Exploring the uncharted influence of family social capital in entrepreneurial ecosystems

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Abstract

Purpose – The purpose of this research is to develop theory, thereby attending to the existing knowledge gap regarding the impact of family firms on entrepreneurial ecosystems (EEs). Reducing such a gap is both timely and relevant given the ubiquity of family firms across the globe and the lack of theoretical development at the intersection of EE and family firm literatures. By employing social capital theory in a propositional theorizing approach, this article presents unique propositions that enrich current understanding of the EE phenomenon.

Design/methodology/approach – Our method adopts a three-step propositional theorizing approach. The first step outlines our conceptualization, drawing on social capital theory and identifying multiple levels of analysis pertaining to EEs and family firms. The second step precisely identifies the constructs used for the theorization process, drawing upon relevant literature. The third step involves proposition building, which produces our findings.

Findings – As a result of our propositional theorizing method, we developed 10 theoretical propositions to explain interactions between family members, nonfamily entrepreneurs, family firms and new ventures in the EE, thereby focusing on the social elements of the EE and reducing its conceptual complexity while extending the explanatory power of family social capital in the EE.

Research limitations/implications – Despite being increasingly relevant in research, policy and practice discourse, EEs remain under theorized. By theorizing in this context, we provide explanations of the mechanisms to explain social interactions between family members, nonfamily entrepreneurs, family firms and new ventures and how such interactions are likely to provide better access to the untapped resources in the EE. Furthermore, our theorization also identifies underexplored research areas paving the way for future scholars. Practical implications – This article is relevant to practitioners and policymakers interested in creating balanced, inclusive and effective EE policies and interventions. Our theorization generates insights that complement a bottom-up approach where the state assumes a facilitating role for actors such as family firms to positively impact their EE. This research is both timely and necessary because, if unaddressed, it will lead to ineffective and potentially exclusionary policies and EE interventions.

Originality/value – We contribute to the literature by synthesizing the two domains and thereby advancing knowledge at the intersection of EE and family firm literatures. We strengthen the link between two burgeoning research areas through a propositional theorizing mode of theory development. Under the assumptions of a grand theory, social capital theory, we highlight the benefits that derive from social interactions in the EE between family firms and other EE actors.

Keywords Entrepreneurial ecosystems, Family firms, Social capital, Family social capital, Theory **Paper type** Research paper

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1. Introduction

During the last decade, the concept of entrepreneurial ecosystems (EEs) has received increasing attention from researchers, policymakers and practitioners (Malecki, 2018; Wurth *et al.*, 2022). The popularity of EEs may be attributed to their potential in explaining why certain locations are able to foster and sustain productive entrepreneurship (Hruskova *et al.*, 2022). This interest has led to the examination of how different organizational forms, such as social enterprises (Roundy, 2017; Thompson *et al.*, 2018), multinational enterprises (Bhawe and Zahra, 2019; Ryan *et al.*, 2020; Ratten, 2020), entrepreneurship support organizations (Bergman and McMullen, 2022; Hruskova *et al.*, 2022) and family firms (Bichler *et al.*, 2022; Benavides-Salazar *et al.*, 2022), influence the functionality of EEs and by extension, productive entrepreneurship. Despite the ongoing research efforts, the EE concept remains undertheorized (Scheidgen, 2020; Spigel *et al.*, 2020; Fotopoulos, 2023) and consequently a gap in knowledge concerns how EEs impact the presence and operations of EE actors, such as family firms (Cobben *et al.*, 2023) and in turn, how those actors influence the EE (Wurth *et al.*, 2022; Daniel *et al.*, 2022).

Generally, a family may adopt multiple organizational forms to interact with its environment (De Massis *et al.*, 2021), generating direct and indirect impacts on the net output of the economy (Memili *et al.*, 2015). Whether this impact is positive or negative depends on the presence and intensity of various factors such as the levels of regional "Familiness" (Basco, 2015, 2024), socio-emotional wealth (SEW) (Gómez-Mejía *et al.*, 2007), family social capital (Arregle *et al.*, 2007; Pearson *et al.*, 2008; Stasa and Machek, 2022) and/or the family's stewardship of their environment (Madison *et al.*, 2016). Sufficient levels of these factors enable distinct interactions between family firms and their environment, such as the development of long-standing relations/stakeholders (Röd, 2016), a heightened concern for their reputation (Campopiano and De Massis, 2015), a vested interest in their employees (Davis *et al.*, 2010) and a general concern for their surroundings (Baù *et al.*, 2019).

Although there is a consensus on family firms being contributors to socio-economic development (Basco, 2024; De Massis et al., 2021; Memili et al., 2015), it remains unclear precisely how family firms influence EEs and vice versa. Given that both EEs and family firms are viewed as sources of productive entrepreneurship, a lack of clarity limits current understanding regarding the potential synergies between the two. Embryonic research at the intersection of these two phenomena (Bichler et al., 2022; Benavides-Salazar et al., 2022; Cobben et al., 2023) indicate an incomplete knowledge gap (Sandberg and Alvesson, 2010). Albeit, what is clear is the role of social capital in both EEs (Pugh et al., 2019; Scheidgen, 2020; Theodoraki et al., 2018; Wurth et al., 2022) and family firms (Arregle et al., 2007; Pearson et al., 2008: Stasa and Machek, 2022). Wurth et al. (2022) identifies social capital as one of the "most prominent" (p. 26) theories in studying EEs, while family social capital is one of the prominent theories in the family firm literature (see Stasa and Machek, 2022 for a review). Thereby, it's an appropriate theory for addressing the gap at the intersection of both literatures. EE literature, typically focuses on studying high-growth entrepreneurship (Brown and Mason, 2017; Spigel et al., 2020) and family firm literature, which overlooks the relevance of EEs, as indicated by the absence of the term in a recent review of the field (Siaba and Rivera, 2024). In short, we answer the following research question: "How does social capital theory explain the interactions, their positive and/or negative effects, between family firms and entrepreneurial ecosystems at the macro, meso and micro levels?"

To answer our research question, we adopt a three-step propositional theorizing process (Bacharach, 1989; Cornelissen, 2017; Cornelissen *et al.*, 2021; Suddaby, 2010). The first step involves conceptualization, in which we utilize social capital theory through a multi-level model (Klein *et al.*, 1999) and then outline the theoretical assumptions following the schematic variant of social capital theory. In the second step, we specify our constructs ensuring clarity and coherence across our model (Suddaby, 2010). In the final step, we infuse the theoretical logics from family social capital and EE social capital to develop 10 propositions.

