

**FAMILY
FIRMS AND
PERFORMANCE:
WHERE DO WE
STAND?**

—
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 **EDHEC**
BUSINESS SCHOOL

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The financial support of the EDHEC Family Business Center is gratefully acknowledged. All errors remain our own. This position paper reports some of the main results of the working paper "Family Businesses and Corporate Performance: A Survey." The reader should refer to that paper for most technical results.

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This study presents the author's views and conclusions, which are not necessarily those of EDHEC Business School

EXECUTIVE SUMMARY

Family-controlled firms dominate the global corporate landscape. In recent years, the efficiency of family firms has attracted considerable interest in both the finance and the management literatures. The purpose of this review is two-fold: (i) to provide a systematic analysis of the literature on family firms and performance in the fields of finance and management and (ii) to critically assess the robustness of the global evidence thus far.

Three main results emerge from our analysis of the empirical link between firm performance and family control. First, our review shows that existing studies provide puzzling and conflicting evidence. Some conclude that family firms offer superior performance vis-à-vis non-family companies, particularly for founder-run firms. Profitability studies often yield positive results, with ratios for family firms typically higher by 1 to 2 per cent. Conversely, other studies document a negative association between family ownership and firm valuation; the latter effect is especially marked for family firms with control-enhancing mechanisms. In general, positive profitability results do not translate into higher valuations, and it appears that family firms do not distribute as many dividends to shareholders as non-family firms do. Second, there is a great divide in the literature: while the finance literature provides conflicting evidence, the management literature is more positive. Third, the evidence shows substantial variation in the economic magnitude of the effects, with equal magnitudes pointing in both directions. This variation greatly reduces the scope for making conclusive statements about the evidence pattern in many areas.

Given the state of the empirical evidence, the review identifies potential explanations to help us understand and interpret the data. Two main patterns emerge from this analysis – the first relates to differing definitions of family control and family

firms. Surprisingly, over 85 per cent of finance studies, and practically all management studies, use an imprecise definition of family control, while only about 60 per cent explicitly define what they mean by a “family firm”. Ultimately, the link between family firms and performance is substantially affected by the form of family control used and the definition of performance considered. It is problematic to interpret and compare results in the absence of clear and consistent definitions of both terms. The second set of explanations is related to biases introduced by the different firm samples and the impact they have on the evidence. There are concerns about biases introduced by samples badly skewed in terms of size, industry and firm-type. We suggest various strategies to test the robustness of existing results and to address detected biases.

In terms of policy lessons for family firms, two main findings from our review are particularly pertinent. First, we show that founding families and CEOs generally have a positive effect. Firms where founders play a role account for a considerable share of the positive performance effects found in the literature. There is thus a need to better understand the sources of competitive advantage in such firms. More work is needed to explore strategic and governance differences that may account for differences in performance. All firms, family or non-family, would benefit from progress in this area. The second lesson that emerges from our review is the relatively poor performance of family firms with control-enhancing mechanisms and of family firms in countries with poor investor protection. Evidence suggests that improving corporate governance boosts the relative family-firm performance, likely through greater access to capital in better governance environments. Overall, the lessons drawn from our analysis of the evidence patterns may prove useful for family firms seeking to improve their performance, valuations and access to capital.

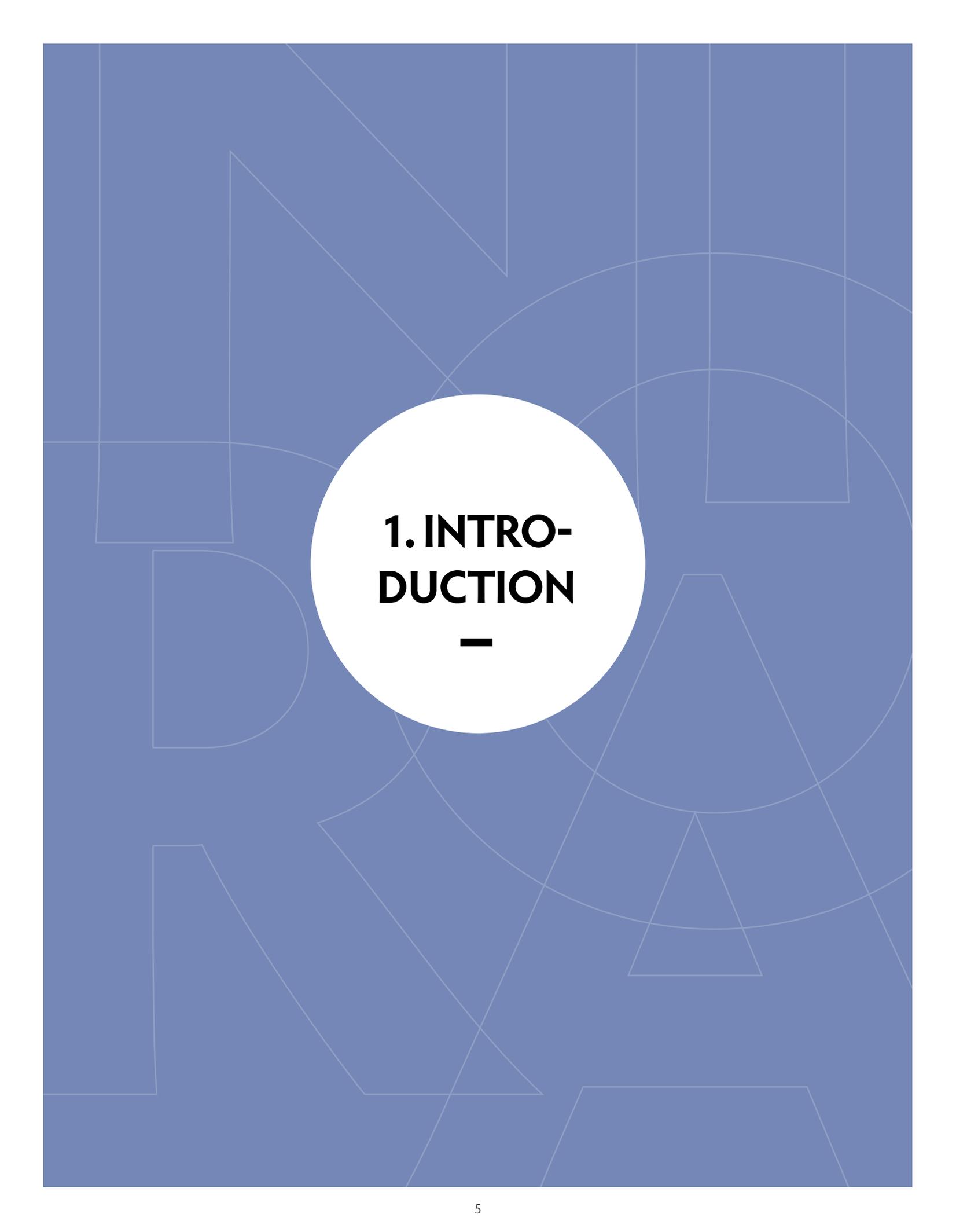
ABOUT THE AUTHORS



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1. INTRO- DUCTION

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1. INTRODUCTION

Family-controlled firms are a major feature of the business landscape worldwide, from Europe to Asia to the Americas. More often than not, they are privately held,¹ but there are also a number of publicly traded family firms. Figure 1 shows that the share of family control of 10 mid-sized publicly traded firms (with stock market capitalisation of common equity of around \$500 million) in the wealthiest economies is more than 45 per cent on average. For the largest 20 firms in these markets, the share would be around 30 per cent. Family firms are thus prevalent around the world.

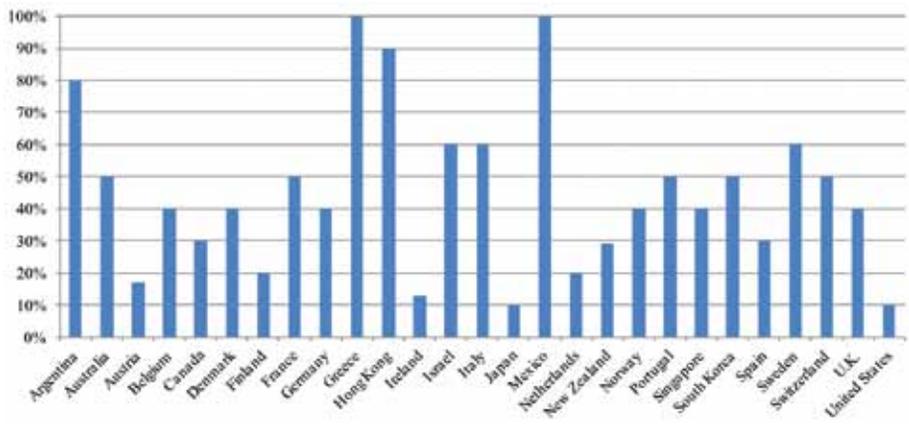
In recent years, analysis of the efficiency of family firms has become an increasingly popular topic in the finance and the management literatures. A series of papers in these two fields has begun to analyse the relationship between family ownership and various dimensions of corporate

performance. These papers seek to establish a causal empirical link between the two.

In this paper, we survey and assess the body of theoretical and empirical literatures regarding the corporate performance of family firms. The purpose of this review is two-fold: (1) to provide a systematic analysis of the growing body of literature on the subject of family firms and their performance in the fields of finance and management; and (2) to critically assess the robustness of the worldwide evidence of this relationship.

Other surveys also discuss the empirical literature on the performance of family firms. Some studies are more focused on certain aspects of the connection of family firms to performance. Bennedsen, Pérez-González and Wolfenzon

Figure 1: Share of family control in medium-sized publicly traded firms around the world
 This figure shows data from La Porta, Lopez-de-Silanes and Shleifer (1999), Table 3, on the percentage of listed firms ultimately controlled by a family. A firm that is ultimately controlled by a family is one which a person is the controlling shareholder, with the criterion for control considered to be 20 per cent of voting rights at every ownership level. La Porta, Lopez-de-Silanes and Shleifer's data include a sample of 10 firms with stock market capitalisation of common equity at the end of December of 1995 of at least \$500 million or higher in 27 countries.



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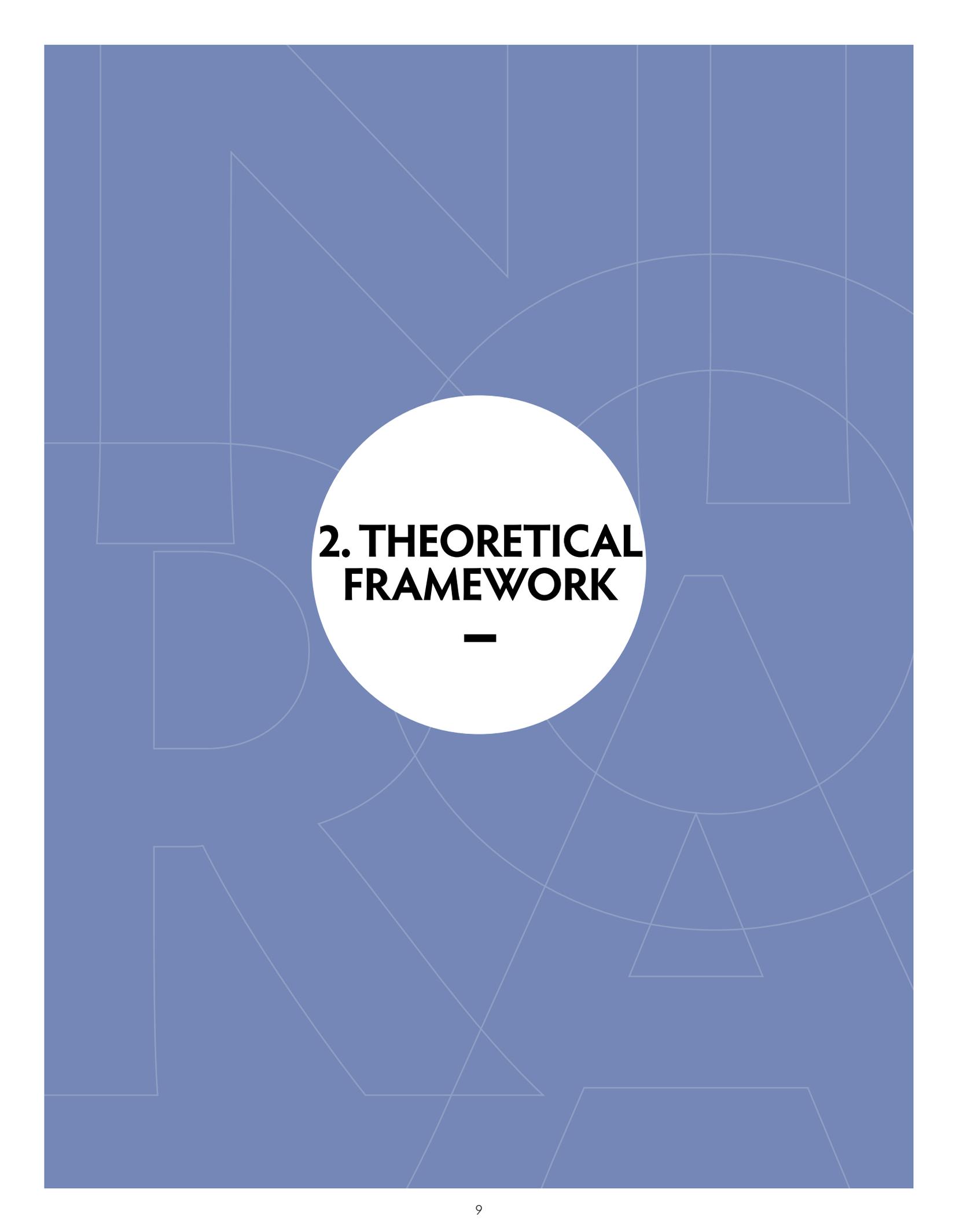
(2010) and Uhlener (2013) discuss the governance of family firms and performance. Van Essen et al. (2011) apply a meta-analysis of the relationship between family control and performance but limit their analysis to U.S.-based firms. They find that the balance of evidence indicates that family firms outperform other types of public corporations. O'Boyle, Pollack and Rutherford (2012) also apply a meta-analysis to the findings from a large range of studies, combining various indicators of performance into a single composite. They describe the contradictory empirical findings and identify no relationship between family involvement and a firm's financial performance. Our paper differs from theirs in several respects.² First, we use a robust selection of papers published in top-ranked journals. Second, we distinguish between finance and management papers to track down any potential differences in the outcomes recorded by the two literatures. We put together the finance and management theories of the benefits and costs of family control and link empirical results to these theories. Third, we analyse the magnitude of the impact of family firms on profitability, valuation, productivity and dividend policy. Fourth, for each family-firm control dimension, we dissect and analyse the economic effects on corporate performance. Finally, we focus on potential problems in the literature. Some reviews have looked at moderators of family-firm performance. We analyse these moderators and think of them as potential sources of sample biases across papers. When these moderators are sorted out, some conflicting results can be better understood. Bennedsen, Pérez-González and Wolfenzon

