What is a Family Firm and Why Does It Matter?

A Survey of Family Firm Definitions[1]

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Abstract

We present a systematic survey of how family firms are defined in empirical studies, focusing on five key conceptual dimensions: ownership, control, management, embeddedness, and succession. Our findings highlight three main points: First, the definition of family firms significantly influences key outcomes, such as their prevalence, performance relative to non-family firms, and innovation activity. Second, among our sample of 122 papers, 29 different binary definitions are used. Third, the most common criteria for defining family firms are ownership, control, and management participation. We conclude by recommending that future research in family business prioritize robustness analyses using multiple definitions of family firms.

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Introduction

How to distinguish the theoretical and operational definitions of family firms was proposed by Chua, Chrisman, and Sharma (1999)(CCS, 1999, henceforth) in their seminal work, indicating that the former "… *must capture the essence differentiating family businesses from all other firms*" (CCS, 1999: 24) and represents the "… *the standard against which operational definitions must be measured*."[2] (CCS, 1999: 19). This question reflects the core issue in any field of research: the requirement of precise definitions of research objects. As noted in Bird, Welsch, Astrachan and Pistrui (2002), family business research should be found on conceptual definitions, and these should drive operational definitions into empirical research.[3] In this paper we document the importance of definitions in studying family firms, a paucity of conceptually driven operational definitions, and a general lack of convergence among operational definitions.

As noted by Miller, Le Breton-Miller, Lester, & Cannella (2007), a lack of definitional consensus has implications for the validity and robustness of inferences one can draw from studying family firm. For instance, Handler (1989) notes that "*Without having clear criteria for distinguishing family firms from other types of business, research sampling is very difficult.*" We document how empirical research results depend crucially on the operational definition within fundamental queries such as the prevalence of family firm, their performance relative to non-family firms and their innovation activity.

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[2] Quoted from the abstract.

[3] Bird, Welsch, Astrachan and Pistrui (2002) conclude by noting key deficiencies in the field of family business research and admonish that "… *the definition of family business needs to be articulated clearly.*"

Conceptually the family firm definition is multi-dimensional and family firms represent a heterogeneous group along the various dimensions that define them.[4] We illustrate the multi-dimensionality through the well-known French luxury brand, Hermès. It is today a publicly traded company where more than 70 family members in three family branches own approximately 70 percent of the firm's shares; family control is further secured through family trust. Its current CEO is Axel Dumas, a 6th generation family scion with a direct blood line to the founder. Two-thirds of non-employee members of the board are family members or closely related, and young family members are actively encouraged to get involved in the firm. Hermès illustrates the multi-dimensional aspect of being a family firm – these are direct ownership, a control securing trust, board membership, senior management positions, family embeddedness in the business and intra-family succession. (Bennedsen, Crawford, Hoefer, 2014).

This survey makes three contributions. First, despite the large and increasing research volume in studying family firms, the lack of consensus in the definition of family firms contributes to a bias in studying the difference between family firms and their non-family counterparts. This lack of consensus will also lead to a tough task in generalizing the findings from studying family firms. We sort through prior empirical research and identify five key dimensions in defining family firms about which there is widespread agreement in the literature of entrepreneurship, family business research, management, economics, and finance. Second, we highlight the fact that most operational definitions often narrowly focus on one or two dimensions which are selected due to data availability rather than driven by conceptual analysis.

[4] Amore, Bennedsen, Le Breton-Miller, & Miller (2021) posit that the heterogeneity of family firms, along with a tendency for family firms to deliver extreme performance, has led to a plethora of evidence documenting both their superiority and their inferiority vis-à-vis non-family firms.

While in principle operational definitions may vary across research fields and research questions, in practice we find that variations in operational family firm definitions persist within research fields and in papers that address similar research questions.

Our third contribution is to identify the embeddedness of the family in business and succession intent and practice across generations[5] are surprisingly rarely adopted as part of operational definitions, while the other three dimensions of ownership, management, and control are employed with a wide latitude, albeit seldom in the same study. For example, ownership is used as a sole or sufficient criterion to qualify as a family firm in 47% of the definitions in our survey, while family management is a sole or sufficient criterion in only 15% of the studies. Within ownership-based definitions, there is a wide latitude in specific thresholds, ranging from 1 share to more than 50% of shares, with 10% ownership being a common threshold. Succession intention, either by itself or in combination with ownership or management criteria, features in only 8% of the surveyed papers as a necessary criterion for qualifying as a family firm. Being embedded in the business features in 14% of the definitions as a sole criterion or in combination with other dimensions.

The absence of embeddedness and succession in most studies can lead to biased inferences regarding their prevalence and performance. As an example, consider the US company Microsoft founded by Bill Gates. Until recently, he was the largest individual shareholder in the company, and throughout the 1990s served as its CEO. He currently has no executive or board positions at

[5] Several earlier studies have conceptually discussed one or more of these dimensions. Control and ownership is the focus of Handler, 1989, and Anderson and Reeb, 2003a. Succession and family embeddedness into the business is key to Donnelley, 1964; and Churchill and Hatten, 1987. Succession as an integral part of family firms also appears in Chua et al., (1999) and Garcia, Sharma, De Massis, Wright, & Scholes (2018).

Microsoft, none of his three children are involved in any capacity in the firm, and there is no plan for succession, nor was there ever one, within the Gates family. All studies[6] that use founder ownership thresholds as a sufficient criterion for defining family firms would classify Microsoft as one during Bill Gates' tenure as CEO so long as Gates' ownership exceeds the selected threshold. We submit that Microsoft, during Mr. Gates' tenure, was a founder-controlled firm, like an entrepreneur firm, and not a family firm. Similarly, in studies of private firms where the number of owners is limited, almost all firms risk being categorized as family firms, regardless of succession intentions.[7]

A second type of mis-categorization is illustrated by the Japanese company Suzuki. Ever since it became public in 1949, the founding Suzuki family has never been listed among the top ten shareholders of their iconic namesake company (Bennedsen, Mehrotra, Wiwattanakantang, & Henry, 2022). For more than 70 years average family ownership has been less than one percent. Suzuki's largest shareholders are long term institutional investors, both domestic and foreign. Nevertheless, the Suzuki family has controlled their namesake company without having a material ownership stake. Osamu Suzuki, until very recently the CEO of the firm, entered the Suzuki family through an arranged marriage to the eldest daughter of Suzuki's 2nd CEO, in fact, all of Suzuki's CEOs, save the current one, have been adopted sons and married to daughters in

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[6] Studies that include ownership by a single person or family above a certain threshold (typically 5-25 percent for public traded firms) as a *necessary* and *sufficient* condition include, among other, Anderson, Reeb and Zhao (2012), Ang, Cole and Lin (2000), Bertrand, Johnson, Samphantharak, & Schoar (2008), Bunkanwanicha, Fan & Wiwattanakantang (2013), Chirico, Criago, Bau, Naldi, Gomez-Maija & Kotlar (2020), Faccio and Lang (2002), Franks, Mayer, Volpin, & Wagner (2009; 2012), Gomez-Mejia (2007), Keasey, Martinez & Pintado (2015), Kowalewski, Talavera, & Stetsyuk (2010), Miller and Breton-Miller (2006), Mullins and Schoar (2016), Pérez-Gonzáles (2006), Sraer and Thesmar (2007).

