons is the fact that many past studies that have examined entrepreneurship have failed to differentiate between family and nonfamily companies. The multiplicity of family firm types also makes comparisons difficult; these types appear to vary significantly across studies depending on the variables used to derive classifications. These studies also largely overlook process, temporal, spatial, and multilevel dimensions of family firms' entrepreneurship. I say this not to condemn; rather, I mean to draw attention to greater creativity in mapping future research directions.

Finally, as my comments suggest, researchers have elaborated on and expanded the domain of the entrepreneurial risk taking concept. One potential avenue to enrich this concept and enhance its usefulness is to link it more directly to ongoing research on organizational ambidexterity where they seek to address the challenges they face on multiple fronts in dealing with environmental uncertainty and change. Research underscores the need for organizations to engage in both exploration and exploitation. Exploration allows for the discovery of new frontiers that promote learning and growth. This exploration makes it possible to consider the demands of long term and successful adaptation through learning and the development of new skills and capabilities. Exploitation enables the effective use of organizational skills and capability through commercialization to create value, thereby addressing the immediate challenges of survival and short-term efficiency. While both exploration and exploitation are necessary for organizational success, management needs to balance the two to ensure the sustainability of socioeconomic wealth.

Relating entrepreneurial risk taking to organizational ambidexterity is likely to challenge researchers to pay greater attention to how family firms develop their capabilities and how they retain their dynamism amid rapid environmental change. The growing literature on dynamic capabilities highlights the need for continuous innovation, alertness, and investment to build these capabilities (Teece, 2007, 2014). It also suggests the need for building the entrepreneurial capacity of the firm through experimentation, learning from failure, and the engagement of organizational members in thinking about the firm's future and how it relates to its competitors, customers, and competitors. By integrating insights from recent research on dynamic capabilities, researchers can enrich their conceptualizations of entrepreneurial risk taking.

Process-Oriented Research

Despite the rapidly growing empirical research (Bettinelli et al., 2017) and the wide recognition of family firms' actual entrepreneurial activities, it is striking that very few studies have objectively measured them in a systematic fashion. One reason is the lack of data in archival sources on these activities; companies often shield information about these activities from the public to protect their advantage (Lumpkin et al., 2010) and allow entrepreneurial activities to reach fruition and achieve success. Besides the dearth of archival data, field work (e.g., interviews, observations, and experiments) is rare and/or nonexistent. One reason again is limited access to research sites. Another is the intensity of effort associated with such studies and the length of time it takes. Fortunately, researchers have begun to give attention to these issues, highlighting the close link between theory, research questions, and methods (for a review and guidelines on effective practice, see Payne, Pearson, & Carr, 2017).

The aforementioned observations signal how an opportunity for future research on the emergence, evolution, and maturation of family firms' different entrepreneurial initiatives could be tracked over time. Case studies, experiments, and simulations can also add richness to future research. This research could also document the multilevel nature of these activities and how they change across levels, entrepreneurial initiatives, and time. Furthermore, with the growing international expansion by family firms, multilevel studies could also examine different activities and processes, causal mechanisms, and effects across different markets or world regions in these companies' portfolios. Understanding these issues can set the stage to develop better measures. It can also delineate where family firms differ in the content and processes of entrepreneurship from others.

Furthermore, the *organizational consequences* of entrepreneurial risk taking also deserve systematic, process-oriented research. To date, researchers have usually focused on the different financial performance outcomes of these activities. Yet entrepreneurial risk taking can change ownership and governance systems in profound ways by introducing new cultural norms and ushering in new organizational designs. Of course, as I have argued earlier (Zahra, 2005), entrepreneurial risk taking centers on developing and enhancing the firm's *regenerative capability* that reframes a family firm's mission, definition of its competitive area as well as strategic tools, and the various capabilities it retains or needs in order to accomplish its goals. As such, this regenerative capability is a meta-capability that integrates other different sub (or lower order) capabilities (e.g., EO), enabling continuous innovation and renewal. The need for this capability is great among family firms as they reassess their missions and visions with changes in their industries (e.g., disruptive technological change) and address the changing expectations of the business and family. How entrepreneurial activities create and renew this regenerative capability remains poorly understood. Future process research can add greater clarity to this issue (Payne et al., 2017).