(2010), Gómez-Mejía et al. (2011) and Sharma and Carney (2012) also mention the definition of a family firm, the focus on publicly traded firms and endogeneity as methodological problems in empirical studies on the performance of family businesses. In our paper, we indicate additional potential sample biases. We also highlight the impact on the evidence, look at the magnitude of the biases, and identify the relative frequency of each bias.

The review is organised as follows. Section 2 provides an overview of the major theories regarding the potential link between family firms and performance. Section 3 presents the dimensions of family control and performance used in the literature. In terms of proxies for family firms, studies can be divided into three large groups: ownership, management, and board representation. These groups represent the three basic mechanisms through which families may play a role in the firm. This section also classifies studies of the corporate performance of family firms into various categories and presents the economic magnitude of the relative performance results. We analyse performance results across the areas of profitability, valuation, productivity and dividend policy. Section 4 attempts to determine whether the aggregate empirical results of Section 3 can be better understood if the differences between various forms of family presence in the firm are closely examined. We show that the wide range of outcomes in the association between family firms and performance may be due partly to the differences in the classification of family firms and the existence of a nonlinear relationship

2 - Privately held firms are nearly always family owned (Burkart, Panunzi and Shleifer, 2003; Bertrand and Schoar, 2006). However, the large number of firms in the economy, together with the failure of statistics to recognise family firms, makes it impossible to accurately study the importance of unlisted family businesses on an international scale. By necessity, most studies of the relative performance of family firms have been limited to listed firms. Although the samples and the definitions of a family firm vary, some surveys reveal some interesting descriptive evidence of the importance of family firms in certain regions of the globe. In Europe, 70 to 80 per cent of companies are family businesses. These family businesses account for 40 to 50 per cent of European employment (*Overview of Family Business Relevant Issues*, 2008 European Commission, Enterprise and Industry Directorate-General). In the U.S., there are some 5.5 million family-owned businesses; they generate 57 per cent of GDP and employ 63 per cent of the nation's workforce (*Annual Family Business Survey, General Results & Conclusions*, Family Enterprise USA, March 2011).

between family involvement and performance. In Section 5, we point out potential problems in the existing papers and examine their impact on the results. Our analysis shows that another part of the large variation in outcomes can be explained by differences in the statistical methods used and the biases introduced by the different samples across studies. Finally, the last section concludes, suggesting directions for future research, and pointing to several implications for family firms looking to improve their performance, valuations and access to capital markets.



2. THEORETICAL FRAMEWORK

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2. THEORETICAL FRAMEWORK

In this section, we summarise some of the major theoretical views of family firms to provide the background with which to analyse the empirical evidence we review in the rest of the paper. The theory on family firms is a subset of the larger literature on the economics of ownership and control. It focuses on the reasons family firms differ from non-family businesses.

Corporate finance has developed around the image of a widely held company. Berle and Means (1932), Jensen and Meckling (1976) or Grossman and Hart (1980) called attention to U.S. widely held corporations, in which ownership of capital is dispersed among small shareholders, yet control is concentrated in the hands of managers. In such firms, agency theory becomes an essential element of the so-called contractual view of the firm, developed by Coase (1937), Jensen and Meckling (1976) and Fama and Jensen (1983a, 1983b). The essence of the agency problem is precisely the separation of ownership and control. The professional manager controls the company and can therefore expropriate investors. Shareholders do not have full control over the CEO because it is impossible to draft a contract that specifies exactly what the manager does in all states of the world or how the profits are allocated. The CEO thus has some freedom to pursue goals other than maximising shareholders' wealth and can simply make use of firm resources for his or her own benefit. Over the past 30 years, a considerable amount of evidence has documented the prevalence of managerial

behaviour that does not serve the interests of shareholders.

One direct way to align management and control is to concentrate shareholdings. From the early 1980s, studies of a few wealthy countries revealed significant concentrations of ownership. A number of more recent and larger studies have shown that, Berle and Means's (1932) depiction of ownership to the contrary, widely dispersed corporate ownership was uncommon, even in developed countries.³ These studies also showed that families are one of the principal owner types of corporations with controlling shareholders.

Large shareholders, such as families, may address the agency problem since they have both a general interest in profit maximisation and control enough of the firm's assets. In family firms, monitoring incentives should be particularly strong since families have usually invested most of their private wealth in the company and are not well diversified. If monitoring requires knowledge of the firm or market-specific technology, families might have an advantage given their long-term presence in the firm.

Under agency theory, however, concentrated shareholdings may also have their costs. A fundamental problem is that large investors have the power and incentives to organise transactions in their interest, transactions that do not necessarily coincide with the interests of other investors in the firm (Shleifer and Vishny, 1997). Instead of

3 - Demsetz (1983), Demsetz and Lehn (1985), Shleifer and Vishny (1986), Shleifer and Vishny (1997), Holderness, Kroszner and Sheehan (1999), La Porta, Lopez-de-Silanes and Shleifer (1999), Claessens, Djankov and Lang (2000), Faccio and Lang (2002).

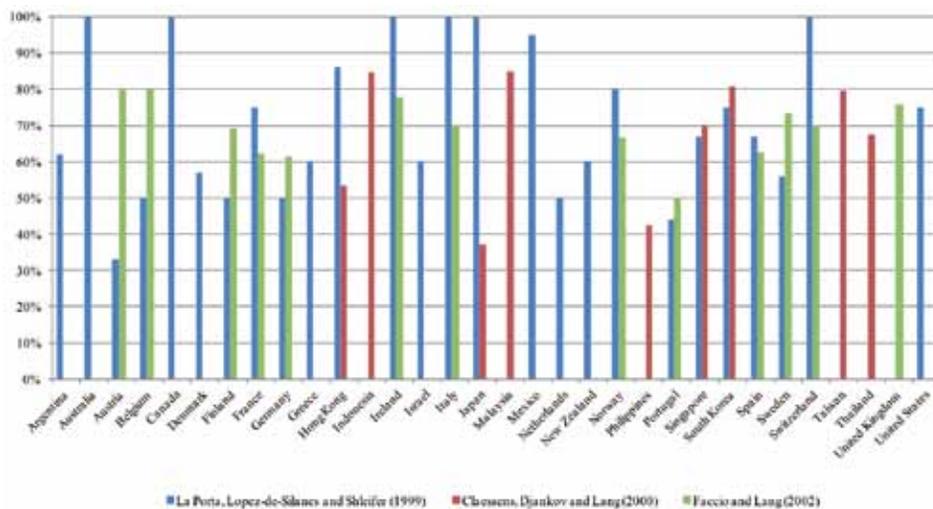
maximising firm value, large shareholders may use their controlling position to extract private benefits and pursue actions at the expense of the minority shareholders, which is detrimental to firm performance. For example, large shareholders may expropriate wealth from the firm through excessive compensation, related-party or self-dealing transactions, or special dividends (Djankov et al., 2008). Burkart, Gromb and Panunzi (1997) also suggest that concentrated ownership reduces managerial initiative and ultimately lowers firm value.

There are two additional agency costs that may be associated with family corporations. First, an often-repeated argument for the inferiority of

family firms is that large ownership stakes reduce the probability of bids from other agents, thereby weakening the value of the firm (Barclay and Holderness, 1989). Under this view, concentrated ownership makes it difficult for acquisitions and takeovers to work as a governance mechanism for imposing discipline on underperforming firms. Second, family-held businesses could be nepotistic. Families may place one of their own at the helm, excluding more capable and talented outside managers, even though the classic owner-manager conflict is mitigated (Shleifer and Vishny, 1997; Burkart, Panunzi and Shleifer, 2003; Bertrand and Schoar, 2006). Figure 2 presents the extent of family management when families control firms in different cross-country studies. The figure shows

Figure 2: Share of family-run firms around the world

This figure shows data from La Porta, Lopez-de-Silanes and Shleifer (1999), Table 5, Claessens, Djankov and Lang (2000), Table 3, and Faccio and Lang (2002), Table 7, on the percentage of family-managed firms. For La Porta, Lopez-de-Silanes and Shleifer, a firm that is family managed is one in which a member of the controlling family is also the CEO, honorary chairman, chairman, or vice-chairman of the board. For Claessens, Djankov and Lang, a firm that is family managed is one which the CEO, board chairman, or vice-chairman is from the controlling family. For Faccio and Lang, a firm that is family managed is one in which top managers come from the largest shareholder's family. La Porta, Lopez-de-Silanes and Shleifer's data include the firms ultimately controlled by a family among the top 20 firms ranked by market capitalisation of common equity at the end of 1995 in 27 countries. Claessens, Djankov and Lang's data include companies that are not widely held among the 2,980 publicly traded corporations, including both financial and non-financial institutions, as of the end of fiscal year 1996 or the closest possible date in nine East Asian countries. Faccio and Lang's data include 3,300 firms with controlling shareholders at the 20-per cent level from 1996 to the end of 1999 in 13 Western European countries.



that controlling family members often participate in management, with a sample average of 68.6 per cent in La Porta, López-de-Silanes and Shleifer (1999), 57.1 per cent in Claessens, Djankov and Lang (2000), and 44.3 per cent in Faccio and Lang (2002).