[7] Notable exceptions include Carney & Child (2013) where the authors employ multiple definitions of private family firms, documenting a tremendous heterogeneity in private family firms depending on the precise definition used to classify them.

the blood line of the founder. Suzuki is an example of an important group of dynastic controlled family firms where the family exercises control with a miniscule ownership stake (Bennedsen, Mehrotra, Shim, & Wiwattanakantang, 2021). Studies that rely on minimum ownership thresholds by the founding family, say one percent or higher, would categorize dynastic controlled firms such as Suzuki as non-family firms.[8]

Our findings echoed previous empirical papers with multi-dimensional definitions. Donnelley (1964) - one of the earliest contributions to the family business research - defines a family firm as "*A company is considered a family firm when it has been closely identified with at least two generations of a family and when this link has had a mutual influence on company policy and on the interests and objectives of the family*." (Donnelley, 1964: 428). According to Donnelley's definition, of the three examples above, Hermès and Suzuki qualify as family firms, but Microsoft does not. If instead we went by a definition of family firms based on founding family ownership, Hermès and Microsoft in the Bill Gates area would be counted as family firms, but Suzuki and other dynastic controlled firms would not.[9] The potential for over- and under-counting the prevalence of family firms in an economy is substantial.[10]

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[8] Studies that have ownership above a certain threshold level as a *necessary* condition for being a family firms include all papers mention in footnote 2 and papers such as Bandiera, Lemos, Prat & Sadun (2018), Bertrand and Schoar, 2006, Claessens, Djankov, & Lang (2000), De Cesari, Gonenc, & Ozkan (2016), Ellul, Pagano & Schvardi (2018), Franks, Mayer & Mijajima (2014), Gomez-Mejia, Larraza-Kintana, & Makri, (2003), Le Breton-Miller, Miller, & Lester (2011), Masulis, Pham & Zein (2011), Miller, Amore, Le Breton-Miller, Minichilli, & Quarato (2018) and Sirmon, Arregle, Hitt & Webb (2008).

[9] A similar point regarding the essentialism of succession in the definition of family firms is made in Churchill and Hatten (1987).

[10] For example, Bennedsen, Mehrotra, Shim, & Wiwattanakantang (2021) estimates that more than 7 pct of public traded firm in Japan are dynastic controlled firms where families control firms with less than 5 pct of the shares and thus are mis-categorized in the family business literature.

The outline of this paper is as follows. Section 2 provides an overview of family firms' definition from previous studies and Section 3 illustrates the method of the survey. Section we report the synthesis of the findings from the survey and include the paper with the discussion in Section 5.

1. The importance of family firm definition in estimating the frequency, the relative performance and relative innovation activity

2.1: The ubiquitous of the family business model

Family firms have shown their significance in the global business context. In all public firms globally, 54% of them are family-controlled firms (Anderson & Reeb, 2003; Claessens, Djankov, & Lang, 2000; EY, 2023) and are dominant among private firms in all countries but mainland China.

As Villalonga and Amit (2006) indicated, most papers studying family firm used a strict ownership threshold as the definition of family firm. In their work, 37% of US firms in their sample (Fortune 500 firms from 1994-2000) are family firms based on ownership (>5%). In fact, the threshold ranging from 5% to 25% has been the dominant number of ownerships by an individual and/or a family as defining the research sample as a pool of family firms (e.g. Berrone, Pascual, Cruz, Gomez-Maija & Larraza-Kintana, 2010; Bunkanwanicha, Pramuan, Fan, & Wiwattanakantang,2003) [11] . However, introducing ownership thresholds as necessary or sufficient criteria is likely to create an over-counting bias by including entrepreneurial and

[11] Ultimate means of the ownership distribution adjusted for control enhancing mechanisms such as pyramids, holding companies and/or superior voting shares.

startup firms in which the founder has no intention of establishing a family firm.[12] If Donnelley's succession criterion is added to the definition, Villalonga and Amit (2006) find that their sample reduces to 19% of Fortune 500 firms. And when multiple family members are also added to the definition (the embeddedness criterion), the fraction of family firms declines to 7% of their sample.

Bennedsen and Nielsen (2015) do a similar exercise for all registered limited liability companies (private and public) in Denmark. They show that if family firms are defined solely based on ownership (an individual or family owning more than 50 percent of the shares), more than 95 percent of all firms in Denmark will be counted as family firms. If top management is added to the necessary qualification, the fraction of firms that classify as family firms drops to 77 percent. In addition, if embeddedness is included by requiring at least two family members involved in the firm, the fraction of family firms drops to 50%. Finally, since many private firms are young, defining family firm based on two or more generations involved with the business brings the fraction of firms qualifying as family firms drop to well below 25 percent.

On the contrary, the sole use of ownership leads to another mis-categorization from exclusion of dynastic controlled family firms, where families control their corporation with very little ownership, can be substantial. Bennedsen et al., (2021) estimated that 7 percent of all public traded firms in Japan are dynastic controlled. Including these firms will almost double the share of family firms in Japan documented in the literature (Claessens et al., 2000; Franks, Mayor & Miyajima 2014; Masulis, Phan & Zein 2011).

2.2 Relative performance

[12] For instance, Kotlar and Sieger (2018) note that second or later generation managers are less entrepreneurial vis-à-vis the family's own heirs.

The superior performance of large US family firms compared to non-family firms is confirmed by Anderson & Reeb (2003), Anderson & Reeb (2004), McConaughy, Walker, Henderson Jr, & Mishra (1998) and Villalonga and Amit (2006). However, Villalonga and Amit (2006) show that the superior performance is lower when families employ control enhancing mechanisms such as pyramidal ownership structures or dual class shares. Miller, Le Breton-Miller, Lester, & Cannella (2007) re-examine the evidence and trace the superiority of family firms to founder-run firms. Excluding founder-run firms from the classification of family firms erases their superior performance. While many founder-run firms are succeeded by family heirs, many are not, and including all of them as bona fide family firms can bias the inferences we can draw regarding their performance. As noted earlier, founder-run firms such as Microsoft under Bill Gates, and more recently, Google under Larry Page, impart a positive bias to the performance of family firms when they are included in the group. Neither firm was succeeded by a family heir.

The Miller, Le Breton-Miller, Lestor & Cannella (2007) study highlights the bias resulting from using broad definitions of family firms. Studies from Europe and Asia have not confirmed the superior performance of family firms. Claessens et al., (2000), Cronqvist & Nilsson (2003) and Maury (2006) find that family firms have inferior performance relative to non-family firms at high ownership levels, when ownership is separated from management, and when there is a wedge between ownership and voting control. To state the obvious, when family firms are defined based solely on low ownership thresholds, as they are in much literature, results may not be representative of all family firms.

2.3 Innovation

There is a growing literature on innovation in family firms. However, there is no apparent consensus on the effect of being a family firm on its effort on innovation. Family owners are believed to be less diversified and hence prefer less risky investments (Shleifer & Vishny, 1986). Anderson, Duru, & Reeb (2012) used the ownership threshold of family firms to examine the nature of investments made by family vs. non-family firms and find that in general, family firms invest less in R&D compared to non-family firms. On the contrary, Anderson, Duru, & Reeb (2012) showed that family firms have more advantage in investing in innovation on dual grounds due to lower agency and monitoring costs. However, Duran, Kammerlander, Van Essen, & Zellweger (2016) found that a key element of innovation activity is the family's control over both ownership and top management.[13] And that family firms are more efficient in using their R&D expenses to generate research output. With the same criteria of ownership and top management, Amore, Bennedsen, Bordeerath, & Foss (2022) found that founders running family firms are less innovative than non-family firms, but that new heir CEOs are more innovative than both the founder run family firms, the professional managed family firms, and non-family firms. These contradictory findings reveal a key issue in studying innovation issues between family and non-family firms. Those inferences are critically dependent on the exact nature of the definition used to identify them. In the next section we describe the five key dimensions that comprise the

[13] Chrisman, Chua, De Massis, & Wright (2015) reported that family firms have superior ability yet lower willingness to engage in technological innovation. De Massis, Di Minin, & Frattini, 2015). De Massis, Frattini, Kotlar, Petruzzelli, & Wright (2016) conceptualize a new product innovation strategy- innovation through tradition (ITT) to identify the way family firms use their past as the source for future innovation. Furthermore, antecedents from family system are also examined to unveil the innovation decisions in family firm. Rondi, De Massis, & Kotlar (2019) developed a typology of four ideal types of *Seasoner*, *Re-enactor*, *Digger*, and *Adventurer* with how family firms position themselves as making innovative decisions. Filser, De Massis, Gast, Kraus, & Niemand (2018) investigated family SMEs and reported that intrafamily succession will renew family bonds and positively affect innovativeness, while the identification of family members with the firm provides a negative effect on innovativeness.

definition of family firms employed in the extant literature and indicate the challenges in empirical research.