Journal of Family Business Management

By developing theoretical propositions concerning the interrelation between the social elements of the EE and family firms, this paper makes a theoretical contribution at the intersection of EE and family firm literatures. The key knowledge advancement lies in the conceptual shift of EE research to include the family firm as a key actor, responding to the calls of Welter *et al.* (2017) in embracing research of diverse types of entrepreneurship. In highlighting the role of the family firm, we explain how interactions between the EE and family firms enhance the creation of social and economic value through productive entrepreneurship (Wurth *et al.*, 2022). By doing so, we simultaneously contribute to the family firm literature by extending existing research on the role of family firms in the EE (Bichler *et al.*, 2022; Benavides-Salazar *et al.*, 2022; Cobben *et al.*, 2023). We also contribute to family social capital literature by adopting a schematic view providing a contingency to the prevailing instrumental view of family social capital (Stasa and Machek, 2022). In addition to our theoretical contributions, we also provide future research directions for scholars seeking to advance EE, family firm and social capital research.

The remainder of this study is organized as follows: The next section provides an overview of family firm research and EE literature. The third section explains our methodological approach. The fourth section presents our developed theoretical propositions. The concluding section includes our theoretical contributions, implications for policy and practitioners and future research directions.

2. Literature overview

2.1 Family firm research

Family firm research is based upon the overlap of two sociological systems, the family and the business (Holt *et al.*, 2018). Since the 1980s, family firm research has grown in depth and breadth. At one point, family business research experienced definitional issues (Sharma *et al.*, 1996), stalling the field's progress as a lack of consensus among the definition limits knowledge accumulation (Suddaby, 2010). However, the dominant definition remains to be the one formulated by three of the most prolific scholars in the field and is as follows:

... a business held or governed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or the families (Chua *et al.*, 1999, p. 25).

Family business research was then criticized for a lack of theory (De Massis *et al.*, 2012). Since then, many theories have been applied to understanding the phenomenon of the family firm. To name but a few: agency theory (both principle-agent, principle-principle relationships) (Gomez-Mejia *et al.*, 2001), the ability-willingness paradox (De Massis *et al.*, 2014), long-term orientation (Lumpkin *et al.*, 2010), familiness (Habbershon and Williams, 1999), SEW (Gómez-Mejía *et al.*, 2007) family social capital (Arregle *et al.*, 2007; Pearson *et al.*, 2008; Stasa and Machek, 2022) and stewardship theory (Madison *et al.*, 2016).

In regard to family social capital theory, it is a potential source of competitive advantage for family firms over nonfamily firms and comes in three distinct instrumental forms: internal family social capital (Pearson *et al.*, 2008; Arregle *et al.*, 2007; Carr *et al.*, 2011), organizational family social capital (Zahra, 2010) and external family social capital (Hadjielias *et al.*, 2022). Generally, social capital explains particular family firm social relations derived from the overlap of family and business structures that create unique processes (Arregle *et al.*, 2007), aiming to create multi-generational wealth (Habbershon *et al.*, 2003).

2.2 Entrepreneurial ecosystems

EEs have emerged as a prominent concept in entrepreneurship research due to their promise in explaining why certain locations are able to foster and sustain productive entrepreneurship

(Malecki, 2018; Wurth et al., 2022; Hruskova et al., 2022). Productive entrepreneurship is defined as "any entrepreneurial activity that contributes directly or indirectly to net output of the economy or to the capacity to produce additional output" (Baumol, 1993: p. 30). According to Rocha et al. (2021), the conceptual ambiguity and interpretive flexibility of EEs has led to the development of various expansive and specified definitions (See Table 1).

Our research adopts Spigel's (2017) definition which conceptualizes EEs as:

A combination of social, political, economic, and cultural elements within a region that support the development and growth of innovative start-ups and encourage nascent entrepreneurs and other actors to take the risks of starting, funding, and otherwise assisting high-risk ventures (Spigel, 2017, p. 50).

We selected Spigel's (2017) for two reasons. First, the definition explicates the interrelationships between EE elements and therefore acknowledges that EEs are heterogenous in their elements, processes and configurations. Second, the conceptualization of EE social elements as "the resources composed of or acquired through the social networks within a region" (Spigel, 2017: p. 53), are in alignment with the tenets of social capital theory which is employed by this study to theorize the interconnections between family firms and EEs.

Author(s)	Definition	Authors' analysis of definition
Mason and Brown (2013, p. 5)	"[A] set of interconnected entrepreneurial actors (both potential and existing), entrepreneurial organizations (e. g. firms, venture capitalists, business angels, banks), institutions (universities, public sector agencies, financial bodies), and entrepreneurial processes (e. g. the business birth rate, numbers of high growth firms, levels of "blockbuster entrepreneurship", number of serial entrepreneurs, degree of sellout mentality within firms, and levels of entrepreneurial ambition), which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment"	Expansive and specific
Spigel (2017, p. 50)	"A combination of social, political, economic, and cultural elements within a region that support the development and growth of innovative start-ups and encourage nascent entrepreneurs and other actors to take the risks of starting, funding, and otherwise assisting high-risk ventures"	Expansive and all encompassing
Ács <i>et al.</i> , (2014, p. 479)	"A dynamic, institutionally embedded interaction between entrepreneurial attitudes, abilities, and aspirations, by individuals which drives the allocation of resources through the creation and operation of new ventures"	Entrepreneur focussed
Stam (2015, p. 1765)	"A set of interdependent actors and factors coordinated in such a way that they enable productive	Inclusive, narrow focus on productive entrepreneurship
Bruns <i>et al.</i> (2017, p. 1)	entrepreneurship" "Entrepreneurial ecosystem as a multidimensional set of interacting factors that moderate the effect of entrepreneurial activity on economic growth"	All encompassing
van Rijnsoever (2020, p. 2)	"A set of actors that interact and exchange resources in a network under an institutional regime and an infrastructure"	Narrow focus on institutional aspects
Source(s): Adapte	ed from Rocha et al. (2021, p. 3) created by authors	

Table 1. Expansive/specified versus narrow/vague definitions of entrepreneurial ecosystems