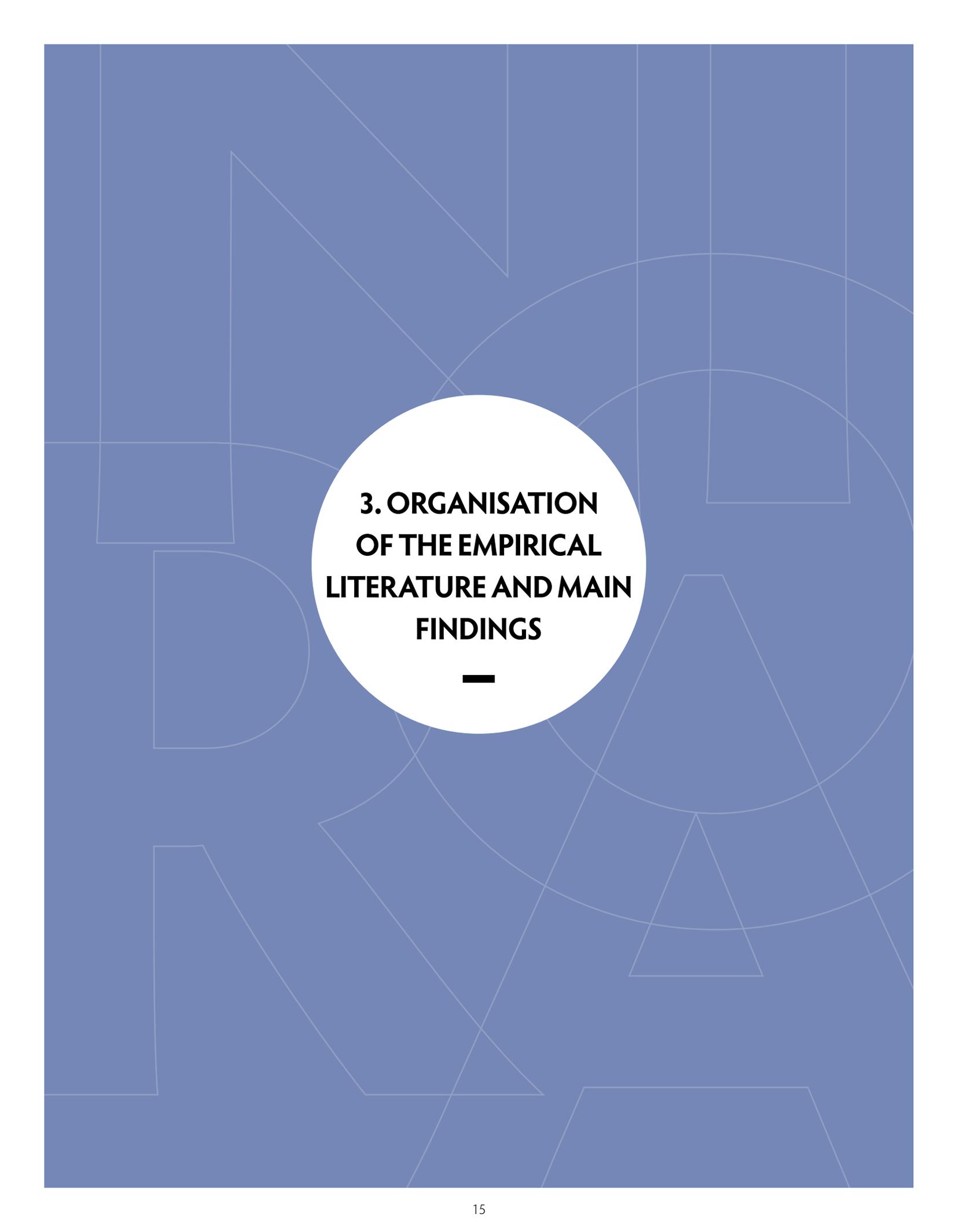
The management literature also points to several intrinsic characteristics of family firms that make them a special class of large shareholders with potential benefits and costs. Three broad theoretical arguments link family firms to better performance. For the first, families are often long-term investors who suffer less from stock market myopia and short-termism (James, 1999). Families would maintain a long-term presence and view their firms as an asset to pass on to their descendants rather than wealth to consume during their lifetimes (Bertrand and Schoar, 2006; Le Breton-Miller and Miller, 2006; Lumpkin and Brigham, 2011). Burkart, Panunzi and Shleifer (2003) suggest that a family's reputation, especially when the firm bears the family name, has long-lasting positive effects. Hence, concerns about survival of the firm should lead to more efficient investment decisions from family firms and improved performance. Second, stewardship theory posits that some leaders and executives aspire to higher purposes at their jobs, that rather than being nothing but self-serving economic individuals, they often act altruistically, for the benefit of the organisation and its stakeholders (Davis, Schoorman and Donaldson, 1997). This theory suggests that family involvement may enhance firm performance to the extent that family members are willing to work harder, eager to enhance and preserve the family's reputation, and interested in keeping the firm valuable for future generations (Eddleston and Kellermanns, 2007). Third, the resource-

based view of the firm asserts that firms with assets that are valuable, rare, inimitable and non-substitutable may be able to create a sustainable competitive advantage (Wernerfelt, 1984). Several family assets and resources have been associated with the performance of family firms. Familiness, defined as resources and capabilities that are unique to the family's involvement and interactions in the business, is thus proposed as a source of competitive advantage (Habbershon, Williams and MacMillan, 2003). Dyer (2006) mentions three types of assets that can be used by the family to support the firm: human capital (unique training, skills, flexibility and motivation of the family), social capital (relationships of the family with stakeholders of the firm), and physical and financial capital.

With respect to the family-firm characteristics that may lead to negative effects on performance, the management literature relies on conflict theory; the potential for conflict, after all, is a recurring characteristic that may handicap family firms (Uhlener, 2013). The literature identifies several potential areas of conflicts in family firms. Process and task conflict refers to the discussions about who is responsible for what (Kellermanns and Eddleston, 2004). Relationship conflict refers to the perception of personal animosities and incompatibility (Kellermanns and Eddleston, 2004; Eddleston and Kellermanns, 2007; Uhlener, 2013). Cognitive conflict centres on disagreements related to the work-at-hand, the strategies being pursued, and differences of opinion about how best to achieve common objectives (Uhlener, 2013). In this perspective, the structure of family firms makes them more vulnerable to conflicts in these three areas, which may end up negatively affecting their relative performance.

Finally, a separate body of research argues that there is no reason to expect a significant relationship between ownership structure and performance. Ownership concentration is perceived as the endogenous outcome of profit-maximising decisions made by current and potential shareholders. A firm's ownership structure reflects decisions made by those who own or who would own shares. The ownership structure that emerges, whether concentrated or diffuse, ought to be influenced by the profit-maximising interests of shareholders, so that, as a result, there should be no systematic link between variations in ownership structure and variations in firm performance (Demsetz, 1983; Demsetz and Lehn, 1985; Demsetz and Villalonga, 2001).

On the whole, it seems that, regarding the connection between family control and performance, theory is inconclusive. Contradictory hypotheses abound, so it is necessary to refer to empirical studies to try to disentangle the link between family control and performance.



**3. ORGANISATION
OF THE EMPIRICAL
LITERATURE AND MAIN
FINDINGS**



3. ORGANISATION OF THE EMPIRICAL LITERATURE AND MAIN FINDINGS

A. SELECTION AND ORGANISATION OF THE LITERATURE

The empirical literature on the corporate performance of family businesses is voluminous and diverse. To make our task more manageable, we developed a bibliographic database on family business and corporate performance. We examined six electronic databases: (1) JSTOR, (2) Science Direct, (3) EBSCO, (4) EconLit, (5) Google Scholar, and (6) SSRN; our examination relied on the following search terms: “family firm,” “family ownership,” “family control,” “family management,” “family CEO,” “founder CEO,” “descendant CEO,” “performance,” “valuation,” “profitability,” “productivity,” and “dividend.” We then identified research papers on family business and corporate performance published in top academic journals with financial performance as a dependent variable and family-firm characteristic as an independent variable.⁴ We concluded our search in November 2013. These two steps yielded a final sample of 89 studies: 58 from the finance literature, 31 from the management, entrepreneurship and organisation literatures. The appendix lists the finance and management studies we have reviewed, together with information on the performance indicators and the dimensions of a family firm they use. These studies represent a total of 307,689 firm-year observations for the main focal relationship (244,340 in finance studies, 63,349 in management studies). They cover 48 countries, from 1903 to 2010. For most of the analysis, we distinguish the results from the finance and the management literatures. Papers from economics journals are considered part of the finance literature.

Research into family firms has recently gone through a period of rapid development and is now routinely published in top-tier journals (Gedajlovic et al., 2012). Indeed, recent years have seen an explosion of research into the efficiency of family firms. Panel A of Figure 3 shows the distribution of surveyed studies by publication date (the year of publication for published studies or the year of last available version for working papers). The figure makes a distinction between studies in the finance and the management literature, and as it shows, interest in the performance of family firms is quite recent and has grown significantly over the past decade. One possible reason, of course, is that previous research had traditionally focused on the notion that firms are widely held. Another reason is the availability of better data, including new databases on ownership.

The analysis of the performance of family firms is heavily concentrated around a few countries. Panel B of Figure 3 shows the distribution of empirical studies by nationality of sample firms for each of the two fields. The vast majority of the literature has focused on U.S. family firms. More than one third of finance studies and 40 per cent of management studies use samples of U.S. firms. The United States may be represented so heavily not because it has a substantially larger proportion of family firms than other countries, but because there is much more data available and disclosure standards are higher.⁵ The three most heavily represented countries account for over half of finance studies and two thirds of management studies. European firms are used in about one quarter of finance studies and one

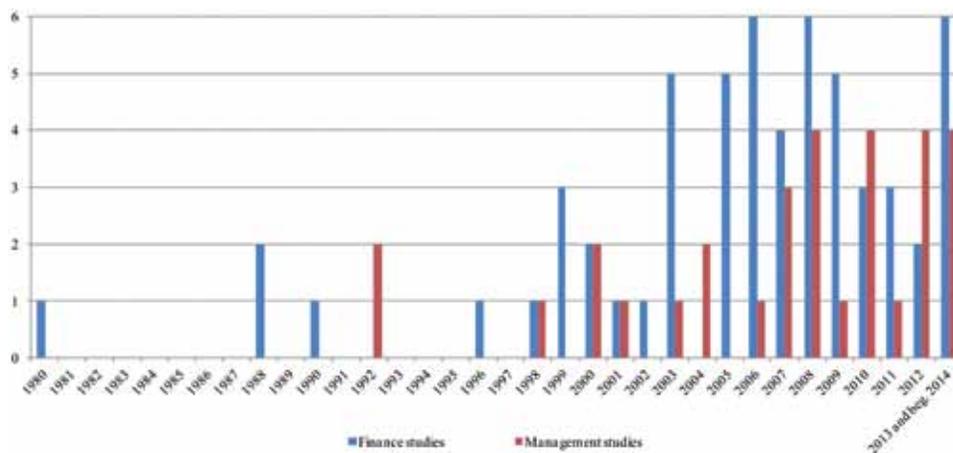
4 - According to the *Financial Times* and CNRS (French National Committee for Scientific Research) classifications of journals. We have also included recent relevant working papers cited in top academic journals according to our classification. Excluding them does not affect the main results.

5 - A significant problem is data availability and consistency. The disclosure requirements in most countries are much less stringent than in the United States, and they vary from country to country as well as within countries over time.

Figure 3: Distribution of studies by publication date and nationality of sample firms

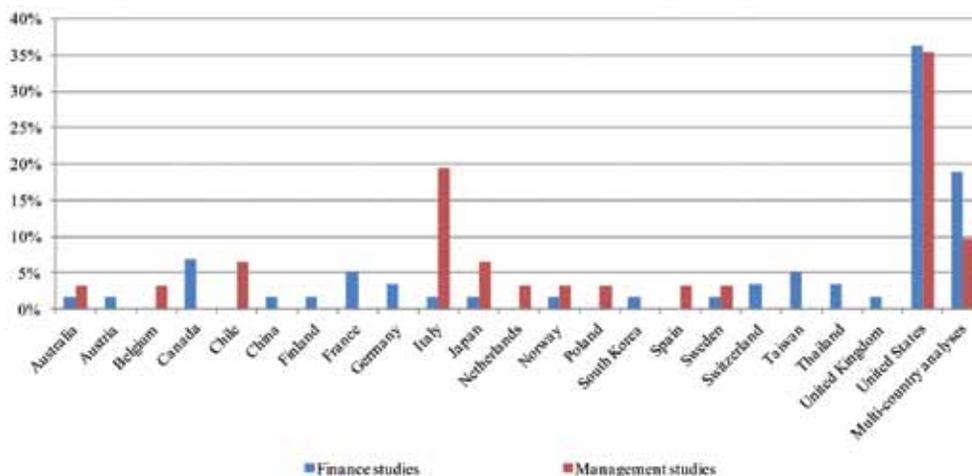
Panel A - Distribution of studies by publication date

For each body of literature, this figure shows the distribution of studies on the corporate performance of family firms by publication date (the year of publication for published studies or the year of last available version for working papers) and literature.



Panel B - Distribution of studies by nationality of sample firms

For each body of literature, this figure shows the distribution of empirical studies on the corporate performance of family firms by nationality of sample firms.



third of management studies,⁶ whereas Asian firms are used in only 13.8 per cent of finance studies and 6.5 per cent of management studies. Multi-country analyses, for their part, account for almost 20 per cent of finance studies and 10 per cent of management studies.