2. Five dimensions in the conceptual definition of family firms and the challenges of implementing them into empirical studies

2.3 Five dimensions in the conceptual definition of a family firm

In this section we discuss conceptually the multi-dimensional aspects of defining family firms and the challenges of imposing a complex definition in empirical research. It is clear from the discussion above that the label family firms have been used on a large and heterogeneous group of firms that may share a common element of overlap between a family and a business but also can be diverse in many important aspects. It is tempting to abolish the idea of a binary categorization of family firms and non-family firms, given the heterogeneity that will always exist within the groups. However, a clear majority of published articles have used a binary definition[14] which makes it important to understand the underlying elements in defining family firms.

Few notable studies incorporated multi-dimensions in defining family firms. Inspired by Donnelly (1964), we incorporated both the interaction between the business and the family sphere and the presence of a generational aspect as part of the definition of family firms. Notwithstanding the twin criteria of embeddedness and intra-family succession, the extant

[14] Notable exceptions include Wilson, Wright and Scholes (2013) who provide alternative definitions of a family firm based on a sliding scale of board representation. However, even here, the resulting definition is binary – the sliding scale is used as a robustness check in how strictly board control is defined.

literature has not converged on a consensus for the definition of family firms. One reason for the lack of consensus is that there are many elements involved in defining a family's involvement in the business. Below, we highlight five non-exclusive elements of family firm definition, and these elements will constitute the foundation for our empirical survey in the next sections.

Ownership (O): Does a family have controlling ownership?

Ownership is a key element for families being able to control their family firm. The three branches of the Hermès family own around 70 percent of the shares in the public listed luxury company. In addition, they have implemented a family trust to protect the family control of the shares in case family members want to exit ownership. In long living family firms, families keep almost all shares within the family through centuries: the world's oldest family firm, the Hoshi Ryokan in Japan, has been owned by one family over 46 generations going back to 818 (Bennedsen, Itoh, Stabile, & Henry, 2023).

Ownership in literature is typically defined as a fraction of shares or cash flow rights. This can vary significantly across types of family firms and countries. This variation is partly linked to the ability to control a firm. Since private firms tend to have few owners, it is common to use a 50 percent threshold level in the definition of family firms. Public-traded firms often have hundreds or thousands of owners and thus control of a company can be secured by a smaller ownership stake. In the USA control can be obtained by as little as 5 percent of the shares, in Europe threshold levels would typically be higher and in Asia families typically own an even larger share of their public traded firms. In addition to the control derived from the share of ownership, control can also be obtained through control enhancing ownership devices such as pyramidal ownership structures, share classes with different voting rights, specific clauses in the corporate charter etc. Control enhancing mechanisms allow families to control their firms with a lower share of nominal ownership.

Management (M): Is the CEO or board Chair a member of the founding family?

As we saw above having a family CEO at the helm of the family firm is important for corporate policy, strategic decisions, and the consequences in business (e.g., Gallucci, Santulli, & Calabrò, 2015; Casillas, Moreno-Menéndez, Barbero, & Clinton, 2019). The family heir Benjamin William Keswick is the group CEO of Jardine Matheson, the Hong Kong based trading conglomerate. Having a family member at the top becomes a flag that unites the 400,000 employees across the world. Similarly, when Axel Dumas Hermès replaced Patrick Thomas at the helm of the French luxury company it was explicitly motivated by the importance of having the family name in the family company.

The requirement of a family CEO is often introduced in research studies to exclude two types of firms. The first are firms in which a family or a person is a strategic investor without being involved in the daily operation of the business. The second is where the family keeps being a significant owner but has lost their attachment to the firm and represents passive investors without any engagement in the firm's activities.

Board (B): Is a member of the founding family represented on the firm's board of directors?

For large family firms, board control is often the most important channel through which families control their business. La Roche is a family firm with large family ownership by the two founding families Hoffmann and La Roche. The management is professional and there are no family members in the executive suite. However, the family engages in the overall long-term firm strategies through Andrè Hoffmann and Jörg Duschmalè who represent the two founding families on the firm's the board of directors. This is a common case in large family firms, where the family professionalizes the management and engages in strategy through board representation.

Embeddedness (E): How engaged is the founding family in the firm, and how dependent are the firm's policies on the founding family's preferences, networks and intangible assets?

Embeddedness focuses on the degree to which the family and the business are integrated and grow together in a mutually dependent manner (Aldrich & Cliff, 2003). How engaged are family members in the business? How important are the intangible family assets – such as network, legacy and family values – for the success of the family business? Embeddedness constructs a context where there is dyadic interrelation between a kinship-oriented social family system and a profit-driven institution15 and is therefore a key element of being a family firm (Sharma , 2004; Aldrich & Cliff, 2003; Chrisman, Chua, & Steier, 2003; Miller, Breton-Miller, & Lester ,2011) adopt social embeddedness (Granovetter, 1985) to see family firm as a business within a social group, and the involvement of family members as owner and manager leads to distinct conduct and performance with agent or stewardship motivation.

[15] The exact definition of embeddedness varies across papers: Baines and Wheelock (1998) introduce the term "family economic unit" to describe family firms (Cruz, Justo, & De Castro, 2012, 63) whereas Khanin, Turel, & Mahto (2012) defined family-business embeddedness as "confluence of values and objectives stemming from various institutional contexts—family, business, and symbolic—within the family firm".

Borrowing from Donnelley, we submit that a family firm has idiosyncratic ties with the founding family. Thus, embeddedness implies that a link between family preferences and firm policy and in such firm level decisions as employment, payouts, capital structure, and risk management. Put simply, without the embeddedness imperative, the family's control is no different from that of a non-family owner or a professional manager.[16,17]

Succession (S). Has there been a family succession in the firm or is it the manifest intention of the founder to make a family succession?

Most firms start out as entrepreneurial firms. As an illustration, a serial entrepreneur sets up a software company with the aim of existing in 10 years. The founder is the sole owner, the CEO and the chairman of the board. The founder places family members on board because they represent available resources and provide trust in governance. After 15 years the entrepreneur sells to an industry leader and plays no role in the future of the company hereafter. During these 15 years, the firm would be defined as a family firm by all of the above 4 criteria but it is an entrepreneurial start up firm. Adding the criterion of actual or intentional succession from the pool of family heirs separates the universe of entrepreneur firms into those that are intended to be bequeathed to heirs vs. those where such intentions were unlikely to have been harbored. Family

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[16] For e.g., Sraer and Thesmar (2007) note that family firms make a "*...more parsimonious use of capital*", indicating lower leverage, less specialized labor, higher NPV acquisitions and a lower cost of debt. Burkart, Panunzi, &Shleifer (2003) note three aspects of family firms that resemble the embeddedness criterion in Donnelley, viz. amenity control, legacy, and the possibility of tunneling. In each case, the firm's investment and financing policies are co-determined with its family control.