Journal of Family Business Management

Early EE research attempted to identify the recipe for a successful EE by developing several "laundry lists" (Stam, 2015, p. 1764) of EE elements from established ecosystems (Isenberg, 2010; Feld, 2012; Spigel, 2020). This approach however faced criticism as it failed to explicate what was cause and what was effect (Stam, 2015; Spigel, 2017), as it disregarded the contextual idiosyncrasies of each place (Welter et al., 2017) and the dynamic nature of ecosystems (Brown and Mason, 2017) as well as their internal heterogeneity (Scheidgen, 2020; Spigel, 2020). More recent EE research has attempted to address these shortcomings by acknowledging the heterogenous configurations and contextual idiosyncrasies of EEs. Despite the ongoing research efforts, the EE concept remains undertheorized (Scheidgen, 2020; Spigel et al., 2020; Fotopoulos, 2023) as it is still not clear how EEs impact the presence and operations of EE actors, such as family firms (Cobben et al., 2023) and in turn, how those actors influence the EE itself (Wurth et al., 2022; Daniel et al., 2022). This maybe due to a bias in EE literature which focuses on studying high-growth/high-tech firms while disregarding other organizational forms (e.g. family firms, social enterprises) and venture types (e.g. lifestyle, survival) (Neumeyer et al., 2019; Spigel et al., 2020; Wurth et al., 2022).

Integrating family firms into the EE theorization addresses such limitations as it aligns with the latest conceptual developments in the EE literature that focus on examining the contextual, structural and configurational heterogeneity of across and within EEs (Spigel, 2017; Roundy, 2017; Spigel and Harrison, 2018; Scheidgen, 2020) while responding to the calls for more diversity in entrepreneurship research (Welter *et al.*, 2017). Our research thus challenges the existing narratives and conceptualizations that give primacy to the certain EE actors that are perceived to be inherently beneficial to the functionality of EEs, such as highgrowth (Malecki, 2018; Bergman and McMullen, 2022; Hruskova *et al.*, 2022) and paves the way in examining elements that were previously neglected from EE literature such as family firms.

By theorizing how EEs influence family firms, as well as how family firms influence productive entrepreneurship within an EE, this study improves understanding of EE dynamics and their associated complexities. This enables us to better understand how family firms may influence the EE through their unique resources and practices (Yilmaz *et al.*, 2024), how they impact the EE's resilience (Hackler and Mayer, 2008; Eraydin *et al.*, 2010; Roundy *et al.*, 2017; Spigel and Harrison, 2018) and legitimacy (Suchman, 1995; Zimmerman and Zeitz, 2002; Spigel and Harrison, 2018), that are argued to be important traits of a functioning EE.

3. Methodology

Theory building can take many forms, such as propositional theorizing, configurational theorizing, process theorizing, perspectival theorizing, or meta-theorizing (Cornelissen, 2017; Cornelissen et al., 2021). In this paper we focus on propositional theorizing, defined as "a style of theorizing that elaborates basic contingencies (as propositions) that explain a topic" (Cornelissen et al., 2021, p. 7), which facilitates an answer to the posed research question by theorizing "a previously unexplored process or relationship" (Colquitt and Zapata-Phela, 2007: p. 1283) [1]. This process involved three steps. Firstly, conceptualization and explicating our theoretical assumptions based on social capital theory. The second step describes the construct development. The third step involved developing the propositions which can be found in Section 4.

3.1 Conceptualization and theoretic assumptions

The first step of propositional theorization is to ground the process in a broader theoretical framework (Cornelissen, 2017). Here we adopt social capital theory, which, since its inception (Banfield, 1958), has been significantly developed by seminal works (Bourdieu, 1987;

Granovetter, 1995; Coleman, 1988). Consequently, social capital theory is able to explain a significant amount of behavior such as (to name but a few): networks (Burt, 1992), the formation of intellectual capital (Nahapiet and Ghoshal, 1998), entrepreneurial behavior (Gedajlovic *et al.*, 2013), certain managerial tasks (Moran, 2005) and unique family influences on the firm (Arregle *et al.*, 2007).

More specifically, in the entrepreneurship literature social capital has been employed to explore legitimacy and how it can be developed through the entrepreneur's own high-status (Khoury et al., 2013) or trusted references in the network (Packalen, 2007). Legitimacy has been acknowledged as a key element of entrepreneurial survival, growth and performance as it is directly linked with the practice of accessing resources (Zimmerman and Zeitz, 2002; Pollack et al., 2012; Lasrado et al., 2016; Fisher et al., 2016). Recent EE literature has stressed the need to utilize social capital to understand "not just [of] the resources present in networks or the nature of the ties between actors, but also the role of cultural factors like trust in how actors affect the relationships which drive the ecosystem" (Wurth et al., 2022, p. 24) and the importance of considering "different levels of aggregation" (p. 26). Thus, a multi-level approach of social capital (Payne et al., 2011) facilitates multi-level theorizing (Klein et al., 1999). Social capital via a multi-level theorization isolates the interactions on and between each level of analysis. We focus on the macro level (the ecosystem), the meso level (family firms and other firms such as new ventures in the EE) and the micro level (family members and other individuals in the EE).

Firstly, on the micro level, social capital holds an instrumental value for individuals to engage in interactions to generate social capital (Coleman, 1988; Burt, 1992). Within this logic, social capital is an outcome of interactions possessed by the individual, both internal and external to the organization (in this case the family firm). Through nurturing interactions with a wide range of individuals (in this case EE actors) results in an individual's connectivity, centrality and hierarchy in any given network (Burt, 1992).

Secondly, at the meso level, social capital theory captures the series of repeated interactions of the collective (in this case the family firm or the start-up), a close set of interactions over a sustained period, as a requisite to accessing the benefits of social capital (Bourdieu, 1987), which often leads to solidarity, trust and a shared identity (Coleman, 1988).

Thirdly, at the macro level, the observation concerns the social structures that influence and are influenced by social interactions (Sandefur and Lauman, 1998). For Portes (1998) and Granovetter (1995) an individual's behavior is mainly determined by the surrounding social structure. Social structures can be coercive mechanisms, rewarding and sanctioning members of the group, shaping the actions of the individual, attributing social capital as belonging more to the structure than the individual (Moran, 2005). This results in context specific shared schemas that influence subsequent interactions between the EE, family firms and other related actors. Enabling rationale to be developed explaining the interrelationships between family firms and the EE and specifically how this occurs through interactions with individuals, shaped by the family social capital's and the EE's schemas.