Different authors use different ownership, management or board representation characteristics to proxy for a family firm because it is hard to measure family control. Similarly, different studies use different performance dimensions to analyse the effect of family ownership on performance. For this reason, we divide the

6 - France, studies of which account for 5.2 per cent of all empirical studies, has drawn more attention than any other country in Europe in the finance literature. Italy is the country which has received the most attention from management researchers, with 19.4 per cent of empirical studies.

discussion of the results according to the type of proxy for family control and the performance dimension used in the papers. In terms of proxies used for family firms, studies can be divided into three broad groups: ownership, management, and board representation. These groups represent the three basic mechanisms through which families may play a role in the firm. Table 1 provides the definitions of these three groups of proxies commonly used in the literature.⁷ Many of the studies of family firms classify firms on the basis of the family participation in the capital and/or votes of the firm (*Family ownership*). Most papers determine ownership by looking at the percentage of shares owned (cash-flow rights), but a few are able to look at the voting power (control rights). The majority of these papers identify cash-flow and/or control rights held by the family and classify the company as a family firm

if the family has at least x per cent of the cash-flow and/or control rights. The required percentage of ownership varies from study to study, ranging from 5 to 50 per cent.⁸ A second large strand of the literature emphasises the role of family management on performance and uses this role to classify family firms. Family management includes studies that identify a member of the family or a representative of the family as the CEO, as one of the top two officers or in top management. The third and final proxy for family firms is their presence as monitors, which is typically associated with their role on the board of directors. We classify as Family board representation the papers that identify family firms as those that have a family member or a representative of the family as the chairman of the board of directors, as a member of the board of directors or as a member on standing board committees.

Table 1: Definitions of family-firm dimensions, key topics for a family firm and performance indicators
 This table describes the family-ownership measures (Panel A), family-management measures (Panel B), family board representation measure (Panel C) and performance indicators (Panel D) used in this survey. The first column gives the name of the variable we created to assign studies groups. The second column describes the variable in detail.

Panel A - Family-ownership measures

Variable	Description
Large family shareholder:	
<i>Large family shareholder present in the firm</i>	Refers to studies that examine the impact on performance of family owners who may be founding or non-founding and controlling or non-controlling shareholders (the studies do not make this distinction clear). In this category, we include all studies that identify cash-flow rights and/or control rights held by founding and non-founding families, founding and non-founding families with at least x per cent of the cash-flow rights and/or control rights. We also include in this group studies of managerial ownership, which are papers identifying the fraction of shares and/or voting rights controlled by management, directors and insiders and their immediate families. We include these studies in our analysis because to the extent that management controls the firm, it is conceptually the same as family controlling and running the firm.
<i>Large founding-family shareholder present in the firm</i>	Refers to studies that examine the impact on performance of founding-family owners who may or may not be controlling shareholders. In this category, we include all studies that identify cash-flow rights and/or control rights held by founding families, a founding family with at least x per cent of the cash-flow rights and/or control rights.
Family control	Refers to studies that examine the impact on performance of family-controlled corporations. In this category, we include all studies that identify cash-flow and control rights held by families, identify a family owner as the largest controlling shareholder of the firm and use the ultimate ownership methodology.
Family firms with control-enhancing mechanisms	Refers to studies that examine the impact on performance of control-enhancing mechanisms in family firms. In this category, we include all studies that identify mechanisms that enable the family's voting rights to exceed its cash-flow rights: multiple share classes, pyramids, cross-holdings and voting agreements in family firms. We also include all studies that identify the size of the wedge between control rights and cash-flow rights (the absolute difference between the percentage of all votes outstanding held by the family and the percentage of all shares outstanding owned by the family).

7 - Family-firm dimensions are measured using continuous and binary variables. For instance, for family ownership, a continuous variable is the ratio of shares held by the family to total shares outstanding. A binary variable takes the value of one if the family holds more than x per cent of the total shares outstanding, and zero otherwise.

8 - We also include in this group studies of *Managerial ownership*, which refers to papers identifying the fraction of shares and/or voting rights controlled by management, directors and insiders and their immediate families. We include these studies in our analysis because to the extent that management controls the firm, it is conceptually the same as a family controlling and running the firm.

Panel B - Family-management measures

Variable	Description
Family CEO	Refers to studies that examine the impact of family CEOs on performance. In this category, we include all studies that identify a member of what may or may not be a founding or non-founding family as the CEO or as one of the top two officers or in top management. We also include studies that identify a non-family member representative of the family as the CEO, and studies that identify the percentage of a firm's managers who are also family members.
Founder CEO	Refers to studies that examine the impact of founder CEOs on performance. In this category, we include all studies that identify the founder of the firm as the CEO, as one of the top two officers or in top management.
Descendant CEO	Refers to studies that examine the impact of descendant CEOs on performance. In this category, we include all studies that identify the descendant by blood or marriage of the founder of the firm as the CEO, as one of the top two officers or in top management.

Panel C – Family board representation measure

Variable	Description
Family board representation	Refers to studies that examine the impact of family board representation on performance. In this category, we include all studies that identify a family member or a non-family member representative of the family as the chairman of the board of directors, on the board of directors and on standing board committees.

Panel D - Performance indicators

Variable	Description
Profitability	Refers to studies that examine the impact of family-firm dimensions on profitability. In this category, we include all studies of return on assets (industry-adjusted), return on equity (industry-adjusted), and differences in return on assets around a precise event (average return on assets after the event minus average return on assets before the event).
Valuation	Refers to studies that examine the impact of family-firm dimensions on valuation. In this category, we include all studies on Tobin's Q (industry-adjusted), market-to-book (industry-adjusted), buy-and-hold stock returns, IPO underpricing, long-run investment performance, cumulative abnormal returns surrounding a precise event, and differences in market-to-book around a precise event (average market-to-book after the event minus average market-to-book before the event).
Productivity	Refers to studies that examine the impact of family-firm dimensions on productivity. In this category, we include all studies on total factor productivity and economic value added.
Dividend policy	Refers to studies that examine the impact of family-firm dimensions on dividend policy. In this category, we include all studies on dividend expenditures, share repurchases, payout ratio, dividend yield and the likelihood of paying or cutting dividends.

Panel D of Table 1 describes the performance indicators used in the literature and covered in our survey. Profitability is commonly measured in studies by (industry-adjusted) returns on assets⁹ and equity. Regarding valuation measures, the literature most commonly uses Tobin's Q,¹⁰ but several papers in the survey also analyse the market-to-book and the buy-and-hold stock returns. Some authors also use industry-adjusted measures for robustness purposes. The literature on the productivity of family firms examines total factor productivity and economic value added. Finally, measures of dividend policies in the literature of family firms include dividend

expenditures, share repurchases, payout ratios, dividend yields and the likelihood of paying or cutting dividends.

B. MAIN FINDINGS OF THE FINANCE AND MANAGEMENT LITERATURES

From an economics standpoint, the most burning question is whether family control, measured as ownership, management or board participation, "matters." That is, does it affect performance? In this section, we summarise the evidence regarding the effects of family ownership on performance and attempt a unified interpretation.¹¹ We evaluate the

9 - In the studies we have surveyed, the numerator of return on assets is EBITDA or net income.

10 - See Demsetz and Lehn (1985), Morck, Shleifer and Vishny (1988), La Porta et al. (2002), Gompers, Ishii and Metrick (2003). There is some variation in the computation of Tobin's Q. For instance, Adams, Almeida and Ferreira (2009) define it as the ratio of the firm's market value to its book value. Maury (2006) estimates Tobin's Q as the market value of common equity plus the book value of total assets minus common equity and deferred taxes divided by the book value of total assets.

11 - We put the finance and economic literatures together because authors in finance also publish in economic reviews, and the literatures are very close in terms of the methodologies used.

results of studies that examine the profitability, firm value, productivity and dividend policy of family firms and non-family firms. To do so, we separately analyse the effect of family involvement in ownership, management and board participation for the finance and the management literatures.

We first focus on finance studies. The statistical methods used in finance papers vary greatly. Econometric methods used in papers include event studies, tests of differences in performance means and medians for family and non-family firms, ordinary least-squares regressions and regressions controlling for potential endogeneity.¹² The usual regression framework involves linking performance as a dependent variable to family firm proxies and other firm variables as explanatory variables:

$$\text{Firm performance} = \beta_0 + \beta_1(\text{Family firm proxy}) + \sum_{k=2}^n \beta_k(\text{Control variables}) + \mu$$

Where β_0, \dots, β_n are parameters to be estimated and μ the unobservable random error or disturbance term. Papers control for several company characteristics likely to be associated with performance: regressions typically include measures of firm size, leverage, industry, country and year dummies.

In terms of samples, studies rely on three empirical designs. One approach is to analyse the performance of family firms in a representative sample of firms of a certain size or type (listed or unlisted, for instance), or firms in a country, an industry, a stock exchange, or a stock exchange index. This approach involves comparing the performance of family firms and that of non-family firms. A second approach is to analyse the impact of certain kinds of family involvement in the firm.

A final approach is to look at the effect of specific events in subsamples of family businesses.

To effectively synthesize the large number of finance studies, Panel A of Table 2 categorises papers by the way in which they proxy for the presence of the family in the firm (i.e., ownership, management, and board participation) and the performance measure they use (i.e., profitability, valuation, productivity, and dividend policy). It classifies all performance results of regressions and tests of differences in means and medians. The results are presented in the form of black and white circles, with the former indicating significant results at conventional statistically significant levels and the latter statistically insignificant results. As a general rule, each circle represents the result of one study of one family-firm proxy and one measure of performance. Several results from one study are translated into several circles. For this reason, the number of circles exceeds the number of relevant studies.

Table 2 highlights the great variety of outcomes: the overall effect of family involvement in the firm on performance is highly diverse. The results of the finance literature on corporate performance of family firms are ambiguous in many areas of performance. The table summarises the effects of different family-firm proxies on profitability measures. There are a total of 62 results reported across papers analysing this link, with 69 per cent finding higher profitability for family firms and 31 per cent finding lower profitability. The split is similar among papers that use family ownership to proxy for family firms and the inverse for those papers using family board representation. In contrast, 22 studies using family management as a proxy find positive results for family firms and only

12 - A regressor is said to be endogenous when there is a correlation between the parameter and the error term. There are three sources of endogeneity: omitted variables, simultaneity and measurement error. Omitted variables refer to those that should be included in the vector of explanatory variables but for various reasons are not. Simultaneity bias occurs when y and one or more of the x_i are determined in equilibrium, so that it can plausibly be argued that x_i causes y or that y causes x_i . Finally, any discrepancy between the true variable of interest and the proxy leads to measurement error (Roberts and Whited, 2012).

Table 2: Family ownership, management, board representation and corporate performance

This table classifies all results of tests of differences in means and medians, regressions and models on corporate performance of family firms in the finance (Panel A) and management (Panel B) literatures by dimensions of a family firm and measures of performance. One circle represents a result for one study, one family-firm dimension, and one measure of corporate performance. Several results from one study are translated into several circles. For this reason, the number of circles exceeds the number of relevant studies. Black circles indicate significant results at conventional levels. White circles denote insignificant results. In the case of empirical studies with tests of differences in means and medians and regressions, we record only the results from regressions. Definitions for each family-firm dimension and measure of corporate performance can be found in Table 1.

Panel A - Finance literature

Family-firm dimensions	Profitability		Valuation		Productivity		Dividend policy	
	Positive effect	Negative effect	Positive effect	Negative effect	Positive effect	Negative effect	Positive effect	Negative effect
Family ownership	●●●●●●●● ●●●●●●●● ●●○	●●●●●●●● ○○○○○○○	●●●●●●●● ●●●●●●●● ●●○○○○○	●●●●●●●● ●●●●●●●● ●●○○○○○	●●●	●	●●●	●●●●●●
Family management	●●●●●●●● ●●●●●●●● ●●○○○	●●	●●●●●●●● ●●●●●●●● ●●○○○○○ ○○○	●●●●●●●○ ○		●	●○	●●
Family board representation	●●	●●●	●●●●○	●●●●○			●	●

Panel B - Management literature

Family-firm dimensions	Profitability		Valuation		Productivity		Dividend policy	
	Positive effect	Negative effect	Positive effect	Negative effect	Positive effect	Negative effect	Positive effect	Negative effect
Family ownership	●●●●●○	●●●○	●●●●●●	●●●○		●●		
Family management	●●●●●●●● ●●●●○○○ ○○	●●●●	●●●●●●●● ●○○○	○		●○		●●
Family board representation	●●●●●○○	●	●●●○	●			●	

2 papers find negative effects for family firms. With more than 100 results reported across papers, gauging the difference between the valuation of family and non-family firms is the most common analysis of the finance literature. The overall breakdown is about the same as for profitability. The only notable difference is that negative valuation effects are found in more papers among studies using family ownership as the proxy for a family firm. Analyses of productivity differences are not very common, with only five results reported across papers reporting results. In this area, there is also a split in the finance literature. The last two columns of Panel A show results for the few analyses of the different dividend policies of family and non-family firms. Here, lower dividend payments are found to be present for family firms in 60 per cent of the papers. On the

whole, the evidence seems inconclusive: Panel A suggests a very large split in the finance literature, particularly for the papers using family ownership and family board representation as the measure for the presence of a family in control.