[17] Family embeddedness perspective argues that every entrepreneur comes from a family, which is the basic social institution in human society. Granovetter (1985; 1992a, b) analyzed and conceptualized embeddedness in modern societies, specifying the context that economic actions and outcome of these "actors" in modern societies are not merely economic driven; instead, these actions and outcomes are affected both by actors' "dyadic relationship and the broad structure of their overall network of relationships." (Hagedoorn, 2006, 671). With this premise Aldrich & Cliff (2003) argued that family members and family resource play a vital role in opportunity cognition and new venture creation.

business scholars have longed to focus on succession as the key element of being a family firm[18] and a key challenge for the continuity of the firm (Bennedsen, Fan, Jian, & Yeh 2015; Chrisman & Sharma, 2003; Lansberg, 1988; Sharma, Christman, & Chua, 1996)

Some economists, including Schumpeter (1934), intuiting an entrepreneur's motivations, have ascribed a dynastic motive to entrepreneurs, among other motives. It is possible, but by no means a certainty, that all entrepreneurs intend to bequeath their firm to their blood heirs. We propose a simple test to gauge such intentions, per Donnelley's definition – the presence and involvement of the second generation as a condition in bestowing family firm status. Those entrepreneurs who are moved by dynastic motives would be succeeded by kin; those that were moved by other motivations would be succeeded by non-kin. We classify firms in the former group as family firms, and firms in the latter group as non-family firms. This classification is based on revealed preference for family succession.[19]

3.2 Empirical challenges in implementing the 5 dimensions

Empirical research on family firms based on a large dataset requires that definitions are quantified in a consistent manner. This is challenging for several reasons: First, it requires aggregation of the multiple dimensions described above. Thus, the researcher needs to rank the

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[18] Handler (1994) points out that succession is "*the most important issue that most family firms face*. "(Handler, 1994, p1) and Ward highlights the distinctiveness of family firm in terms of its potential to the existence in generational concern. "*We define a family business as one that will be passed on for the family's next generation to manage and control*" (Ward, 1987, p252). Previous work focused less on intentions and more on succession planning (e.g., Christensen, 1953; Tashakori, 1977; Rosenblatt, de Mik, Anderson, & Johnson, 1985), Dyer (1986) and Handler (1987 and 1989).

[19] We recognize that in some cases the revealed preference may be at odds with the initial intent of the founder. We believe this noise in the ex-post classification is unlikely to introduce bias because the intent and revealed preference could go either way. That is, a founder may have intentions of bequeathing the firm to his progeny, but circumstance might transpire against that intention and the firm might get classified as a non-family firm in due time. Or a founder may have little intent of passing his firm to his children, but after a sudden death, the progeny decides to take over.

different elements above and construct an aggregate binary variable as a weighted average of the underlying elements.[20] Second, many dimensions are not binary. The Kirk-Kristensen family owns 100 percent of the parent company of the famous toy company LEGO, but the Siemens family owns only 7 to 8 percent of their famous namesake company. On top of this, family shares may have superior voting rights or there may be rules saying that family shares can only be sold within the family. Thus, ownership is a continuum, and control is often a non-linear function of ownership. As we discussed above many studies take a short cut and define a binary variable of ownership and control based on thresholds that can vary from 5 to 50 percent.

Third, the ability to observe ownership is limited by national corporate laws and access to data. Corporate laws often do not require disclosure of detailed individual ownership stakes. Publicly traded firms often require disclosure of the identity of key shareholders with ownership stakes above certain threshold levels, but exact shareholdings disclosure is not mandated. For private firms, the requirement is often weaker. Thus, the researcher relies on either access to commercial ownership databases or must collect information from the company or other websites. In both cases, exact ownership statistics may be difficult to establish.

Fourth, the ability to observe the family's involvement in management and labor varies across countries and across data registers. However, since management position and board positions are binary variables, this is in general less of a challenge than obtaining detailed ownership information. Fifth, whereas the embeddedness criterion is a powerful conceptual

[20] Given the multidimensional definition of family ownership, involvement and control, a natural approach is to start with a plenary group of all firms and then analyze how the family structure impacts governance (see, e.g., Bennedsen, Nielsen, Perez-Gonzalez, & Wolfenzon, 2007; Bertrand & Schoar, 2006). This approach may lead to an endogenous definition where the degree of family involvement along the dimensions noted above determines the degree of family firm, in a continuous manner. As it is, most papers in the literature take a binary approach and categorize firms into either a family or a non-family firm

dimension of what it means to be a family firm, it is difficult to implement the same in empirical studies. For instance, there are many ways to define the overlap between family and business and the amount of measurable data available is often very limited. Not surprisingly, very few studies use this criterion in a systematic manner, and when they do it is often based on the number of family members working or directly engaged in the firm (see for example Bennedsen, Tsoutsoura & Wolfenzon, 2022).

Finally, whereas information about actual succession is possible to collect, it is challenging to define ex-ante intent in family successions. First generation firms, where the founder harbors a strong interest in intra-family succession, may receive a tempting offer to sell. For the researcher, it is difficult to separate such cases from a strictly entrepreneurial case where exit was the goal from the beginning.

3. A survey[21]

4.1 Methodology

In this section we provide the method and the results of our survey of how empirical papers have defined family firms. The survey followed a systematic process to identify and review relevant literature. We began by making structured surveys on different search engines, including Google Scholar, Web of Science, and JSTOR with the keywords of "define family business," "define family firm," "family ownership," and "family-controlled firms". We limited the search

[21] The accompanying Internet Appendix provide a table of all studies included in the survey. For each paper it provides data on how a family firm is defined and how this definition relates to the 5 categories above.

to publications between 1964 and 2022. The 1964 starting point was chosen because of the seminal paper of Donelly that was published in that year.

Next, we restrict journals with impact factors greater than 3[22]. The selected articles underwent a detailed review by the three authors to ensure alignment with the study's objectives. The review process emphasized two criteria: a clear definition of "family business" or "family firm" and the inclusion of and empirical analysis containing a sample of family firms. Our process ended in selecting articles from 27 journals across the domains of business- finance, economics, and management. With the multidisciplinary journal pools, it allows us to examine the differences in defining family firms across different research fields. Meanwhile, FT 50 list is also used to identify the overlap of the journal list. There are 16 journals on the FT 50 list with 11 papers from *Journal of Financial Economics* as the highest number of papers compared to the peers on the list. In the journals which are not on the FT 50 list, *Journal of Corporate Finance* is the one with highest number of papers, revealing 14 papers in the time frame.

To identify the papers with operation definitions and empirical evidence, the first three pages of search results were reviewed by the three authors to finalize the sample of papers. This process resulted in a final sample of 122 papers. The distribution of articles across journals (and working papers) is illustrated in **Figure 1**.

[Insert Table 1 about here]

[22] Clarivate's 2022 journal list

We classify these journals into two broad categories. The first category contains journals in entrepreneurship, management and strategy that have traditionally had a focus on family business studies (such as *Entrepreneurship Theory and Practice*, *Family Business Review*, and the *Journal of Family Business Strategies*). The second group contains journals with a financial economics focus such as the *Journal of Finance*, *Journal of Financial Economics*, *Review of Financial studies*, and the *Journal of Financials* and *Quantitative Analysis*). For simplicity we refer to these two categories as Management and Finance journals in the following analysis. Almost half of the surveyed papers come from three Finance and three Management journals: Family *Business Review* and *Entrepreneurship Theory and Practice* are the top two in Management journals, whereas the *Journal of Corporate Finance* and the *Journal of Financial Economics* are the top two in Finance journals.

[Insert Figure 1 about here]

Figure 2 shows the distribution of articles according to year of publication. More than 90% of studies were published after 2000. This is indicative of the growth in the empirical family business literature during the last three decades. As mentioned above, we consider Donnelley's paper (Donnelley, 1964) as the founding paper in empirical family business literature.