In summary, our framework assumes that individuals are driven by their own agency, while also acknowledging the social structures manifest an established shared schema, which exhibits characteristics such as sanctions, norms, expectations and tacit knowledge. These imposed characteristics govern future behavior but an individual has the agency to deviate from expectations (Long, 2011; Long and Matthews, 2011). Therefore, we explicate three governing assumptions: (1) interactions on one level influence the other levels of analysis (2) repeated interactions between actors form shared schemas and (3) shared schemas influence subsequent interactions between actors.

3.2 Construct development

Construct development is important for propositional theorizing (Cornelissen, 2017), since constructs are the building blocks of theory (Suddaby, 2010; Bacharach, 1989). Here, we define constructs as "simply robust categories that distill phenomenon into sharp distinctions that are comprehensible to a community of researchers" (Suddaby, 2010, p. 346). In order to maintain coherence with social capital theory, we isolate the social elements of the EE outlined by Spigel's (2017) definition and take constructs from family social capital theory (Arregle *et al.*, 2007; Pearson *et al.*, 2008). A list of our constructs are included in Table 2. A diagram of our model, prior to the third step of our propositional theorizing, is included in Figure 1. In addition, an extensive range of references we grounded our constructs in, encapsulating their boundaries, interactions and meaning, are included in Appendix 2.

Journal of Family Business Management

Construct	Description	Level of analysis	Sources	
Junior family members	Members of the family with a member from the preceding generation still active in the firm	Micro	Arregle <i>et al.</i> (2007), Pearson <i>et al.</i> (2008)	
Senior family members	Members of the family with a member of the next generation active in the firm	Micro	Arregle <i>et al.</i> (2007), Pearson <i>et al.</i> (2008)	
Family firms	A firm owned by (two or more) members of the same family, who are involved in the firm, either via management or governance	Meso	Chua et al. (1999)	
Family firm schema	The family's set of values, sanctions, norms, expectations, unspoken rules, and tacit knowledge that influence subsequent behavior of the family members inside and outside the boundaries of the firm	Meso	Long (2011), Lester and Canella (2006), Sorenson <i>et al.</i> (2009)	
Productive entrepreneurship	Entrepreneurial activity that generates a positive socio-economic impact	Macro	Baumol (1993)	
Regional social networks	Provide resources for actors, such as access to valuable information in a timely manner	Meso	Spigel (2017)	
EE Resilience	Depends on the interplay between ecosystem diversity and coherence. Demonstrates the degree to which an EE can recover from internal and external shocks	Macro	Hacklr and Mayer (2008), Eraydin <i>et al.</i> (2010), Roundy <i>et al.</i> (2017), Spigel and Harrison (2018)	
EE Legitimacy	The degree to which the activities of an EE entity are proper, desirable, or appropriate in relation to the EE schema	Micro	Suchman (1995), Zimmerman and Zeitz (2002)	
EE schema	The EE's set of values, norms, expectations, unspoken rules, and obligations that influence EE interactions	Macro	Wurth et al. (2022)	Constructs
Source(s): Created	by authors			theorizi

Table 2.
Constructs used in the propositional theorizing process

entrepreneurial ecosystem Political Entrepreneurial Ecosystem schema Macro Cultural level Economic Ecosystem organizational level Family firm schema actors (new venture /non-family firms) Meso level Family Family Actors members members (entrepreneur: senior next /mentors) generation generation Productive Micro Entrepreneurship Social elements of entrepreneurial ecosystem

Other elements of

Figure 1. The entrepreneurial ecosystems' social elements across micro, meso, macro levels pre-theorization

Source(s): Authors' own creation but elements of framework adopted from Spigel (2017b)'s definition

4. Theory development

As the third step of our propositional theorizing, we develop our propositions by drawing on the literature to develop our reasoning that culminates in our propositions as instructed by Cornelissen (2017).

4.1 How does the macro level and micro level interaction influence EE schema and the entrepreneur's social capital?

Within EEs, the social capital of entrepreneurs is seen as a vital systemic condition for a well-functioning EE (Stam, 2015). Thus, various EE actors offering entrepreneurship support services and leading ecosystem initiatives (e.g. governments and universities), lay a special emphasis on helping entrepreneurs to develop their networks and connections within an EE (Theodoraki *et al.*, 2018; Pugh *et al.*, 2019; Scheidgen, 2020). Participating to these support services and initiatives constitutes a more efficient and accelerated way for entrepreneurs to build, enhance and signal their social capital within an EE (Spigel and Harrison, 2018).

Importantly, social capital theory proposes that entrepreneurs in a network will be able to derive value (in this case the recognition of opportunities) from brokering information (Burt. 1992). However, such brokering opportunity is contingent upon an entrepreneur's position in an ecosystem and will depend on their power, centrality and hierarchy in relation to others (Burt, 1997). The better positioned an entrepreneur is in the EE, the better their brokering options are, in turn providing more information advantages, such as timely exposure to nonredundant information (Burt and Opper, 2020). The entrepreneur's position is contingent upon their power, centrality and hierarchy. An entrepreneur's position over time intertwines with the EE's schema, embodying both the EE coherence (shared values, solidarity and trust) and the history of interactions that has led to the schema's current state. The longer the entrepreneur has been participating in the EE the more likely their position will have improved, providing them with more network centrality. Also, the more coherent the entrepreneur is with the EE, the more the entrepreneur will be able to project, signal and communicate their own values thus increasing their alignment with the EE. Overall, longstanding entrepreneurs in the EE are more likely to receive more information for new opportunities, therefore we propose:

Proposition 1A. The longer and more coherent an entrepreneur is with the EE's schema, the greater their access to resources from the EE.

Journal of Family Business Management

A further benefit an entrepreneur may gain from a strong position in their EE is entrepreneurial legitimacy. This derives from their reputation and consequently their actions are perceived to be "desirable, proper, or appropriate" (Suchman, 1995, p. 574). For example, when an agent holds a high status in an industry, their actions are legitimized by other actors (Khoury et al., 2013). Furthermore, even entrepreneurs in a weaker position in the EE may establish their legitimacy if more centered actors are able to provide them with references (Packalen, 2007). Thus, the EE leads to more legitimacy for entrepreneurs and their ventures. Therefore, we propose:

Proposition 1B. The longer and more coherent an entrepreneur is with the EE's schema; the more legitimacy is assigned to them and their new ventures.