Panel B of Table 2 classifies all statistically significant results of tests of differences in means and regression models of the performance of family firms in the management literature. This panel suggests that family firms tend to outperform non-family firms: close to three fourths of the reported results show higher profitability and valuations for family firms. As with finance studies, studies using family ownership as the proxy for family control show the most conflicting evidence. At the same time, papers using family management and family board representation find much more

overwhelming evidence for the hypothesis that the presence of a family has a positive effect on profitability and valuation ratios. In contrast, the few papers on productivity and dividend payment differences in the management literature come on the negative side for family firms. Only one of the seven results reported across papers in these two areas finds that the presence of a family has a positive effect. Although the results vary somewhat, management studies of the performance of family firms are, as a general rule, more uniform than those from the finance literature and more likely to report positive effects for most family-firm dimensions. This discrepancy between the two fields is a puzzle that we will attempt to work out in Section 4, in which we analyse the problems with the current literature.

C. ECONOMIC MAGNITUDE OF THE EFFECTS OF FAMILY CONTROL ON PERFORMANCE

Although the samples, the definitions of a family firm and the econometric methods of the empirical studies vary, some numbers can be compared. To provide an overview of what the finance and management literatures say on the magnitude of the effects of family ownership, management, and board presence, we summarise some comparable results in Figures 4, 5 and 6. The figures show the magnitude of the performance differences between family and non-family firms for the three groups of family proxies: ownership (Figure 4), management (Figure 5), and board representation (Figure 6). Panel A of each figure shows magnitudes for finance papers, while Panel B presents the evidence for the management literature. For each proxy for family control, we compute the median,¹³ the minimum and the

maximum increase of profitability, valuation, productivity and dividend payout and yield only from the papers that present statistically significant results (those with black circles in Table 2). Although Table 2 presented the results of papers across several performance measures, for comparability purposes, Figures 4 to 6 present only the results of papers using returns on assets as a measure of profitability, Tobin's Q and market to book ratios as a measure of valuation, total factor productivity as a measure of productivity, and dividend payout ratios as a measure of dividends.

The large majority of the papers in the literature analyse the differences in performance with the use of a dummy variable in regression settings. We report the economic magnitudes of these results using the label "dummy". We also show the magnitude for the few studies that use as proxy for family presence a continuous variable measuring the extent of family ownership or family board representation. For these studies, under the label "continuous", we compute the percentage increase of performance due to a one-standard-deviation increase of the specific family firm proxy evaluated at the mean. When the outcome variable is log transformed,¹⁴ we interpret the exponential of the regression coefficients.¹⁵

Figure 4 presents the evidence for studies using family ownership as a proxy for family control. Panel A shows the economic magnitudes of finance studies across our four performance measures, whereas Panel B shows the magnitudes for management papers. As with the results shown in Table 2, Figure 4 shows that the median paper in both literatures finds that family ownership has small positive effects on most performance measures. The median positive effect on

13 - We choose to report medians instead of means because the median yields a measure that is more robust in the presence of outlier values than is the mean.

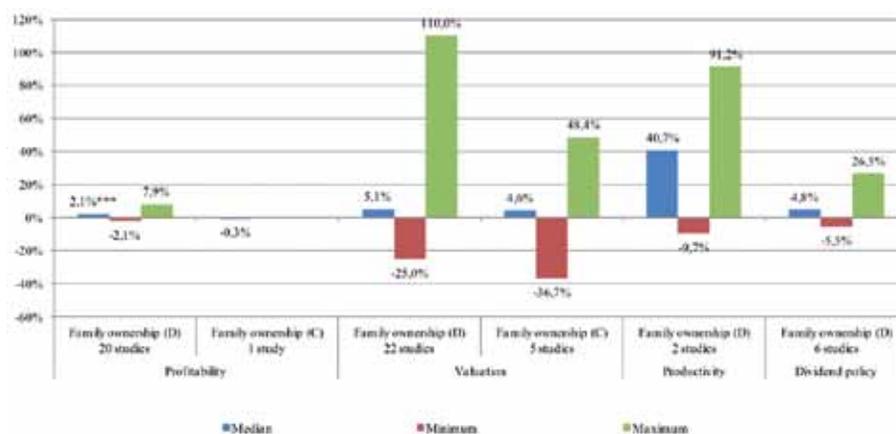
14 - To reduce the influence of extreme observations of dependent variables, some studies use a logarithmic transformation.

15 - We cannot report economic magnitudes for all the studies presented in Table 2 for several reasons. When the family firm variable is continuous, some studies do not report the mean of the dependent variable and the standard deviation of the independent variable, so the computation of economic magnitude is not possible. Furthermore, we obviously cannot report economic magnitudes from clinical studies.

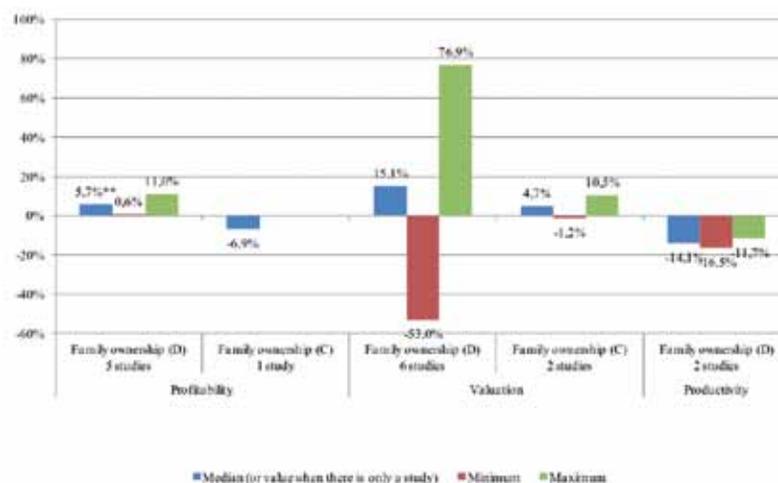
Figure 4: Economic magnitudes of effects of family ownership on corporate performance

This figure presents a standardisation of the difference in profitability, valuation, productivity and dividend policy between family-owned firms and non-family firms for the studies reviewed. The numbers do not follow exactly the same calculation, sample period, sample localisation and/or definition of a family firm. For each family-firm dimension, we compute the median, the minimum and the maximum increase of corporate performance. When there is only one study, we present the value reported in the study. When the family-firm dimension is continuous, the graph presents the percentage increase in corporate performance due to a one-standard-deviation increase of the specific family-firm dimension used in the study. When the dependent variable is log transformed, we interpret the exponentiated regression coefficients. Exact definitions for each of the dimensions can be found in Table 1. Panel A presents economic magnitudes of the finance literature. Panel B presents economic magnitudes of the management literature. Source: own calculations based on statistically significant results at conventional levels from relevant analyses in finance and management empirical studies included in this survey. (D) indicates studies that proxy for family presence with a dummy variable, (C) indicates studies that proxy for family presence with a continuous variable. The figure also reports statistical significance levels for a test that the median is equal to zero. Asterisks indicate statistical significance at the 1% (***), 5% (**), or 10% (*) level, respectively.

Panel A - Finance literature



Panel B - Management literature



profitability and valuation is about two times larger in the management literature than in the finance literature. If we focus on papers using a dummy variable to identify family ownership, the median higher profitability (valuation) in the finance literature is 2.1 (5.1) per cent, but it attains 5.7 (15.1) per cent in management papers. The most striking fact highlighted in Figure 4 is the large variance of economic magnitudes in both literatures. This is also true even in papers on profitability and valuation measures, for which there is a large number of papers that allow a better comparison. Valuation differences between family and non-family firms are striking, ranging from 100 to -50 per cent, for example. Although smaller than for valuation, the variance of results is also large in other performance measures, with studies

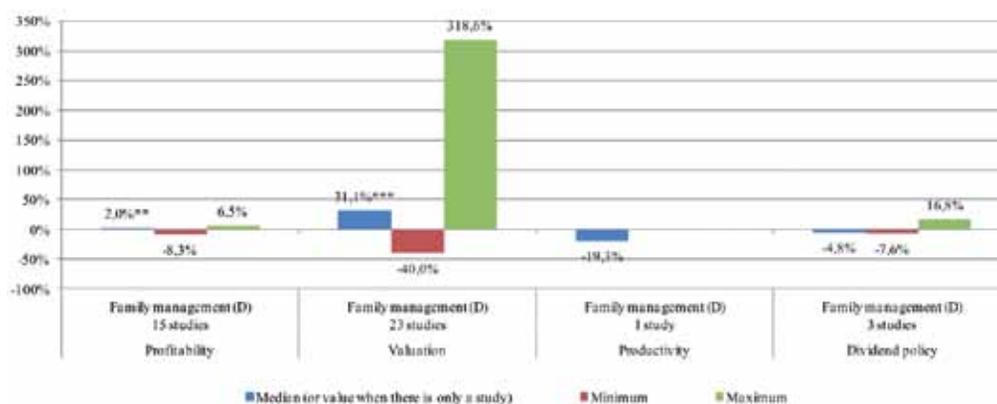
pointing to large magnitudes on the positive and the negative side.

Figure 5 shows the economic magnitudes of studies using family management as a proxy. The positive median higher profitability of family firms is 2.0 per cent for finance papers and 1.5 per cent for management papers. In both literatures, studies using family management as a proxy for the presence of the family find significantly higher median valuations of family firms than studies using family ownership as the proxy. The few productivity and dividend payments studies show median negative outcomes for family firms similar to those shown in Figure 4. Finally, the large variance of economic magnitudes is also striking, particularly in terms of profitability and valuations.

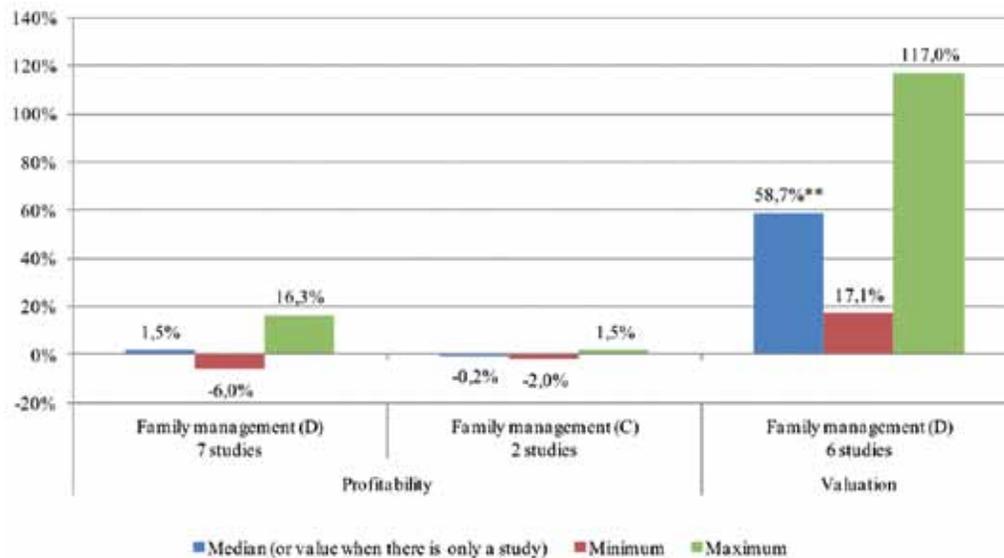
Figure 5: Economic magnitudes of effects of family management on corporate performance

This figure presents a standardisation of the difference in profitability, valuation, productivity and dividend policy between family-managed firms and non-family firms for the studies reviewed. The numbers do not follow exactly the same calculation, sample period, sample localisation and/or definition of a family firm. For each family-firm dimension, we compute the median, the minimum and the maximum increase of corporate performance. When there is only one study, we present the value reported in the study. When the family-firm dimension is continuous, the graph presents the percentage increase in corporate performance due to a one-standard-deviation increase of the specific family-firm dimension used in the study. When the dependent variable is log transformed, we interpret the exponentiated regression coefficients. Exact definitions for each of the dimensions can be found in Table 1. Panel A presents economic magnitudes of the finance literature. Panel B presents economic magnitudes of the management literature. Source: own calculations based on statistically significant results at conventional levels from relevant analyses in finance and management empirical studies included in this survey. (D) indicates studies that proxy for family presence with a dummy variable, (C) indicates studies that proxy for family presence with a continuous variable. The figure also reports statistical significance levels for a test that the median is equal to zero. Asterisks indicate statistical significance at the 1% (***) , 5% (**), or 10% (*) level, respectively.