[Insert Figure 2 about here]

4.2: How empirical papers define a family firm

We now turn to a taxonomy of the five criteria identified above and categorize the definitions in the surveyed papers on the five criteria: ownership, management, board, embeddedness and succession. We analyze every definition in our survey based on each of the five dimensions that is used to define a family firm. We examine whether the definition requires the different criteria as being necessary, sufficient or simply an alternate criterion for a firm to be labelled a family firm.

Figure 3 summarizes the elements of family firm definitions across the articles. Since some articles use several definitions, we end up with 149 definitions from 122 papers.[23] The figure provides two important insights. First, there is a large variation in the definition of family firm across published articles. We identify 28 different definitions employed in the surveyed papers – these definitions differ based on various permutations of the five criteria that are used to define family firms. It is worth remarking that even within these categories there exists considerable variation with several concerns.

[Insert Figure 3 about here]

First, ownership is the most popular of the five criteria. A sizable majority of the definitions use ownership as either a sole and sufficient criterion, or in combination with other criteria to define a family firm. We find that 38.3% of definitions are based solely on ownership by the founding family. If we count the inclusion of ownership in combination with the other four

[23] Articles with multiple definitions of family firms include Anderson, Mansi, & Reeb (2003), Andres (2008), Barontini & Caprio (2005), Bennedsen, Fan, Ming & Yin-Hua (2015), Chen, Chen, Cheng, & Shevlin (2010), Duran, Van Essen, Heugens, Kostova, & Peng (2019), Le Breton-Miller, Miller & Lester (2011), Miller, Breton-Miller, & Lester (2013), Maury (2006), Masulis, Pham, & Zein (2011), Murro & Peruzzi (2019), Rose & Chung (2012), Steijvers & Niskanen (2014) and Villalonga & Amit (2006). Villalonga & Amit (2006) has indeed 9 different definitions of family firms.

criteria to define a family firm, we find that more than 8 out 10 definitions include ownership as a sole or joint criterion to define a family firm. Despite the prevalence of using ownership as a sole or a joint criterion, there is little consensus in literature on what this threshold should be. Some papers use 5%, others as high as 50%, and yet others count any positive level as sufficient.

Second, top management is the second most popular criterion in defining family firms. 5.4% of studies that accept it as a sole criterion and more than one-fifth of the studies use top management as a joint criterion in defining family firms, while we cannot find a clear pattern among the use of the other dimensions. Board positions are the next most commonly used criteria in family firm definitions. Last but not lease, in considering the intra-family succession as a condition to define family firms, only 4.2% of the definitions in our survey explicitly acknowledge a requirement of it. Recall that the seminal paper by Donnelley (1964) counts succession as an integral part of a family firm, alongside the notion of embeddedness. Surprisingly, we did not find any studies, except that by Donnelley, in our survey that require the twin dimensions of succession and embeddedness to define a family firm. The concept of embeddedness is also conspicuous by the relative absence in the criteria commonly used to define family firms.

Multiple criteria within one paper: We next turn to examine the use of single vs. multiple criteria in defining family firms. We begin by investigating the extent to which the studies in our survey employ multiple criteria in defining family firms, sometimes as jointly necessary, and sometimes as alternative criteria from a set. The number of dimensions used in the survey is illustrated in **Figure 4**. It shows that 44% of the definitions employ only one dimension in defining family firms, 25% of the definitions in our survey use two criteria, and 21% use three criteria to define a family firm. In general, studies published in Finance journals are more likely to rely on a single dimension, usually ownership, to define a family firm, while Management journals are more likely to employ two or more criteria to define the family firms.

[Insert Figure 4 about here]

Necessary and sufficient elements of the definition of a family firm: We investigate to what extent certain criteria are strictly necessary to qualify as a family firm, vis-à-vis other dimensions that serve as alternates in an either/or requirement. Put simply, we want to know if, say, a board position by the family member is a non-negotiable part of the definition of family firms, or if it can be substituted with another criterion such as a top management position. In **Figure 5** we show how often each of the five criteria is used as a strict or weak requirement in the definition of family firms. We define a dimension to be strictly necessary if the paper explicitly notes that the criterion is a necessary part of the set of firms defined as family firms; if the criterion is not met, the firm is considered non-family. An example is the definition of family firms employed in Fan and Leung (2020), who study publicly listed firms in Hong Kong and define family firms as those where a founder or a family member owns more than 10% of the shares. No other conditions are mentioned in their definition of family firms, and the ownership level exceeding the 10% threshold is a hard barrier. Firms in which the founding family's ownership is less than 10% are not classified as family firms.

[Insert Figure 5 about here]

In the weakly necessary criteria, we include definitions where the criterion is part of an "or" condition, i.e., if this criterion is included then it is a family firm. An example of this is found in Ellul, Pagano, & Schivardi (2018) in which one of the definitions of a family firm is one where a founding family either has significant ownership or is involved in top management. In this case, Ownership is counted as a weakly necessary criterion – if it is met, the firm qualifies as a family firm, but even if it is not met, the firm may qualify as a family firm if the founding family descendants are represented in the firm's top management (that is, the Management criterion is met).

To both consider the strict and weakly necessary conditions, from **Figure 5** we can see that ownership is clearly the most used dimension in both the groups. It appears 126 times as a weakly necessary condition in the definition of family firms, either by itself or in combination with other criteria. Of this, it appears 104 times as a strictly necessary condition – if the founding family fails to meet the ownership threshold, the firm is classified as a non-family firm. While Management and Board appear 71 and 51 times as weakly necessary criteria, we find that they are less likely to be strictly necessary criteria (34 and 16 times respectively), dramatically compared to the weakly necessary conditions. To put that in perspective, Ownership appears as a strictly necessary condition 83% (104/126) of the time it is included as a weakly necessary condition. Management and Board presence appear as strictly necessary conditions 48% (34/71) and 31% (16/51) of the time they are included as weakly necessary criteria.

Embeddedness and Succession; however, not surprisingly are relatively rare, appearing 27 and 14 times respectively as weakly necessary criteria in defining family firms in our survey. However, studies that do employ these two criteria in defining family firms, treat them more often as a necessary criterion. Embeddedness and Succession appear as strictly necessary conditions 96% (26/27) and 93% (13/14) of the time they are included as weakly necessary conditions. Interestingly, we note that Embeddedness (26 times) is more commonly used as a strictly necessary criterion than the Board (16 times) is in our survey. By contrast, Succession as a strictly necessary criterion is least prominent in the literature on family business. This is interesting since as we discussed above; the succession motive is the key intent that separates entrepreneurial firms and founder-controlled firms from dynastic family firms.

Discussion and Implications for Future Research

Donnelley (1964) attributed two dimensions – family embeddedness and succession - to a family firm that distinguishes it from non-family firms. Since this publication of Donnelly in 1964, a huge body of literature studying family firms. The prevalence, performance, and innovation of family firms have been investigated with numerous empirical investigations, while the key issue of appropriately distinguishing between family and non-family firms is kept unsolved.

This survey identified several concerns for the lack of persuasive definition of family firm from the extant studies. First, ownership was seldom used as a continuous variable – in almost all of the papers we surveyed, ownership is defined as a binary variable based on ad hoc thresholds, most commonly 5% of outstanding shares. It's not surprising since ownership provides an easily measurable quantitative measure that is not subject to ambiguity. However, the non-unified threshold from 5% to 50% resulted in a dramatic variation in studying the pools of "family firms", hence raise questionable empirical findings.

Second, we argued that the two requirements from Donnelly (1964) lead to an unintended outcome of such a facile definitional framework accepted by the literature is a straitjacket that sometimes omits family firms because of insufficient founding family ownership and sometimes includes firms as family controlled when the founder had little intent of passing on control to the next generation and in fact, such a succession never took place. These two mis-categorizations have the potential to introduce bias in several aspects of inferences one can draw from empirical studies on family firms. Drawing inferences from empirical studies becomes difficult when fundamental disagreements of identity are left unresolved.