My above comments are meant to draw attention to the need for process research that explores family firms' decisions related to capability building, upgrade, and deployment. When these firms decide to add new capabilities, they signal their commitment to a given course of action (e.g., a strategy). Changes in capability mixes also reveal major changes occurring in these companies as well as their business definitions, business models, and competitive approaches. Thus, much could be gleaned from studying how family firms build or upgrade their capabilities, which are at the core of these companies' adaptation, renewal, and transformation processes. Process research could be revealing about the genesis of these firms' *organizational entrepreneurial capability*: where it is located within the company, how it is kept current and deployed, and how it is used to derive value for the firm, family, and other key stakeholders (e.g., industry and society). Over time, in family firms (like other companies), the locus of this capability typically is likely to move from founders to others (e.g., professional outsiders). Thus, this capability becomes intertwined with the firms' human capital, which over time embodies not only new generations of family owners but also professional outsiders who are recruited to add to these firms' knowledge and skill bases. Process research can track these changes and link them to family firms' entrepreneurship.

The changes in the locus of family firms' organizational entrepreneurial capability, just described, suggest another important issue for future exploration. There is a growing recognition of the effect of family transitions and generational shifts on family firms' entrepreneurship. However, this effect is often conflated with the growing presence of nonfamily members. Generational shifts often stimulate entrepreneurship by bringing in talented outsiders who are encouraged to lead the change. Thus, entrepreneurship may not result solely from the creativity of a new generation of family members. Future studies need to empirically examine the separate and interactive influences of these changes empirically.

Process research on family firms' capabilities as indicators of entrepreneurial risk taking could be informative in other important ways. As these companies face the challenges of decaying or underperforming capabilities, they need to study their markets and identify current and future opportunities. They also need to consider their own resource bases and their relevance to their opportunities. It also compels them to explore creative ways to leverage their organizational and familial social capital in accessing and assembling the resources needed to revise their capability sets and realize opportunities being contemplated. Of course, these firms do not go it alone when making their strategic moves; they increasingly use open innovation sources, alliances, and joint ventures. Fortunately, family firm scholars have begun to study these activities (Bettinelli et al., 2017; Bettinelli & Randerson, 2016; Lumpkin et al., 2011). True some family firms may be reluctant to use alliances and joint ventures because of concern over ownership and control but they often use other external sources to assemble needed capabilities. For example, they may license or buy technologies developed by other companies to augment or revamp their technological capabilities. Still, perhaps because of data limitations, studies do not always link these mechanisms (e.g., joint ventures) to the development, evolution or abandonment of particular organizational capabilities.

To better understand these relationships, future studies need to consider several questions: How do family firms develop the recipes for these capabilities? How and where do they assemble or build their components? Furthermore, how do they integrate their own (internal) resources with external sources to develop these capabilities? Clearly, defining, designing, developing, sequencing, and deploying these firms' organizational capabilities offer an important forum for entrepreneurial risk taking that is laden with uncertainty that challenges family firm managers' imagination and creativity to find solutions. These are internal processes that are not easy for outsiders to understand, copy, or imitate. Oftentimes, these processes are idiosyncratic because they rely on local knowledge and are interwoven with the firm's own culture. Process research can enhance our understanding of these forces and processes and how they shape the emergence and evolution of capabilities. In turn, this could provide useful clues about the intermediate outcomes of risk taking associated with developing these capabilities. For instance, there is considerable learning that occurs from undertaking entrepreneurial activities; this learning could enhance family firms' absorptive capacity and their ability to innovate and venture, renewing their regenerative capability that enhances value creation. Documenting this cycle can enrich our understanding of the consequences of family firms' entrepreneurship.

Internationalization of Research

Mirroring changes occurring elsewhere in the study of management and organizational sciences, recent family firm research has become international in its scope and production (Arregle, Duran, Hitt, & van Essen, 2017). For example, a recent meta-analysis (Bettinelli et al., 2017) identified 109 papers published in 18 journals; of these papers, only 19 used U.S. data. Forty-four other articles covered European countries and eight covered different Asian countries. Given that family firms have different histories and their cultures reflect their national cultures, business environments, and institutions, such studies are helpful in clarifying the effect of contextual variables on family firms' entrepreneurial activities in general and entrepreneurial risk taking in particular. Nonetheless, these studies have two limitations. The first is failing to examine the variety of entrepreneurial activities within and across countries, even though unique family variables are likely to imprint the choices family firms make about their entrepreneurial activities. While using standardized scales (e.g., EO scales) to capture these firms' entrepreneurship is essential for valid results, companies could have the same score by doing different things. We need to move beyond this to look into the variety of entrepreneurial activities that companies undertake. Learning about these differences could guide future theorizing about the strategic choices family firms make as well as their timing and effect on performance (e.g., firm growth). It could tell us why companies undertaking entrepreneurial risks may achieve different levels of market success.