Panel A - Finance literature



Panel B - Management literature



In the case of profitability, results for finance papers range from 6.5 per cent to -8.3 per cent, whereas those for management studies range from 16.3 to -6 per cent.

Figure 6 shows the economic magnitude of the substantially smaller number of papers that use board representation of the family to classify family firms. Although there are only a few studies in each category, we still find a pattern similar to that shown in the two preceding figures, with positive median performance for family firms and a large variance of the results. Panel A of Figure 6 summarises the results across the finance papers that analyse the effect of family representation on the board of directors on return on assets, Tobin's Q and market-to-book, and dividend payout. The two relevant finance studies on family board representation report mixed effects on profitability (median of 1.0 per cent), with the -0.4 per cent of Yeh and Woidtke (2005) and the 2.5 per cent in Barontini and Caprio (2006). The median economic impact from the five finance studies on

valuation is positive: family board representation is associated with a median higher Tobin's Q and market-to-book of 23.7 per cent. The greatest increase is found by Miller et al. (2007), who report a 57.4 per cent higher firm valuation, whereas the lowest valuation is obtained by Yeh and Woidtke (2005), who report 7.0 per cent lower valuation ratios. The management literature has fewer comparable studies but exhibits patterns similar to those found in the finance papers.

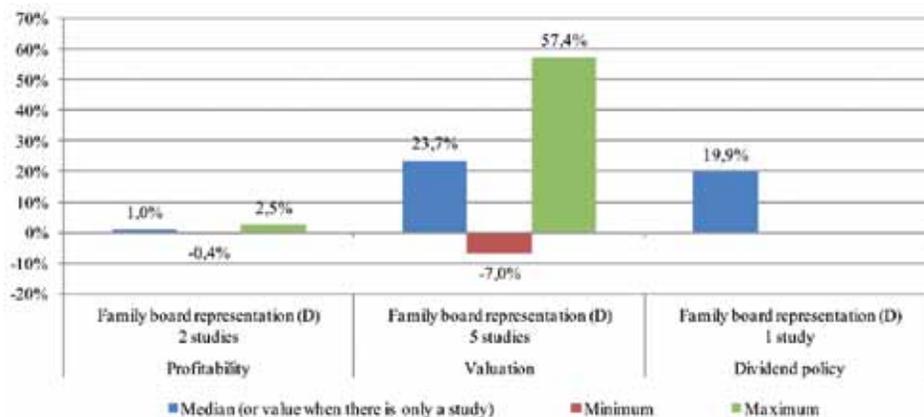
On the whole, the analysis presented in Table 2 and Figures 4, 5 and 6 suggests that, for several reasons, it is very difficult to reach a simple conclusion regarding family firms' impact on performance. First, the finance literature is very divided and fails to arrive at clear outcomes. Second, the management literature, although more positive, presents large variations across studies. Third, although profitability and valuation studies seem to suggest positive median effects for family firms, the productivity and dividend studies point in the other direction for the most part. Finally, the

tremendous variation of the economic magnitude of the differences in performance of family and non-family firms casts a large shadow over the existing results and requires further exploration. The large variation of outcomes is another puzzle that needs to be addressed in the following sections.

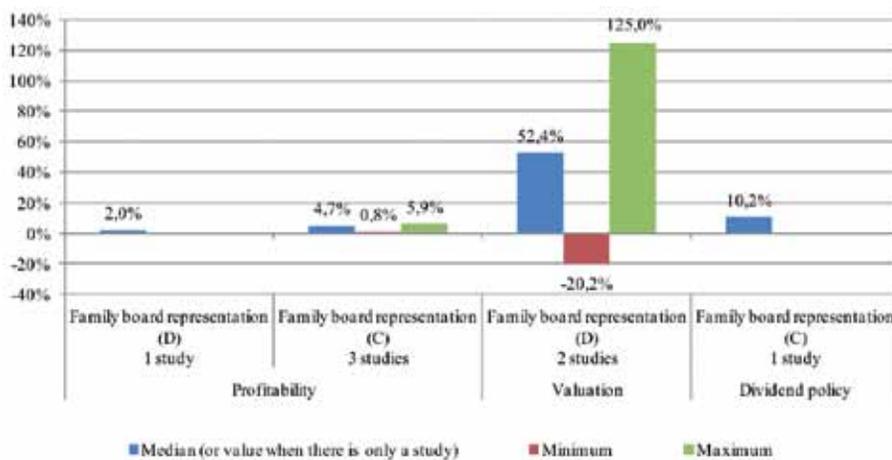
Figure 6: Economic magnitudes of effects of family board representation on corporate performance

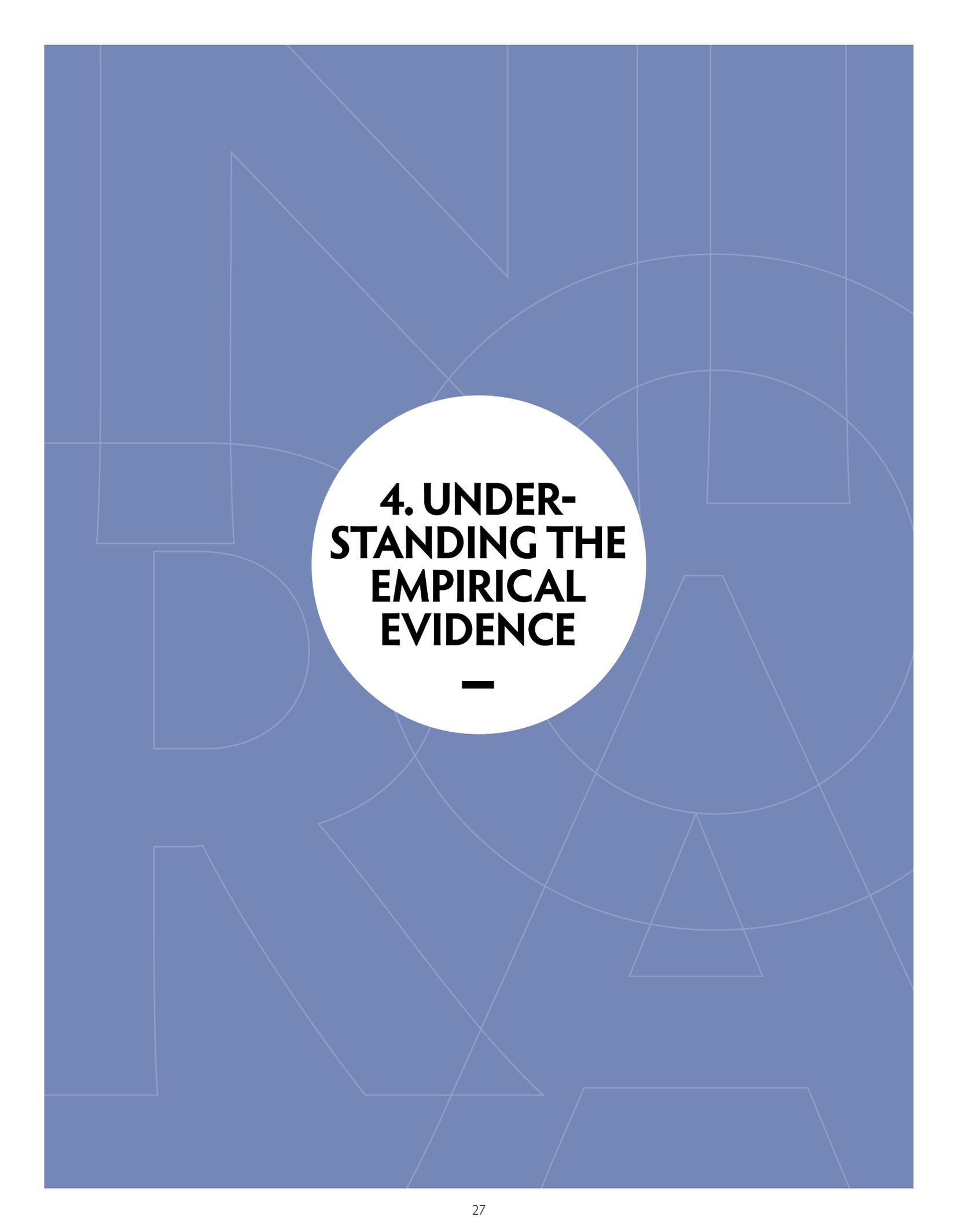
This figure presents a standardisation of the difference in profitability, valuation, productivity and dividend policy between firms with family board representation and non-family firms for the studies reviewed. The numbers do not follow exactly the same calculation, sample period, sample localisation and/or definition of a family firm. For each family-firm dimension, we compute the median, the minimum and the maximum increase of corporate performance. When there is only one study, we present the value reported in the study. When the family-firm dimension is continuous, the graph presents the percentage increase in corporate performance due to a one-standard-deviation increase of the specific family-firm dimension used in the study. When the dependent variable is log transformed, we interpret the exponentiated regression coefficients. Exact definitions for each of the dimensions can be found in Table 1. Panel A presents economic magnitudes of the finance literature. Panel B presents economic magnitudes of the management literature. Source: own calculations based on statistically significant results at conventional levels from relevant analyses in finance and management empirical studies included in this survey. (D) indicates studies that proxy for family presence with a dummy variable, (C) indicates studies that proxy for family presence with a continuous variable. The figure also reports statistical significance levels for a test that the median is equal to zero. Asterisks indicate statistical significance at the 1% (***), 5% (**), or 10% (*) level, respectively.

Panel A - Finance literature



Panel B - Management literature





**4. UNDER-
STANDING THE
EMPIRICAL
EVIDENCE**

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4. UNDERSTANDING THE EMPIRICAL EVIDENCE

In the rest of the paper, we attempt to determine whether the aggregate empirical results presented in the preceding pages can be better understood by looking more carefully at the differences between the multiple forms a family's presence in the firm can take. The large range of outcomes in the association between family firms and performance may be due in part to the differences in the classification of family firms, the existence of a nonlinear relationship between family presence and performance, or the methodologies used and biases of the samples of firms analysed across studies. We analyse the first two issues in this section and leave the latter to Section 5.

A. DIFFERENCES IN FAMILY-FIRM CLASSIFICATIONS AND ROBUST PATTERNS OF EVIDENCE

In Section 3, we presented the empirical results, organising the evidence around the three main forms of family involvement: namely, ownership, management and board representation. But the classification of studies along these lines leaves us with a conflicting pattern of evidence and large variation in economic magnitudes. For this reason, in this section we separate studies further and look at more specific ways in which the family is present in an effort to understand whether the evidence is less ambiguous and whether it is possible to draw some lessons from the literature.

The classification of firms by family ownership can be examined more carefully by identifying ownership methods and the type of family in control. The studies that make such an attempt

can be identified as one of four major groups, depending on the refinement and characteristics of the measure they use. First, *Large family shareholder present in the firm* includes all studies that identify cash-flow and/or control rights held by the family but cannot determine whether the family is the founding family or another family. In these studies, the firm is identified as a family firm if the family owns at least x per cent of the cash-flow and/or control rights. The second group – namely, *Large founding-family shareholder present in the firm* – refers to studies that examine the performance impact of founding-family owners, who are not necessarily controlling shareholders. In this category, we include all studies that identify cash-flow and/or control rights held by founding families with at least x per cent of the cash-flow and/or control rights. Third, what we define as the *Family control* group refers to studies that (1) identify cash-flow and control rights held by families, (2) identify a family owner as the largest controlling shareholder of the firm, and (3) identify the family owner applying the ultimate ownership method (i.e., when shares in a firm are owned by another company, these studies examine the ownership of that company, and so on). The final group of ownership studies, *Family firms with control-enhancing mechanisms*, refers to papers that examine the performance impact of control-enhancing mechanisms that enable the family's voting rights to exceed its cash-flow rights. This category includes all studies that identify multiple share classes, pyramids, cross-holdings and voting agreements in family firms, or the size of the wedge between control rights and cash-flow rights (that is, the absolute difference between the percentage

of all votes outstanding held by the family and the percentage of all shares outstanding owned by the family). The exact definition of each of these classifications can be found in Panel A of Table 1.

Table 3 breaks the studies down according to this classification. Panel A shows the breakdown for finance papers and Panel B for management papers. The first two rows of each panel show the way the studies break down between those that identify that the large shareholder present in the firm is the founding family and those that do not further identify the family shareholder. The majority of the results in the finance literature fall into the category of those that make it possible to tell whether the founding family is the large shareholder of the firm, whereas the management literature is evenly split. This classification allows

us to draw our first conclusion from this table: the presence of the large founding family is very often linked to higher firm performance.