In this paper we have taken a first large sample examination of the status quo of family firm definitions by decomposing them along five dimensions – Ownership, Management, Board, Succession and Embeddedness. The first three are commonly encountered as part of the definition employed by a great number of studies in literature, and the last two as dimensions that are in the original Donnelley proposition, but not commonly employed in the vast number of empirical studies over the last two decades. Our survey of 122 papers is a first step in taking stock of the relative use of each of the five dimensions of family firm definition, and a useful guide to understanding the current state of family firm classification. The precise accounting we offer in our survey is helpful in drafting proposed definitions for future work that can overcome the biases inherent in the current definitions employed in the literature.

We highlight the fact that family firms are heterogeneous, despite the extant research using a dichotomic variable to identify them. While we shy away from proposing an iron-clad definition of family firms, we hope that the dimensions of embeddedness and succession which were first identified by Donnelley are treated as integral parts of whatever definition the literature converges on. Emphasizing embeddedness corrects the other bias resulting from excluding many firms that fail to meet ad hoc ownership thresholds, and the requirement of succession intent or practice can appropriately eliminate all entrepreneur managed firms where the founder has either no heirs or no bequest motive beyond wealth.

We urgently call on researchers to move away from the data-driven definitions currently used in the literature, which often lead to conflicting findings and obscure our understanding of family firms. As a result, the current landscape of family firm research remains fragmented. Instead, we suggest that future research should focus on bridging theoretical definitions with empirical categorizations, using multiple criteria for classification. This approach will enhance our understanding of how the diverse group of firms labeled as "family firms" impact governance and business outcomes.

In conclusion, while we do not advocate for a rigid definition of family firms, we strongly recommend incorporating the two key dimensions from Donnelley’s original 1964 framework. We leave the task of developing robust categorizations for empirical research to future studies, having laid the foundational groundwork in this survey.

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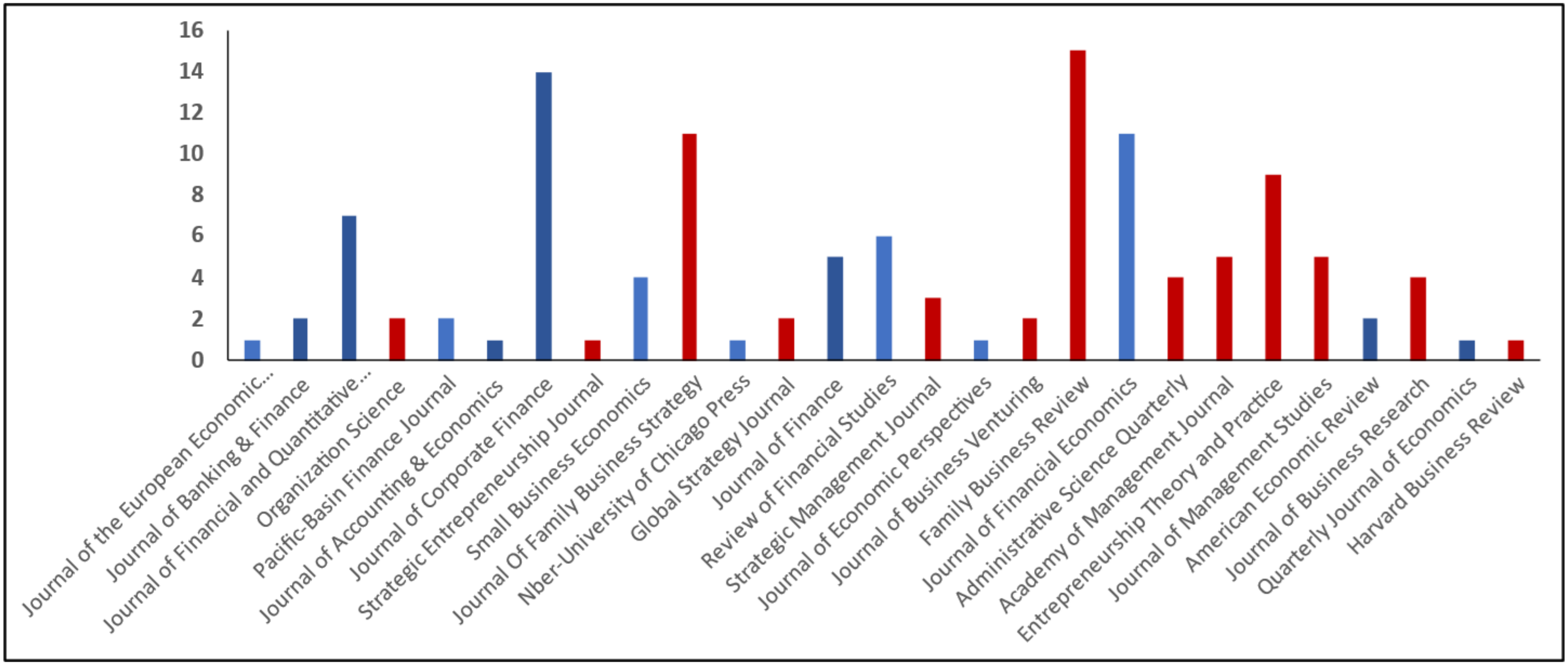

Figure 1: Journals included in survey
This figure shows the frequency distribution of 122 papers across 27 journals.

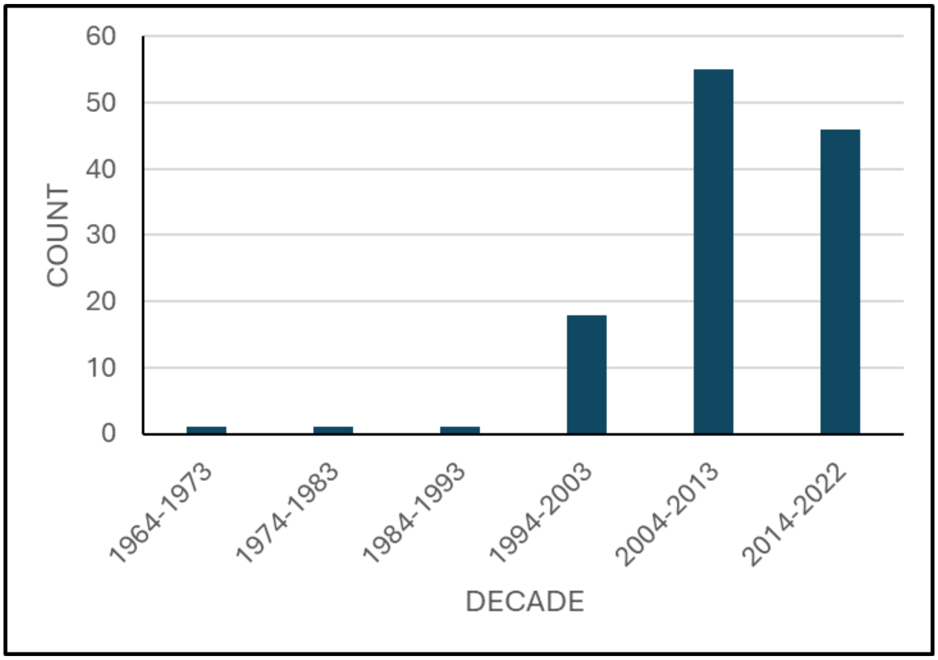

Figure 2: Distribution of papers based on publication year

Figure 2 shows the year of publication for papers included in our survey. Each bin spans 10 years, beginning with Donnelley's paper in 1964. The total number of papers included in the survey is 122.