The second limitation of the existing literature is the scant attention given to the role of the external environment in studying the link between family firms and entrepreneurship within and across countries. This limitation persists despite the growing attention to the context of family firms' decisions (Wright et al., 2014). Such lack of attention might stem from the fact that most empirical studies use data from multiple industries. However, industry conditions influence the pursuit of these activities *and* determine the value firms derive from them. Firm ownership also has different consequences under different environmental conditions. Furthermore, in increasingly globalized business environments, institutions also influence the power of different classes of owners in effecting different types of entrepreneurial activities. Given that research in this area is fast becoming international, greater systematic attention should be given to the role of institutions and the external environment play in determining the type, magnitude, and effect of entrepreneurial conditions in different types of family firms in different countries as well as across countries or regions. Clearly, research on family firm internationalization offers an important arena for the study of comparative entrepreneurship; it is an area that is ripe for multilevel research that helps better clarify the microfoundations of family firms' changing locus on entrepreneurial and regenerative capability.

Multilevel Conceptualizations and Analyses

The growing recognition of the multilevel nature of entrepreneurial activities is a recent development in the study of family firms (for a review, see McKenny et al., 2014). In fact, a recent review of 223 articles published in different journals during the 2001 to 2010 period shows that 56% of the articles covered two levels of analyses, another 15% covered three, and 1% covered four. Thus, 72% of these studies covered two or more levels (McKenny et al., 2014). This recognition of multilevel analyses stems from the fact that entrepreneurial activities unfold across organizational levels; opportunities might be identified by lower level employees, evaluated by middle managers, and pursued at the overall organizational level. Thus, adopting a multilevel perspective in research adds realism by accounting for the interplay among different actors operating at different levels (McKenny et al., 2014), applying different criteria and using different lenses, and exercising different judgment rules (see Hitt, Beamish, Jackson, & Mathieu, 2007). Consequently, Bettinelli et al. (2017) conceptually differentiate among individual-, family-, firm-, and context-level drivers and outcomes of entrepreneurship in family firms. Likewise, the authors depict these activities as a nested hierarchy of CE (venturing, innovation, and strategic renewal), strategic, international, and transgenerational entrepreneurship, forming related organizational activities. They also highlight family business attitudes in the form of EO, embodying innovativeness, reactiveness, risk taking, competitive aggressiveness, and autonomy.

Adopting a multilevel perspective draws attention to the challenge of accessing data on different entrepreneurial initiatives, especially about the processes associated with their evolutionary paths. Some of these processes unfold over years, especially when the family opts to undergo major strategic reorientations to achieve transformation and renewal. While time is a major constraint in terms of gaining access to such data on these changes, concern over leakage of sensitive data to outsiders is another serious barrier. This concern rises as family firms engage with external partners or employ outsiders. However, dealing with the difficulties associated with gaining access to data is not new to entrepreneurship and family firm researchers. A multilevel focus, however, is necessary to further enhance research relevance and realism. It can help us understand when, where, and to whom entrepreneurship creates value. Given that entrepreneurial activities increasingly unfold across national borders, as family firms venture into foreign markets, multilevel research enables the recognition of spatial and temporal issues in determining the evolution of these activities as well as their success or failure. Multilevel research could also bring more systematic attention to contextual influences (e.g., institutions and the external environment), processes, and forces operating within and across organizational levels (McKenny et al., 2014). In turn, this will help researchers as they examine the microfoundations of entrepreneurial risk taking in family firms and the temporal and spatial dimensions, guiding future theory development (Felin, Foss, & Ployhart, 2015). Thus, multilevel research can expedite the development of an organizing framework that integrates recent findings.