Social capital is relevant in the creation of new ventures (Kreiser *et al.*, 2013), but is not automatically productive and in some ways brings diminishing returns (Portes, 1998). In this case, once the opportunity has been recognized the entrepreneur's attention is better spent on other activities. Antagonizing this is the logic that sustaining social capital requires a significant amount of time, effort and resources (Coleman, 1988; Westlund and Bolton, 2003). Thus, the entrepreneur must recognize how much time, effort and resources are spent on EE interactions. Failure to recognize and successfully manage this may result in negative returns, otherwise known as unproductive social capital (Gedajlovic *et al.*, 2013). Therefore, we propose:

Proposition 2. An entrepreneur must be careful of the diminishing returns of social capital from the EE and the potential distractions of EE networking.

4.2 How do interactions between the Macro and Meso levels, i.e. the family firm's schema and the EE's schema affect the EE?

The family firm schema represents the internal family social capital on the firm level (Long, 2011) derived from the pattern of family interactions in the firm, which lead to unique characteristics such as long-term orientation (Zellweger and Sieger, 2010), SEW (Gómez-Meija et al., 2007), peculiar processes (Arregle et al., 2007) and shared history, values, trust and identity (Pearson et al., 2008). Thus, the family firm's schema interacts with the EE's schema and their objectives influence one another. Indeed, the family firm's interest may not always align with the EE's schema, and a family firm may deliberately attempt to shape the EE's schema to suit the family's needs. This is contingent upon the length of time the family firm has participated in the EE (following the logic of the proposition 1A and 1B).

When the family firm has a strong position in the EE, due to a long-standing participation, their network centrality provides enhanced information and EE legitimacy. However, it's well known that family firms are prone to risk-aversion as their age increases (Molly *et al.*, 2012). This phenomenon will likely negatively impact the EE schema, as elucidated by Morck and Yeung (2003) in the business group and innovation context. Thus, a family firm's risk-aversion will negatively impact the EE as a family firm will seek to delegitimize entrepreneurial opportunities that are high risk, leading to counterproductive forms of entrepreneurship, rather than productive entrepreneurship. Hence:

Proposition 3. A long-standing family firm in an EE can use their position to de-legitimize opportunities that they perceive as risky.

4.3 How does the EE's schema', family firm's schema and individual family members interact with one another?

Family firm research has found that family firms are sometimes able to mitigate this riskaversion, through specific behaviors such as transgenerational entrepreneurship (Cohen and Sharma, 2016). Naturally, because the next generation is less immersed in the existing family firm's schema than senior generation members, they are less likely to have network attachments that keep them entrenched in their existing networks (Hadjielias et al., 2022). Indeed, in this case, the next generation is free to combine benefits derived from both the family firm's schema and the EE's schema. From the family firm's schema, the next generation can gain advantages from the family's shared history, values and know-how on starting new ventures (Discua-Cruz et al., 2013), as well as financial and physical resources (Sharma, 2008). In turn, they can also use the family firm's legitimacy and informational advantages to create new ventures. From the EE's schema, the next generation members will gain the advantage of being informed of new entrepreneurial opportunities. In addition, they are perceived by others as more attractive to collaborate with due to their endowed reputation and accessibility to resources from the family firms. All these combined increases the likelihood of their success and consequently productive entrepreneurship. Hence the following proposition:

Proposition 4. Next generation family members can utilize the family firm's schema as well as the EE's schema to increase the legitimacy and attraction of their new ventures to potential partners.

Moreover, in the absence of next generation members and a concentration of senior generation members, the attachment to the network heightens due to their long tenure, preference for the status quo (Cassia *et al.*, 2012) and loyalty towards existing buyers and suppliers (De Massis *et al.*, 2016). All of which are symptomatic of a constrained network, where contacts already know each other and there is an increasing amount of redundant information (Burt, 2002). In this situation the EE will suffer from a lack of diversity, which is required for productive entrepreneurship and resilience (Roundy *et al.*, 2017). Hence:

Proposition 5. When senior generation family members form a family firm's schema it becomes stagnant and lacks diversity required for an EE to foster productive entrepreneurship and ecosystem resilience.

Furthermore, if there is a balance of next generation members and senior generation members that comprise the family firm's schema, it is likely to produce the benefits that lead to the advantages of family social capital (Pearson *et al.*, 2008). There are several specific advantages that benefit the EE and contribute to positive outputs, i.e. productive entrepreneurship. Firstly, intergenerational interactions produce cognitive diversity (Chirico *et al.*, 2011), enriching the EE's resevoir of resources. On the one hand, the senior generation possess the tacit knowledge on new venture creation whilst the younger generation brings new ideas from their unique unbringings (Magrelli *et al.*, 2022). Secondly, the senior generation is able to offer support especially from their experience, longer histories, connections that assist the younger generation, who take leadership roles in entrepreneurial projects. Thirdly, the established patterns of communication in the family system generate efficiency for disseminating information and legitimacy, enhancing entrepreneurial venturing. Therefore, we propose:

Proposition 6. A family firm's schema with a combination of older and younger family members will enhance the EE's schema.

Moreover, individual senior generation family members' interactions with other EE actors pose advantages and disadvantages. Specifically, senior family members may use their

Journal of Family Business Management

enhanced position in the EE to identify and support other young nonfamily entrepreneurs. They may be motivated by reciprocity, especially if they feel indebted to the EE, which has helped them build and sustain their firms, as a form of citizenship behavior (Perkins *et al.*, 2002). This motivation may be stronger in family firms lacking next generation members as a form of phantom succession. In such a circumstance, the senior generation family members may seek continuity of their legacy through a nonfamily member from the EE, ensuring continuity of cohesion, i.e. shared entrepreneurial values. This citizenship behavior is demonstrated by providing coaching, emotional support, resources, introducing contacts and positive references. Senior generation family members may refer to this benefactor as their "prodigy" or "non-family successor" and exhibit a peculiar form of altruism, a common characteristic in family firms (Schulze *et al.*, 2003). Hence, we propose:

Proposition 7A. Senior generation family members may enhance the EE by engaging in citizenship behaviors and mentoring younger entrepreneurs in the EE.