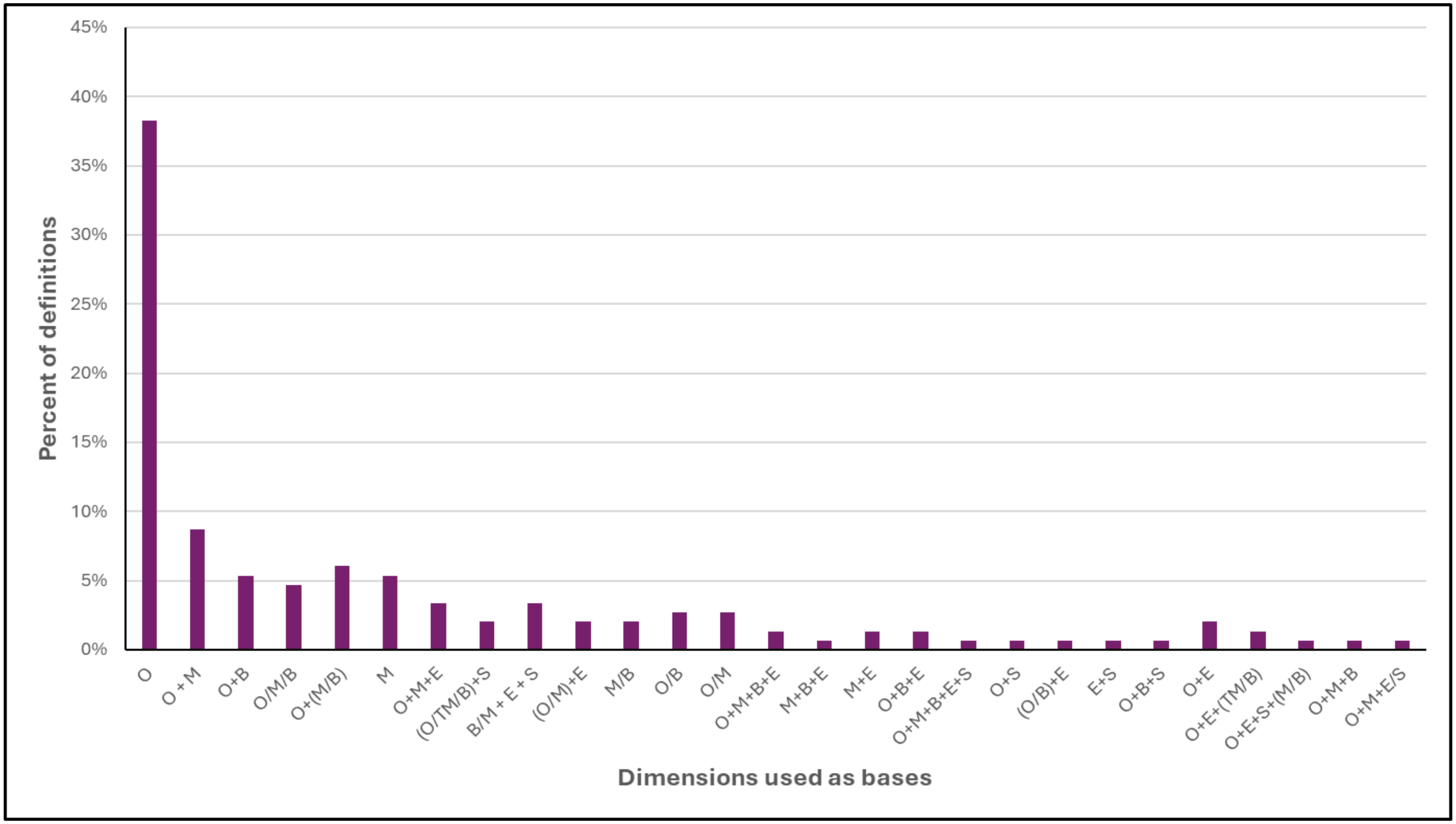

Figure 3: Frequency distribution of family firm definitions

O, M, B, E and S are defined in Appendix A1. '+' denotes that dimensions on both sides of + are required for defining family firms. '/' denotes that dimensions on either side of / is sufficient to define family firms. The vertical axis measures the relative frequency of each of the 149 definitions used in the survey of 122 papers.

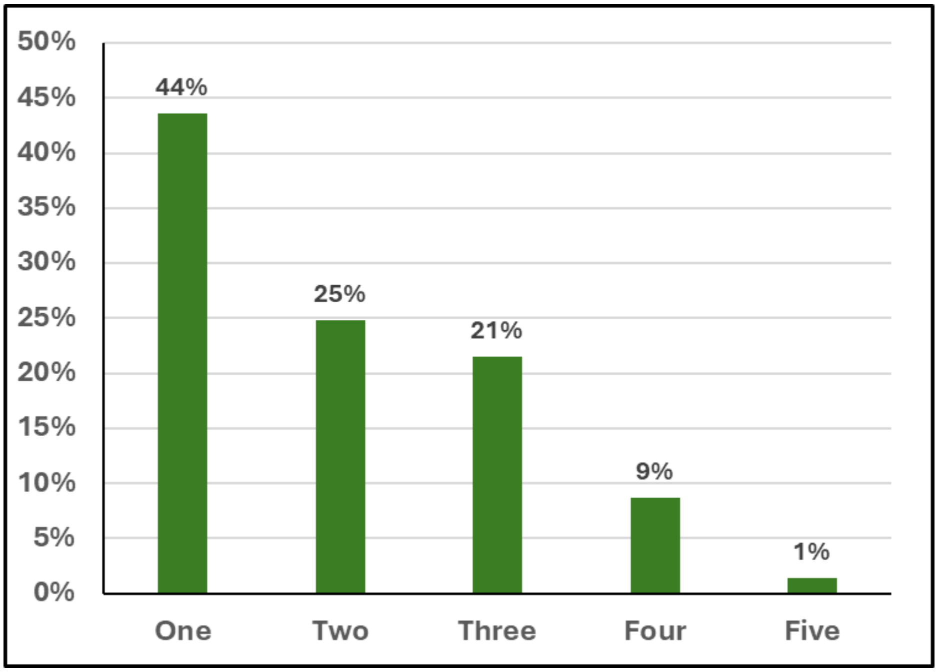

Figure 4 (Panel A): The Use of Single vs. Multiple Dimensions in Defining Family Firms

This figure shows the percentage of definitions that employ one, two, three, four or five dimensions in defining family firms. The five dimensions are Ownership, Management, Board, Embeddedness and Succession. Studies that use multiple dimensions combine them using "OR" or "AND" operators.

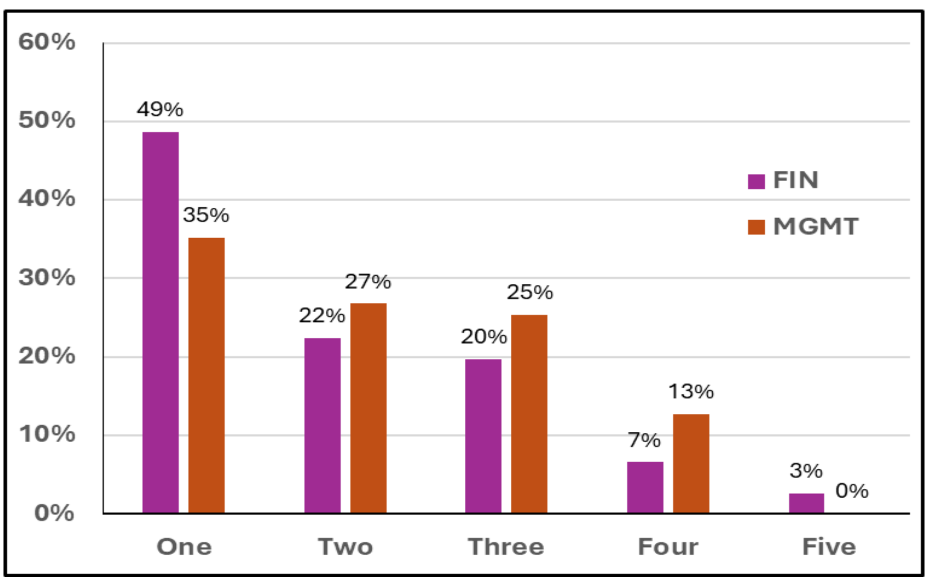

Figure 4 (Panel B): Family Firm Definitions in Finance and Management Journals

Panel B shows the fraction of definitions where the particular criterion is strictly necessary to be classified as a family firm in finance journals compared to the management peers.