Founding-family shareholders differ from non-founding family owners in several respects. Founding families are likely to experience considerable attachment to their companies and often consider their firm as their life's achievement, which might encourage them to pursue the optimal shareholder-value maximising strategy instead of "enjoying the quiet life" (Fahlenbrach, 2009). The entrepreneurial ability of the founder can also be a valuable asset (Morck, Shleifer and Vishny, 1988). Founding-family firms may exhibit better performance not because they are owned by the founders, but because such firms are run by the founder who has been selected for

Table 3: Family ownership and corporate performance

This table classifies all results of tests of differences in means and medians, regressions and models on corporate performance of family firms in the finance (Panel A) and management (Panel B) literatures by dimensions of family ownership and measures of performance. One circle represents a result for one study, one family-ownership dimension, and one measure of corporate performance. Several results from one study are translated into several circles. For this reason, the number of circles exceeds the number of relevant studies. Black circles indicate significant results at conventional levels. White circles denote insignificant results. In the case of empirical studies with tests of differences in means and medians and regressions, we record only the results from regressions. Definitions for each family-ownership dimension and measure of corporate performance can be found in Table 1.

Panel A - Finance literature

Family-firm dimensions	Profitability		Valuation		Productivity		Dividend policy	
	Positive effect	Negative effect						
Large family shareholder: <i>Large family shareholder present in the firm</i>	●●●○	●○○○	●●●	●●●●○○	●●	●	●	●
<i>Large founding-family shareholder present in the firm</i>	●●●●●●●●	●●○	●●●●●●●●	●●●	●		●●	●●●
Family control	●●●	●●○	●●	●●●○○○				●●
Family firms with control-enhancing mechanisms	●	●●●○	●●○	●●●●●○○				

Panel B - Management literature

Family-firm dimensions	Profitability		Valuation		Productivity		Dividend policy	
	Positive effect	Negative effect						
Large family shareholder: <i>Large family shareholder present in the firm</i>	●●●●○	●○○	●●●	●●○		●●		
<i>Large founding-family shareholder present in the firm</i>	●●●	●●	●●●●	●				
Family control								
Family firms with control-enhancing mechanisms								

success.¹⁶ In contrast, founding-family firms may be more inclined to appoint their descendants as company CEOs, which can have a negative impact on performance if descendants do not have the founder's special talents and entrepreneurial abilities that explain why he/she was able to start the firm.

Some 80 per cent of the studies in profitability and valuation find that the presence of a large founding-family shareholder in the firm is reflected in higher performance. The only study in this group that looks at productivity differences also finds a positive effect when the large shareholder is from the founding family. The only area for which the results are mixed is for dividend payments, as only two of the five available studies find higher dividend payments in firms in which large founding families are present.

In contrast to the results for the group of large founding-family shareholders, the first row of each panel shows very mixed evidence for the studies that do not make it possible to determine whether the large shareholder belongs to a founding or non-founding family. In both literatures the results are split almost evenly, with half showing a positive influence on profitability and valuation for firms with large family shareholders and the other half showing a negative effect. The few productivity and the two dividend studies available for this group of papers are almost evenly divided as well.

Figure 7 regroups finance and management studies and analyses the economic magnitudes of the performance impact of these two groups of papers in four separate panels. Panels A and B show evidence of larger profitability and valuation measures for firms with a large founding-

family shareholder than for those where the identity of the large family shareholder cannot be determined. The variation of the economic magnitude, although still significant, is smaller for firms with a large founding-family shareholder. The vast majority of papers that make it possible to compare magnitudes are part of the finance literature. In these papers, the presence of a large founding-family shareholder, measured by a dummy variable, has a positive impact on firm profitability: a median 2.3 per cent increase for the 10 surveyed studies, ranging from 0.4 per cent in Mehrotra et al. (2013) to 7.9 per cent in Ehrhardt, Nowak and Weber (2006).¹⁷ The eleven finance studies on the presence of large founding-family shareholders in the firm indicate a median higher valuation of 14.2 per cent, with the results ranging from Chen and Nowland's (2010) -25.0 per cent to Ali, Chen and Radhakrishnan's (2007) 110.0 per cent.¹⁸ The three papers from the management literature in this group show a similar median higher valuation than the finance papers.

Since we do not have productivity studies that allow for the differentiation between founding and non-founding family shareholders, Panel C of Figure 7 simply shows that on average the generally negative effects in total factor productivity of firms with a large family shareholder present hover around 10 per cent. Finally, Panel D suggests that, for the few studies available where we can obtain magnitudes, firms with large founding shareholders pay substantially smaller dividends. It is possible that the firms where founders are present may still be at an early stage of development and therefore need more cash to invest, or that they simply retain more earnings and pay family members through their work in the firm.

16 - As we will discuss later, this may create a selection bias if firm samples include a large number of the successful founding-family firms as those firms that were created by bad founders died early on and never grew.

17 - Bertrand et al. (2008) is the only study where ownership is measured by a continuous variable in this category. It documents a slight negative effect: a jump in founding-family ownership of one standard deviation decreases residual return on assets by 0.3 percentage points.

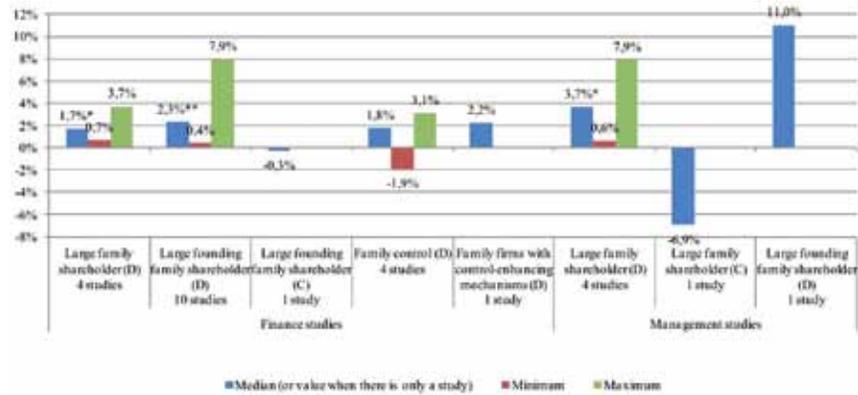
18 - When the presence of a large founding-family shareholder in the firm is measured with a continuous variable, the two surveyed papers (Villalonga and Amit, 2006; Anderson, Duru and Reeb, 2009) show that a jump in the variable of one standard deviation increases firm valuation by 20.2 per cent.

In the group of studies that classify family firms as those where the manager is part of the family, there are papers that further break down the type of family CEO. Table 4 breaks down studies using family management as the proxy for family control. In our classification, we label as *Founder CEO* all studies that identify the founder of the firm as the CEO or in top management. We

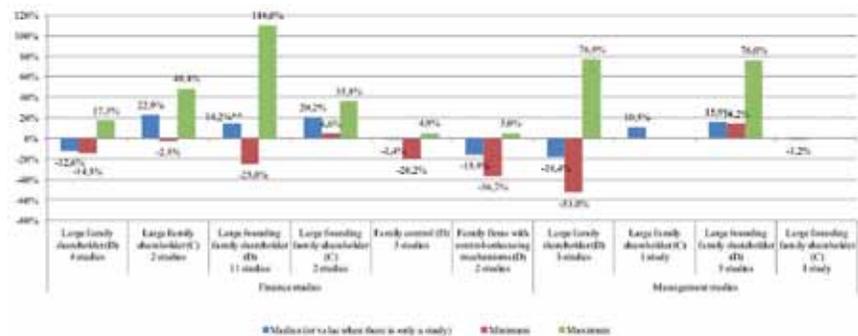
Figure 7: Economic magnitudes of effects of different measures of family ownership on corporate performance

This figure presents a standardisation of the difference in profitability, valuation, productivity and dividend policy between family firms and non-family firms across different family-ownership measures for the studies reviewed. The numbers do not follow exactly the same calculation, sample period, sample localisation and/or definition of a family firm. For each family-ownership measure, we compute the median, the minimum and the maximum increase of corporate performance. When there is only one study, we present the value reported in the study. When the family-ownership measure is continuous, the graph presents the percentage increase in corporate performance due to a one-standard-deviation increase of the specific family-ownership measure used in the study. When the dependent variable is log transformed, we interpret the exponentiated regression coefficients. Exact definitions for each of the dimensions can be found in Table 1. Panel A presents economic magnitudes of family-ownership measures on profitability. Panel B presents economic magnitudes of family-ownership measures on valuation. Panel C presents economic magnitudes of family-ownership measures on productivity. Panel D presents economic magnitudes of family-ownership measures on dividend policy. Source: own calculations based on statistically significant results at conventional levels from relevant analyses in finance and management empirical studies included in this survey. (D) indicates studies that proxy for family presence with a dummy variable, (C) indicates studies that proxy for family presence with a continuous variable. The figure also reports statistical significance levels for a test that the median is equal to zero. Asterisks indicate statistical significance at the 1% (***) , 5% (**), or 10% (*) level, respectively.

Panel A - Impact on profitability



Panel B - Impact on valuation



label as *Descendant CEO* all studies identifying a descendant by blood or marriage of the founder of the firm as the CEO or in a top management position. Those studies that present results that do not allow us to identify the type of family CEO are classified in the table under the label of Family CEO.

This categorisation proves revealing. In keeping with the findings presented in Table 3 and discussed above, both the finance and management literatures are nearly unanimous in showing higher profitability and higher valuations for *Founder CEO* family firms. The results for *Descendant CEO* family firms are more evenly split and a large number of papers do not find statistically significant results. The papers that do allow for the identification of the CEO (i.e., the *Family CEO* group) show a higher variation in outcomes, particularly in the finance literature.

In terms of economic magnitudes among papers that classify firms based on management, Panels A and B of Figure 8 show that for the comparable subset of papers, *Founder CEO* family firms exhibit higher median profitability and valuations than the other two groups of papers. This figure also shows that the papers identifying the *Descendant CEO* exhibit larger variation, with results going in both directions in both literatures for the most part. This pattern calls for further analysis of the type of descendant who becomes CEO.

Table 4 and Panels C and D of Figure 8 present the number of studies and the economic magnitudes on productivity and dividend payments of the subgroups of papers that classify family firms by the family's involvement in management. These results are broadly similar to those for the classification of firms based on ownership, but the small number of papers in these groups makes it hard to interpret this evidence further.

Table 4: Family management and corporate performance

This table classifies all results of tests of differences in means and medians, regressions and models on corporate performance of family firms in the finance (Panel A) and management (Panel B) literatures by dimensions of family management and measures of performance. One circle represents a result for one study, one family-management dimension, and one measure of corporate performance. Several results from one study are translated into several circles. For this reason, the number of circles exceeds the number of relevant studies. Black circles indicate significant results at conventional levels. White circles denote insignificant results. In the case of empirical studies with tests of differences in means and medians and regressions, we record only the results from regressions. Definitions for each family-management dimension and measure of corporate performance can be found in Table 1.