Alternatively, senior generation family members may perceive younger nonfamily entrepreneurs as a threat to their family firm. New ventures may disrupt the existing practices and "status quo" that the family firm's competencies are based on. A senior generation family member, with their enhanced position in the network (due to their long-standing investment in the EE) may diffuse this threat by several possible behaviors. For example, they may de-legitimize the entrepreneur's ideas, resulting in a lack of legitimacy by the EE. Alternatively, they may withhold information and contacts that may help the young entrepreneur in starting their new venture. Thus, we also propose:

Proposition 7B. Senior generation family members may use their position in the EE to constrain and delegitimize new ventures that threaten their firm's existing activities.

In regard to the next generation family members, they have potential synergies with both young and old actors of the EE. Next generation family members are more likely to align with other actors in the EE of a similar age in terms of values, experience, language and motivations, due to the fact they are from the same generational cohort (Magrelli et al., 2022). In addition, next generation family members are motivated to prove themselves (especially to the senior generation family members) and seek to rejuvenate their family firm's schema by creating new ventures. In addition, some family firms may experience unexpected life events such as death or illness that unexpectedly remove the senior generation from the firm (Carr et al., 2011), which may leave a void in the younger generation's life. This void may be filled by senior entrepreneurs from the EE who may feel obliged, out of a respect for the deceased family member, resulting in citizenship behaviors (Perkins et al., 2002). Older long-standing nonfamily entrepreneurs maybe attracted to the next generation family members due to their enhanced position in the family structure (Pearson et al., 2008), providing access to tacit knowledge, information and contacts, all of which are needed in new ventures. This combination between nonfamily entrepreneurs and family members results in a synergy producing EE outputs, i.e. new ventures and productive entrepreneurship. Therefore, we propose:

Proposition 8. Next generation family members bring benefits from their access to the family firm's schema that when combined with nonfamily entrepreneurs strengthen the likelihood of successful new ventures, enhancing the EE

In conclusion, our theorization through social capital theory shows how the family's schema, next generation family members and senior generation family members enhance or constrain productive entrepreneurship. However, it may also lead to counterproductive

entrepreneurship through the abuse of their position within the EE. Our 10 theoretical propositions build on our original model and culminate in Figure 2.

5. Conclusions

5.1 Discussion and contributions

Despite the increasing attention received, EEs and family firms were mostly studied in isolation. This research through propositional theorizing set out to address this gap by examining how EEs influence family firms and by extension, how family firms influence EEs they are located in. To achieve this, we posed the following research question: "How does social capital theory explain the interactions, and their positive and/or negative effects, between family firms and entrepreneurial ecosystems?" To answer this research question, we examined the social interactions between family firms and the EE on three levels: the macro, the meso and the micro. Particularly, we based our theory on the notion of each social arena possessing a particular schema, which is manifest in the structure that manifests its own characteristics (norms, expectations and historical interactions) that influence current and future behaviors. In doing so, we contribute a fine-grained explanation of the interactions between family firms and their EE. Thereby, generating several propositions and future research directions, summarized in Table 3. Ultimately, through our propositional theorizing we make contributions to the family firm and EE literatures.

For the family firm literature, we make a theoretical contribution by furthering our understanding of external family social capital (Hadjielias *et al.*, 2022; Arregle *et al.*, 2007). This compliments prior work that has focused on internal family social capital (Pearson *et al.*, 2008; Sanchez-Ruiz *et al.*, 2019) and broadens our understanding of the positive and negative impact a family firm has on its environment (Stasa and Machek, 2022). Secondly, in synthesizing the EE literature, our research creates a conceptual shift to include family firms as potentially key actors in the EE and consequently productive entrepreneurship. This brings a novel perspective as the interaction between the two phenomena has only been

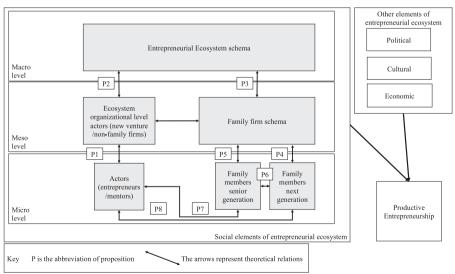


Figure 2. The entrepreneurial ecosystems' social elements across micro, meso, macro levels post-theorization

Source(s): Authors' own creation but elements of framework adopted from Spigel (2017b)'s definition

Level of analysis	Propositions generated from social capital theory	Unanswered research questions	Journal of Family Business Management
Macro- Micro	Proposition 1A: The longer and more coherent an entrepreneur is with the EE's schema the greater their access to resources from the EE Proposition 1B: The longer and more coherent an entrepreneur is with the EE 'schema' the more legitimacy is assigned to their new ventures	How long is required for an entrepreneur to participate in the EE's schema before they can appropriate the benefits associated with social capital? How do constraining behaviors manifest in EE? What behaviors can be associated with legitimizing and constraining behaviors?	
Macro- Meso level	Proposition 2: An entrepreneur must be careful of the diminishing returns of social capital from the EE and the potential distractions of EE networking	Does EE social capital have greater (or lesser) advantages at different stages of the new venture creation process?	
Meso- micro level	Proposition 3: A long-standing family firm in an EE can use their position to de-legitimize opportunities that they perceive as risky Proposition 4: Next generation family members can utilise the family firm's schema as well as the EE's schema to increase the legitimacy and attraction of their new	How do long-standing firms interact in the EE? Do they bring any unique benefits or hindrances to the EE? How do family entrepreneurs appropriate resources from the family system for utilization in the EE that lead to productive entrepreneurship?	
	ventures to potential partners Proposition 5: When senior generation family members form a family firm's schema it becomes stagnant and lacks diversity required for an EE to create productive	How do family members of a stagnant organization interact with the EE? Does this constrain the EE and lead to counterproductive entrepreneurship?	
	entrepreneurship Proposition 6: A family firm's schema with a combination of older and younger family members will enhance the EE's schema.	How do intergenerational family TMTs interact and create synergies with the EE?	
Meso- micro level	Proposition 7A: Senior generation family members may enhance the EE by engaging in citizenship behaviors and mentoring younger entrepreneurs in the EE	What roles do senior generation family members play in EE? Do they exhibit any supporting behaviors for other entrepreneurs?	
	Proposition 7B: Senior generation family members may use their position in the EE to constrain and delegitimize new ventures that threaten their own firms existing activities	Do senior generation family members display negative behaviors, attitudes or feelings towards younger entrepreneurs in the EE?	
	Proposition 8: Next generation family members bring benefits from their access to the family schema that when combined with nonfamily entrepreneurs strengthen the	What relationships do junior generation family members form in the EE? Do they leverage their access to the family firm system for new ventures?	Table 3.
Source(s):	likelihood of successful new ventures, enhancing the EE Created by authors		Propositions and future research directions

implicitly touched upon in instances of regional "Familiness" (Basco, 2015, 2024) and positive environmental impact (Baù *et al.*, 2019). Secondly, we answer calls from Magrelli *et al.* (2022) to consider the older and younger members of the family firm in different contexts, here we have utilized the EE context. We considered what effects family members, from both the junior and senior generation, are likely to have on the EE, specifically elucidating the important role of the family's schema.