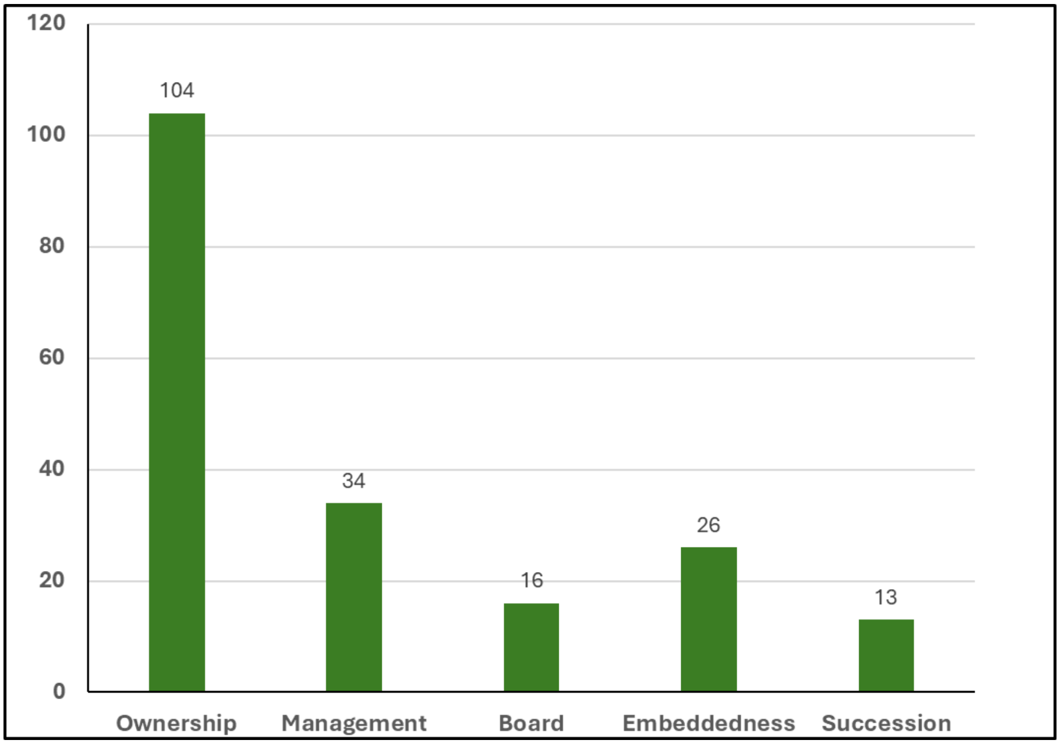

Figure 5 (Panel A): Strictly necessary conditions of the five dimensions.

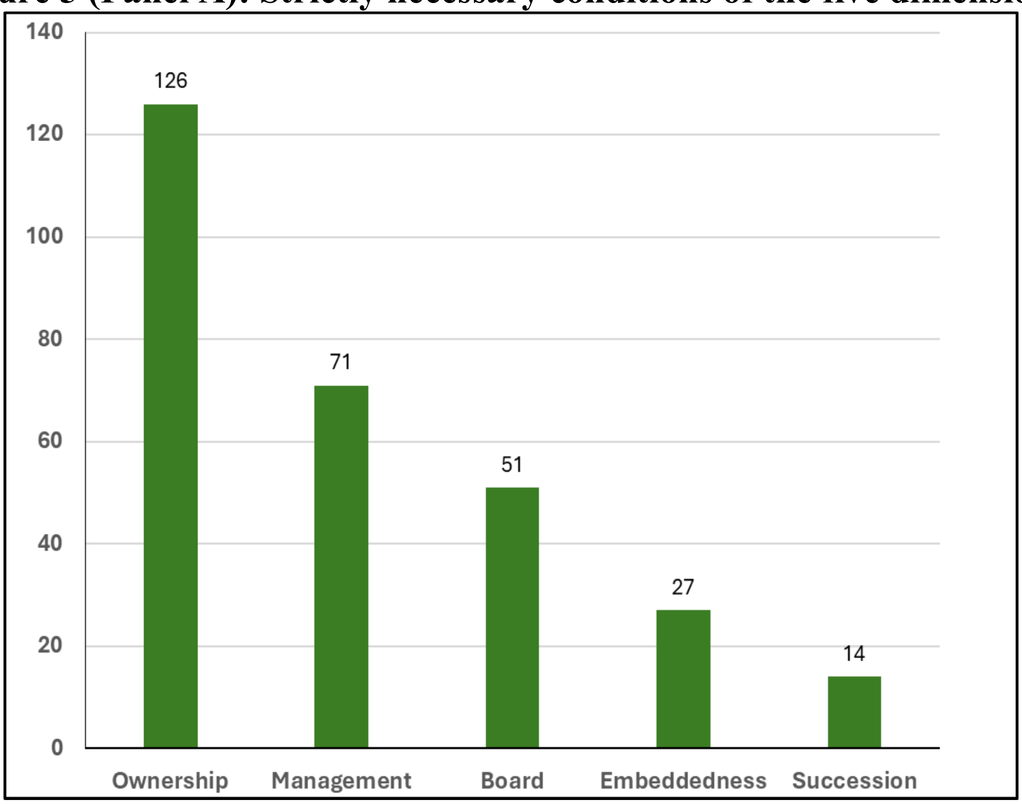

Figure 5 (Panel B): Weakly necessary conditions of the five dimensions.

Table 1 Journal Title and Number of Papers in this Survey

	Journals	No. of Papers in Sample	IN FT 50	IF>3 (As per journal citations report)
1	HBR	1	Y	14.7
2	Quarterly Journal of Economics	1	Y	13.7
3	American Economic Review	2		10.7
4	Administrative Science Quarterly	4	Y	10.4
5	Entrepreneurship Theory and Practice	9	Y	10.5
6	Academy of Management Journal	5	Y	10.5
7	Journal of Management Studies	5	Y	10.5
8	Journal of Business Venturing	2	Y	8.7
9	Journal of Financial Economics	11	Y	8.9
10	Strategic Management Journal	3	Y	8.3
11	Review of Financial Studies	6	Y	8.2
12	Journal of Finance	5	Y	8
13	Strategic Entrepreneurship Journal	1	Y	6.3
14	Journal of Accounting and Economics	1	Y	5.9
15	Organization Science	2	Y	4.1
16	JFQA	7	Y	3.9
17	Journal of European Economic Association	1	N	3.4
18	Journal of Banking & Finance	2	N	3.7
19	Pacific-Basin Finance Journal	2	N	4.6
20	Journal of Corporate Finance	14	N	6.1
21	Small Business Economics	4	N	6.4
22	Journal of Family Business Strategy	11	N	7.2
23	NBER-University of Chicago Press	1	N	7.7
24	Global Strategy Journal	2	N	7.6
25	Journal of Economic Perspectives	1	N	8.4
26	Family Business Review	15	N	8.8
27	Journal of Business Research	4	N	11.3
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