Despite the growing attention to multilevel research, several barriers limit its progress. I have already noted difficulties associated with data access and the complexities associated with process research across levels. Researchers are also not well trained in the use of techniques associated with this type of analyses and the subtleties of their appropriate use. Fortunately, McKenny et al. (2014) provide some helpful hints in this regard.

Researchers have paid considerable attention to larger and well-established family firms. This attention is understandable because of these companies' economic and social contributions. Researchers also find it easier to find data on these companies, allowing for more rigorous and elegant testing of their theories. Yet SMEs and privately held companies have not received as much attention despite their pivotal role in their nations' economies. These companies are under serious financial pressure that challenges them to act entrepreneurially to survive, succeed, and grow. Decision-making dynamics, time horizons, and strategic choices in these privately held and smaller and medium-sized family forms are likely to be different from those observed in larger and oftentimes resource-rich organizations. As a result, they deserve closer study to better understand the nature of their entrepreneurial risk taking and their regenerative capability.

Methodological Challenges

Surveys continue to dominate research in this area. I have already noted some of the well-acknowledged shortcomings of survey methods. However, an added problem to address is the tendency to use scales developed in other research contexts to capture the activities of family firms. Of course, researchers use these measures to allow for comparisons with prior results and because of these scales' proven psychometric qualities; these qualities need to be further assessed in the context of family firms. Sometimes, these measures need revision or translation to fit the family firm setting without compromising their reliability and validity.

With survey data dominating research, longitudinal analyses are fairly absent. Fortunately, there are more and more studies that employ archival data using multiple sources that allow cross-checks and validation while enabling credible longitudinal analyses (e.g., Miller & Le Breton Miller, 2011; Patel & Chrisman, 2014). In addition, this will allow researchers to apply appropriate identification techniques that help them delineate mechanisms in action. This will help researchers better account for spatial and temporal factors that affect family firms' entrepreneurship. Fortunately, there is growing awareness of these issues among family business researchers (Sharma, Salvato, & Reay, 2014), a development that is likely to improve future scholarship and enrich findings.

Future research designs also need to consider the temporal relationships among dimensions of entrepreneurial risk taking and how they may create or enrich a firm's regenerative capability. Not only do family and firm histories shape the patterns of decisions that affect different dimensions of risk taking but also the forces of history are themselves likely to change. Companies also sequence these activities because of resource needs and constraints, managerial capacity, or path dependence consideration; certain activities need to happen for others to materialize. Over time, companies also learn from undertaking these activities. Research designs need to consider these realities.

To date, we have analyzed a wide range of indicators of family entrepreneurship and entrepreneurial risk taking. With the growing recognition of multilevel research, it is time to look into these variables as a nested set of activities (or even processes) that form a hierarchy that gives substance and meaning to a firm's entrepreneurial capability by ensuring its regenerative quality and giving direction to these activities. Conceptually and analytically this can help us organize and integrate research findings. It can also enable us understand how the different parts form into a meaningful whole that allow family firms to adapt, survive, and thrive amid their changing environments.

Conclusion

Today, research on entrepreneurial risk taking is in a state of ferment where basic concepts, definitions, measures, and causal mechanisms are being debated, reconstructed, and refined. Fortunately, this research is becoming more sophisticated, rigorous, and informative. Focusing on the distinct, and perhaps idiosyncratic qualities of family firms, will generate rich insights that will inspire creative future scholarship. With so much breadth in covering different facets of entrepreneurial risk taking in family firms, deeper and more carefully constructed empirical analyses need to examine and document their unique microfoundations, relating actors and context in ways that clarify their genesis, evolution, manifestations, and consequences across organizational levels and time. Future empirical research should also show special attention to the mainsprings of family firms' regenerative capability that ensures their successful adaptation, transformation, and evolution.

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Note

1. On February 14, 2018, a Google Scholar search yielded 28,100 entries using the term "family firms and entrepreneurial risk taking" and 138,000 entries using the term "family firms and entrepreneurship" since the publication of my article (2006-2018). For the same period, EBSCO yielded 692 entries for term "family firms and entrepreneurship" and only three entries using the term "family firms and risk taking."

References

Arregle, 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*, 801-831.

Astrachan, J. H., Zahra, S. A., & Sharma, P. (2003). *Family-sponsored ventures*. Kansas, MO: Kauffman Foundation.