Finally, by examining the interplay between family firms and EEs also responds to the recent calls to calls from the EE literature for diversity in entrepreneurship research and the

need to study diverse ecosystem actors beyond high-growth/high-tech firms (Welter *et al.*, 2017; Neumeyer *et al.*, 2019; Spigel *et al.*, 2020; Wurth *et al.*, 2022). Through its propositions, this study contributes to the ongoing attempts for examining heterogeneity within and across EEs (Scheidgen, 2020; Spigel, 2022; Schrijvers *et al.*, 2024).

5.2 Implications for practitioners and policy makers

Through the application of an established theoretical lens, social capital, the 10 novel propositions provide insights for EE practitioners and policy makers to better understand the potential unique impact family firms have on EE and therefore productive entrepreneurship.

Policy makers benefit from this research because it identifies specific behaviors they should seek to support. Specifically, senior generation family members, specifically those who do not have a next generation member entering the firm, may be motivated by reciprocity and altruism to support and coach next generation entrepreneurs. This is a huge untapped resource for the EE and could help generate productive entrepreneurship and enhance the EE's diversity and by extension its resilience (Roundy et al., 2017). Thus, policies can incentivize and structure coaching schemes facilitating senior entrepreneurs and younger entrepreneurs to interact and build relationships. This could be facilitated by the EE's anchor institutions such as universities and city councils. In current times, social capital can be used as a rationale for lower public spending (Perkins et al., 2002) as it is perceived to be an apparent solution to social problems. However, policymakers must be mindful that social capital is not a substitute for economic resources. Policymakers should then focus on developing and implementing policies that can enable family firms to fulfill their potential contribution to the EE in terms of productive entrepreneurship and resilience.

5.3 Future research directions

Reflections upon the existing literature from both streams of research has resulted in 10 robust theoretical propositions and simultaneously uncovered research gaps. In this section, we articulate "what we do not yet explicitly know" at the intersection of these two literatures on three levels of analysis (macro, meso, micro). We propose that the identified research gaps are the focus of future contributions to advance the current theorization and further synthesize the two domains.

5.3.1 Macro level. The entrepreneurship and EE literature established a need to identify more actors that influence socio-economic development (Welter et al., 2017; Wurth et al., 2022). From a theoretical perspective, we have reflected on the potential benefits social capital in the EE brings to entrepreneurs and new ventures (Proposition 1). However, this proposition is grounded in the structural perspective of social capital, one that emphasizes the importance of structure, underestimating the essence of social capital. There are two important but unexplored factors here. Firstly, the essence of social capital takes time to form hence the presence of a degree of closure and sustained interaction that comprise durable and lasting relations (Bourdieu, 1987). A gap emerges pertaining to how long this will take to reach a sufficient level to become instrumental for the EE actors. Secondly, social capital is the value individuals appropriate from the structures (Sandefer and Laurman, 1998). This process of appropriation requires investment of time and energy to sustain relationships (Adler and Kwon, 2002). Knowing the minimum threshold would help EE actors understand how much they need to invest in EEs before expecting any return. Therefore, it would be interesting to explore how long an entrepreneur is required to participate in EE before being able to appropriate benefits (RQ1).

Furthermore, while our theorization led us to consider both the benefits of social capital (legitimacy and informational advantages) and also the drawbacks that lead to counterproductive entrepreneurship, it remains to be seen how these behaviors occur in

Journal of Family Business Management

practice. This can be explored by observing EE and understanding which behavior delegitimize new opportunities and what behaviors result in constraining behaviors (RQ2). This would help uncover how the dark side of social capital may have a negative impact on EE's productive entrepreneurship and resilience, advancing literature by providing a more complete understanding of EE.

5.3.2 Meso level. Importantly, through our theoretical reasoning we acknowledge the potential limitations of social capital due to the cost of maintenance. However, what remains unclear is the specific behaviors, i.e. antecedents that build social capital as well as whether these behaviors are always effective through the different stages of the life cycle. It may be that the continuous patterned interaction, which leads to lasting and durable relationships that provide benefits (Granovetter, 1995), is only beneficial at certain points i.e. in the case of new ventures access to different information from different people is required in different moments. For example, the interaction in a diverse network leading to information advantages is more relevant at the initial stages of the new venture's life cycle because it supplies a form of non-redundant information (Burt, 1992). Whereas, in subsequent phases the founding teams with strong forms of relational capital manifest a more content oriented form of social capital and thus is more valuable at this stage. Consequently, it would be interesting to know at which stage of a new venture accessing the EE social capital is most effective and whether this diminishes or increases across the different phases of the new venture's life cycle (RQ3).

Family firms are known to become risk averse (Kotlar *et al.*, 2020), stick to the status quo (Cassia *et al.*, 2012) and their traditions (De Massis *et al.*, 2016). All of which are likely to contribute to counterproductive behaviors in the EE and consequently contribute to counterproductive entrepreneurship. From this line of reasoning, it would be interesting to observe how long-standing family firms interact with the EE and if there are examples that contradict this logic. In both cases, future research should longitudinally observe the interaction between long-standing firms and their EE (RQ4). This will advance knowledge by explicating a specific form of actor in the EE and their contribution to either productive or counterproductive entrepreneurship.

5.3.3 Micro level. Generally, research focusing on the specific actors is required to advance this line of research. Literature acknowledges that the family firm's schema is influenced by the individual members of the family firm (Habbershon et al., 2003). Thus, to further the research of the EE, it would be interesting to explicitly observe how next generation family members utilize their access to the family system and family resources (that separates them from nonfamily members), in the context of EE (RQ5).