Bettinelli, C., Fayolle, A., & Randerson, K. (2014). Family entrepreneurship: A developing field. *Foundations and Trends in Entrepreneurship*, *10*, 161-236.

Bettinelli, C., & Randerson, K. (2016). Introduction: What we know about entrepreneurship. In K. Randerson, C. Bettinelli, A. Fayolle, & G. Dossena (Eds.), *Family entrepreneurship: Rethinking the research agenda* (pp. 1-12). Abingdon, England: Routledge.

Bettinelli, C., Sciascia, S., Randerson, K., & Fayolle, A. (2017). Researching entrepreneurship in family firms. *Journal of Small Business Management*, *15*, 506-529.

Brumana, M., Minola, T., Garrett, R. P., & Digan, S. P. (2017). How do family firms launch new businesses? A developmental perspective on internal corporate venturing in family business. *Journal of Small Business Management*, *55*, 594-613.

Choi, Y. R., Zahra, S. A., Yoshikawa, T., & Han, B. (2015). Family ownership and R&D investment: The role of growth opportunities and business group membership. *Journal of Business Research*, *68*, 1053-1061.

Covin, J. G., & Lumpkin, G. T. (2011). Entrepreneurial orientation theory and research: Reflections on a needed construct. *Entrepreneurship Theory and Practice*, *35*, 855-872.

Cruz, C., & Justo, R. (2017). Portfolio entrepreneurship as a mixed gamble: A winning bet for SMEs family owners. *Journal of Small Business Management*, *55*, 571-593.

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

De Massis, A., Frattini, F., Pizzurno, E., & Cassia, L. (2015). Product innovation in family versus nonfamily firms: An exploratory analysis. *Journal of Small Business Management*, *53*(1), 1-36.

Eddleston, K. A., Kellermanns, F. W., & Zellweger, T. M. (2012). Exploring the entrepreneurial behavior of family firms: Does the stewardship perspective explain differences? *Entrepreneurship: Theory and Practice*, *36*, 347-367.

Evert, R. E., Sears, J., Martin, J. A., & Payne, G. T. (2018). Family ownership and family involvement as antecedents of strategic action: A longitudinal study of initial international entry. *Journal of Business Research*, *84*, 301-311.

Felin, T., Foss, N., & Ployhart, R. E. (2015). The microfoundations movement in strategy and organization theory. *Academy of Management Annals*, *9*, 575-632.

Fitz-Koch, S., & Nordqvist, M. (2017). The reciprocal relationship of innovation capabilities and socioemotional wealth: A study of family firms. *Journal of Small Business Management*, *55*, 547-570.

Goel, S., & Jones, R. G. (2016). Entrepreneurial exploration and exploitation in family business: A systematic review and future directions. *Family Business Review*, *29*, 94-120.

Hitt, M. A., Beamish, P. W., Jackson, S. E., & Mathieu, J. E. (2007). Building theoretical and empirical bridges across levels: Multilevel research in management. *Academy of Management Journal*, *50*, 1385-1399.

Jaskiewicz, P., Combs, J. G., & Rau, S. B. (2015). Entrepreneurial legacy: Toward a theory of how some family firms nurture transgenerational entrepreneurship. *Journal of Business Venturing*, *30*(1), 29-49.

Kammerlander, N., & Ganter, M. (2015). An attention-based view of family firm adaptation to discontinuous technological change: Exploring the role of family CEOs' noneconomic goals. *Journal of Product Innovation Management*, *32*, 361-383.

Lumpkin, G. T., Brigham, K. H., & Moss, T. W. (2010). Long-term orientation: Implications for the entrepreneurial orientation and performance of family businesses. *Entrepreneurship and Regional Development*, *22*, 241-264.

Lumpkin, G. T., Steier, L., & Wright, M. (2011). Strategic entrepreneurship in family business. *Strategic Entrepreneurship Journal*, *5*, 285-306.

McKenny, A. M., Payne, G. T., Zachary, M. A., & Short, J. C. (2014). Multilevel analysis in family business studies. In P. Sharma, L. Melin, & M. Nordqvist (Eds.), *Handbook of Family business* (pp. 594-608). Thousand Oaks, CA: Sage.