Furthermore, our reasoning outlined how a family's schema formed by a concentration of senior generation family members, also known as a stagnant organization (Ward, 1986), is likely to have a negative impact on the EE. Therefore, it would be interesting to identify what behaviors senior generations' family members exhibit when interacting with the EE who are part of a stagnant organization, as well as their attitudes, behaviors and feelings towards upcoming changes in the EE (RQ6). This could help identify situations in which the EE is stagnant, and this is especially poignant in an aging population and ones which specifically have a high proportion of family firms, such as Italy (Cascino *et al.*, 2010).

Our theoretical reasoning also explicated how the family's schema is influenced by both junior and senior family business members. Having a mixture ensures cognitive diversity and thus contributes more to the EE outputs and resilience (Roundy et al., 2017). However, what is underexplained is how the advantages of internal family social capital through intergenerational relations (Magrelli et al., 2022) can contribute to the EE and more precisely the nature of such interactions and specific related behaviors (RQ7). In identifying the peculiar behavior of multi-generational family members that benefit EE, it can extend and refine the current list of attributes that are required for functioning EEs.

The family firm literature is anticipating the succession crisis, a state in which the next generation members are either non-existent or not entering the firm (Garcia et al., 2019). This results in an abundance of senior generation family members and not enough junior family business members, which may not only hinder but also benefit the EE. Future research can broaden our understanding of these situations. Firstly, future research can focus on senior generation family members, particularly those who do not have the next generation coming into the firm and observe their interactions with entrepreneurs in the EE. This can inform whether and how they perform mentoring roles and whether their reciprocity and altruism that builds the typical family's schema and whether this extends to the EE's schema (RQ8). Identifying such empirical examples of such behaviors would inform more beneficial aspects that family firms bring to the EE.

On the other hand, since family firms seek transgenerational wealth transfer (Habbershon et al., 2003) and they seek to protect their SEW that sometimes skews their economic rationality (Kotlar et al., 2020). Our reasoning proposes that they may use their esteemed position, as successful business owners in the EE, to constrain younger upcoming entrepreneurs in a bid to protect their status quo and their firms existing competences, which may be destroyed in the wake of new products and services that supersede them (Schumpeter, 1934; Morck and Yeung, 2003). Therefore, capturing these behaviors such as attempts to delegitimize and withhold information from entrepreneurs, can help capture counterproductive behaviors and advance theory on EE (RQ9).

Furthermore, the dynamic nature of EE (Brown and Mason, 2017) aligns with the idea of generational change in family firms (Magrelli *et al.*, 2022). Thereby, our logic has considered situations in which the next generation accesses the family system to boost their entrepreneurial efforts. Furthermore, in situations next generation family members may link up with both young nonfamily entrepreneurs and even older nonfamily entrepreneurs. In both cases, it would be interesting to observe what specific unique resources, derived from enhanced family social capital, a family member brings to new ventures (RQ10). This would help explain the unique positive impact a family firm has on EE and therefore productive entrepreneurship. Table 3 summarizes the future research directions.

5.4 Final note

This research set out to bridge the gap between two important research domains to entrepreneurship: family firms and EEs. We established social capital as a common theoretical ground to develop 10 unique propositions that explain how family firms influence the functionality of EE, as well how the EE itself may influence the operations and interactions of family firms. In addition, we identify future research questions to guide scholars in advancing this novel but increasingly relevant phenomenon. In doing so, we contribute to EE, family firm and social capital literatures.

Notes

 We would also like to note that theory building via a systematic literature review (Breslin and Gatrell, 2023) was not viable due to the identification of five articles that sufficiently analyze family firms and EE, following the traditional systematic literature review process (Transfield et al., 2003), and more details of this can be found in Appendix 1.

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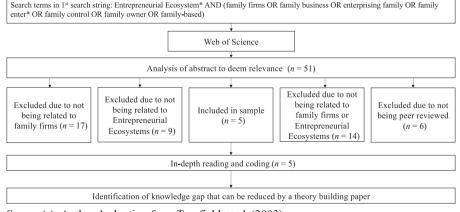
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Appendix 1 Search results of attempted systematic literature review of family firms and EEs



Source(s): Authors' adoption from Tranfield *et al.* (2003)

Figure A1. Attempted systematic review process

	Reason for exclusions	Explanation	
	Not related to family firms ($n = 17$)	These articles, mostly, contained some element of family factors, such as family upbringing in relation to entrepreneurial behaviors. While these are interesting for entrepreneurship scholars, they fall out of the scope of the aim of this article	
_	Not related to entrepreneurial ecosystems $(n = 9)$	These articles, while analyzing some aspect of family firms in relation to the environment, were not referring to the EE or	
ıg		engaging with the literature on EEs	
n	Not related to family firms or entrepreneurial ecosystems ($n = 14$)	Not relevant to either family firms or EEs	
	Not peer reviewed $(n = 6)$	Not of sufficient quality to qualify as contributions to knowledge $$	

Table A1. Rationale for excluding scientific articles from the literature review process

Table A2. Selection of articles used in propositional theorizing process

Appendix 2

Area of literature	Sources
Seminal studies	Bourdieu (1987), Burt (1992, 2019), Coleman and Carsky (1999), Gedajlovic <i>et al.</i> (2013), Portes (1998), Putnam (1993, 2002)
Family firm literature	Arregle <i>et al.</i> (2007), Hadjielias <i>et al.</i> (2022), Lester and Canella (2006), Long (2011), Long and Matthews (2011), Pearson <i>et al.</i> (2008), Sanchez-Ruiz <i>et al.</i> (2019), Sorenson <i>et al.</i> (2009), Stasa and Machek (2022), Yates <i>et al.</i> (2023), Zahra (2010)
Entrepreneurial ecosystem literature	Acs et al. (2014), Benavides-Salazar et al. (2022), Bergman and McMullen (2022), Brown and Mason (2017), Daniel et al. (2022), Feld (2012), Fotopoulos (2023), Hruskova et al. (2022), Isenberg (2010), Malecki (2018), Neumeyer et al. (2019), Nicotra et al. (2018), Pugh et al. (2019), Roundy (2017), Ryan et al. (2020) Scheidgen (2020), Schrijvers et al. (2024), Spigel (2017, 2020, 2022), Spigel and Harrison (2018), Spigel et al. (2020), Stam (2015), Theodoraki et al. (2018), Thompson et al. (2018), Wagner et al. (2019), Wurth et al. (2021)

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Journal of Family Business Management

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