Michael-Tsabari, N., Labaki, R., & Zachary, R. K. (2014). Toward the cluster model: The family firm's entrepreneurial behavior over generations. *Family Business Review*, *27*, 161-185.

Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, *29*, 770-791.

Miller, D., & Le Breton Miller, I. (2011). Governance, social identity, and entrepreneurial orientation in closely held public companies. *Entrepreneurship: Theory and Practice*, *35*, 1051-1076.

Naldi, L., Nordqvist, M., Solberg, K., & Wiklund, J. (2007). Entrepreneurial orientation, risk taking, and performance in family firms. *Family Business Review*, *20*, 33-47.

Patel, P. C., & Chrisman, J.C. (2014). Risk abatement as a strategy for R&D investments in family firms. *Strategic Management Journal*, *35*, 617-627.

Payne, G. T., Pearson, A. W., & Carr, J. C. (2017). Process and variance modeling: Linking research questions to methods in family business research. *Family Business Review*, *30*, 11-18.

Randerson, K. (2016). Entrepreneurial orientation: Do we actually know as much as we think we do? *Entrepreneurship and Regional Development*, *28*, 580-600.

Randerson, K., Bettinelli, C., Fayolle, A., & Anderson, A. (2015). Family entrepreneurship as a field of research: Exploring its contours and contents. *Journal of Family Business Strategy*, *6*, 143-154.

Randolph, R. V., Li, Z., & Daspit, J. J. (2017). Toward a typology of family firm corporate entrepreneurship. *Journal of Small Business Management*, *55*, 530-546.

Sciascia, S., & Bettinelli, C. (2016). Corporate family entrepreneurship: The seven circumstances. In K. Randerson, C. Bettinelli, A. Fayolle, & G. Dossena (Eds.), *Family entrepreneurship: Rethinking the research agenda*. Abingdon: UK Routledge.

Sciascia, S., Mazzola, P., Astrachan, J., & Pieper, T. (2012). The role of family ownership in international entrepreneurship: Exploring nonlinear effects. *Small Business Economics*, *38*, 15-31.

Sciascia, S., Mazzola, P., & Chirico, F. (2013). Generational involvement in the top management team of family firms: Exploring nonlinear effects on entrepreneurial orientation. *Entrepreneurship: Theory and Practice*, *37*(1), 69-85.

Sharma, P., Salvato, C., & Reay, T. (2014). Temporal dimensions of family enterprise research. *Family Business Review*, *27*, 10-19.

Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, *28*, 1319-1350.

Teece, D. J. (2014). A dynamic capabilities-based entrepreneurial theory of the multinational enterprise. *Journal of International Business Studies*, *45*(1), 8-37.

Webb, J. W., Ketchen, D. J., & Ireland, R. D. (2010). Strategic entrepreneurship within family-controlled firms: Opportunities and challenges. *Journal of Family Business Strategy*, *1*(2), 67-77.

Wennberg, K., Wiklund, J., Hellerstedt, K., & Norquist, M. (2011). Implications of intrafamily and external ownership transfer of family firms: Short-term and long-term performance differences. *Strategic Entrepreneurship Journal*, *5*, 352-372.

Wright, M., Chrisman, J. J., Chua, J. H., & Steier, L. P. (2014). Family enterprise and context. *Entrepreneurship: Theory and Practice*, *38*, 1247-1260.

Zahra, S. A. (2003). International expansion of U.S. manufacturing family businesses: the effect of ownership and involvement. *Journal of Business Venturing*, *18*, 495-512.

Zahra, S. A. (2005). Entrepreneurial risk taking in family firms. *Family Business Review*, *18*, 23-40.

Zahra, S. A. (2007). Contextualizing theory building in entrepreneurship research. *Journal of Business Venturing*, *22*, 443-452.

Zahra, S. A. (2009). Harvesting family firms' organizational social capital: A relational perspective. *Journal of Management Studies*, *47*, 345-366.

Zahra, S. A. (2012). Organizational learning and entrepreneurship in family firms: Exploring the moderating effect of ownership and cohesion. *Small Business Economics*, *38*, 51-65.

Zahra, S. A., & Newey, L. R. (2009). Maximizing the impact of organization science: Theory-building at the intersection of disciplines and/or fields. *Journal of Management Studies*, *46*, 1059-1075.

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