Panel A - Finance literature

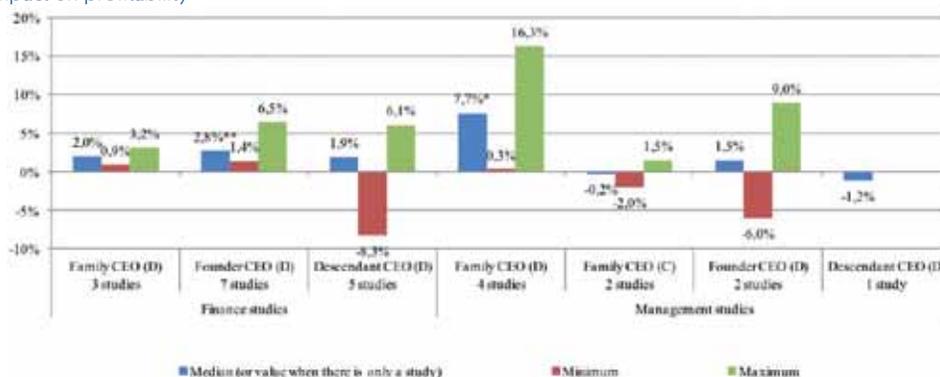
Family-firm dimensions	Profitability		Valuation		Productivity		Dividend policy	
	Positive effect	Negative effect						
Family CEO	●●●●○	●	●●●●●○○	●●●●○		●		
Founder CEO	●●●●●●●● ○		●●●●●●●●	○			○	●
Descendant CEO	●●●●○	●	●○○○○	●●●			●	●

Panel B - Management literature

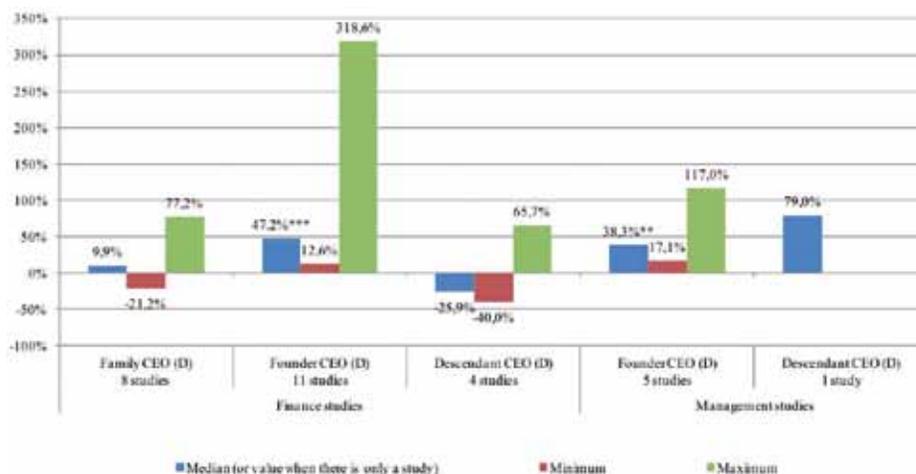
Family-firm dimensions	Profitability		Valuation		Productivity		Dividend policy	
	Positive effect	Negative effect						
Family CEO	●●●●●●●● ○	●	●○○			●		
Founder CEO	●●●●○○○	●	●●●●○	○		○		●
Descendant CEO	●○	●●	●●●					●

Figure 8: Economic magnitudes of effects of different measures of family management on corporate performance
 This figure presents a standardisation of the difference in profitability, valuation, productivity and dividend policy between family firms and non-family firms across different family-management measures for the studies reviewed. The numbers do not follow exactly the same calculation, sample period, sample localisation and/or definition of a family firm. For each family-management measure, we compute the median, the minimum and the maximum increase of corporate performance. When there is only one study, we present the value reported in the study. When the family-management measure is continuous, the graph presents the percentage increase in corporate performance due to a one-standard-deviation increase of the specific family-management measure used in the study. When the dependent variable is log transformed, we interpret the exponentiated regression coefficients. Exact definitions for each of the dimensions can be found in Table 1. Panel A presents economic magnitudes of family-management measures on profitability. Panel B presents economic magnitudes of family-management measures on valuation. Panel C presents economic magnitudes of family-management measures on productivity. Panel D presents economic magnitudes of family-management measures on dividend policy. Source: own calculations based on statistically significant results at conventional levels from relevant analyses in finance and management empirical studies included in this survey. (D) indicates studies that proxy for family presence with a dummy variable, (C) indicates studies that proxy for family presence with a continuous variable. The figure also reports statistical significance levels for a test that the median is equal to zero. Asterisks indicate statistical significance at the 1% (***) , 5% (**), or 10% (*) level, respectively.

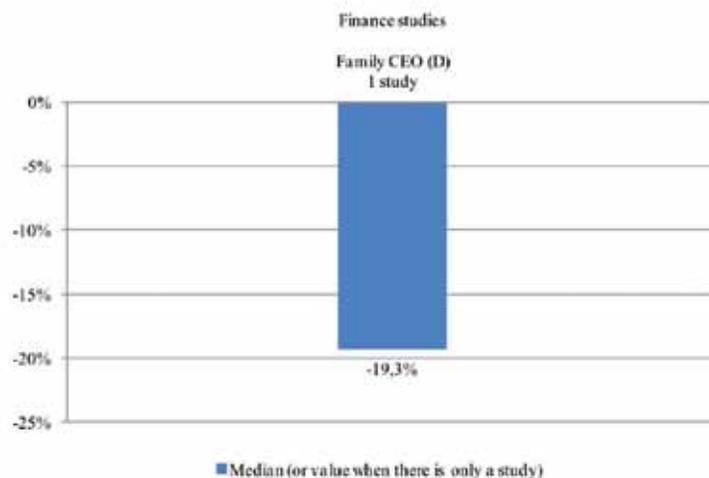
Panel A - Impact on profitability



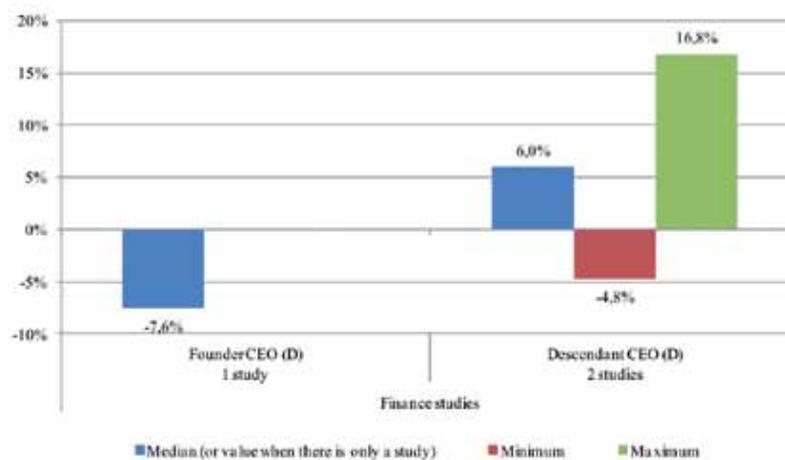
Panel B - Impact on valuation



Panel C - Impact on productivity



Panel D - Impact on dividend policy



On the whole, the generally positive performance effect of the presence of a large founding shareholder and the founder CEO raises the question of what makes these firms different from others and what enables founding families and CEOs to outperform. One possibility is that firms with founders are simply the most successful and best performing firms as a result of some unobservable characteristics that make them different from others, and that we are not able to capture this success with the set of controls of other firm characteristics. An alternative possibility

is that founding families and CEOs are responsible for policies and strategic choices that generate superior performance. Whatever the explanation, it seems that the presence of the founders and/or their families is more generally associated with positive performance. These results also raise a challenge for future research as they suggest that founders, who are likely to have more influence and control in the firm, do not use this influence to extract private benefits of control and exhibit higher performance.

Table 3 and Figure 7 also make it possible to identify a second pattern of evidence across papers: the results suggest that family firms with control-enhancing mechanisms do relatively worse. This pattern emerges by comparing the results of the groups of studies that use different methodologies to determine family control. As Table 3 shows, some two thirds of the finance studies and all management studies classify family firms on the basis of the ownership structure of the first-tier of shareholders. The risk is that this criterion may be misclassifying as non-family firms those firms that are controlled by a family through such indirect mechanisms as pyramids or a web of firms ultimately controlled by the family several layers below. These misclassified firms may actually be those that exhibit lower performance, as the incentives to direct cash flows away from the firm and pay low dividends increase with deviations from the one-share/one-vote model.

Panel A of Table 3 shows a sharp reduction in the number of profitability and valuation studies that find positive relative performance of family firms when the ultimate ownership methodology is used. Of the studies labelled *Family Control*, only half of the papers on profitability and one fourth of those on valuation find a positive association of performance and family firms proxied by ultimate ownership. The four relevant studies on family control that can be compared in Panel A of Figure 7 still reveal a median positive influence on profitability equal to 1.8 per cent, but the variance is substantially reduced, ranging only from -1.9 per cent in Morck, Stangeland and Yeung (2000) to 3.1 per cent in King and Santor (2008). In terms of valuation, the three comparable studies analysed in Panel B of Figure 7 indicate that family control has a median negative effect of 1.4 percentage points.

The effects vary from a 20.2 per cent decrease in valuation in King and Santor (2008) to a 4.9 per cent increase in Barontini and Caprio (2006). This pattern suggests that papers that use the ultimate ownership method may be better able to identify ownership structures that create a wedge between ownership and control and therefore lead to lower profitability and valuations. It also suggests that those papers that do not use this methodology may be misclassifying family firms.

Although the evidence of *Family Control* studies is suggestive, the findings of papers that analyse the performance of family firms with control-enhancing mechanisms directly are the most striking. The last row of Panel A of Table 3 shows that nearly all the papers on profitability find lower performance and 80 per cent of the studies in valuation find worse Tobin's Q or market-to-book ratios for family firms with control-enhancing mechanisms. Unfortunately, the vast majority of the studies identifying family firms with control-enhancing mechanisms do not allow for a comparison of the economic magnitudes. In Panel A of Figure 7, the Andres (2008) study is the only one we can use for our comparison, but this paper is the only one out of five studies that reports that family firms with control-enhancing mechanisms show higher profitability. Panel B of the same figure presents the economic magnitudes of the valuation discounts of family firms with control-enhancing mechanisms. Using dummy variables, there are only two studies that can be compared showing a median decrease of 15.9 per cent in valuation (-36.7 per cent in King and Santor, 2008, and +5.0 per cent in Villalonga and Amit, 2006).

B. NONLINEAR RELATIONS

Most papers in the literature classify firms as either family or non-family to facilitate the use of statistical methods to find differences in performance between the two groups. But this type of classification implicitly implies that the family-firm dimensions exert a linear influence on corporate performance. An alternative view suggests that it is possible to observe a nonlinear relationship between firm performance and family ownership and control depending on the level of family involvement. In a parallel literature that analyses management ownership and firm valuation, Morck, Shleifer and Vishny (1988) confirm Stulz's (1988) hypothesis that the relationship of managerial ownership and performance need not be linear. The authors show that Tobin's Q first increases, then decreases, and finally rises slightly, along with ownership by the board of directors. Therefore, it is possible that a similar pattern may emerge if we look at different levels of family firm involvement and performance.

Several authors have started to work on this question, estimating the inflection points at which the relationship between performance and a continuous measure of family presence turns. The few available studies in the finance literature report an inverted U-shaped relationship between continuous family-firm characteristics and corporate performance implying that at high degrees of family involvement, the negative effects outweigh the positive. Panel A of Figure 9 shows the inflection points estimated in these papers indicating the percentage of the family firm ownership or board representation at which the curvature of the inverted U-shaped relationship between family involvement and performance changes sign from positive to negative. Regarding

family ownership, the median inflection point reported in the two relevant studies is 39.3 per cent for firm value. For founding-family ownership, the median inflection points reported in the seven relevant studies are 40.3 per cent for firm profitability, 34.4 per cent for firm valuation and 41.1 per cent for dividend payouts.

As in the finance literature, some management studies suggest that the degree of family involvement in the firm may have a nonlinear influence on performance. Panel B of Figure 9 shows the inflection points estimated inverted U-shaped relationship found in management studies. The median inflection points are 46.8 per cent for family ownership, and 35.3 per cent for founding-family ownership.¹⁹

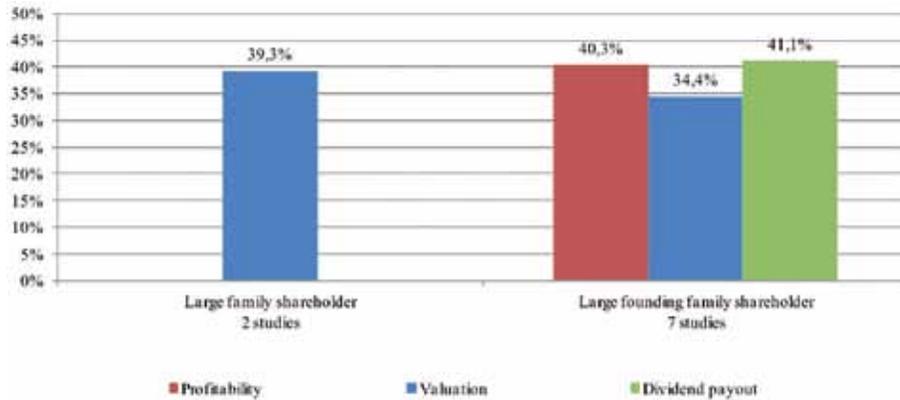
In short, the actual value of the inflection point vary across studies depending on the sample or the proxy for family involvement and corporate performance used, but the majority of studies find an inflection point of family ownership level around 40 per cent. Taking these results into consideration may help account for some of the large variation in performance outcomes documented in the previous section for the bulk of studies that analyse the relationship between family involvement and performance as linear.

19 - However, the management literature reports nonlinear relationships of various shapes. De Miguel, Pindado and De La Torre (2004) suggest that there is a quadratic relationship between insider ownership and firm value: firm value increases, as a result of the convergence-of-interest effect, with insider ownership at low (less than 35.7 per cent) and high levels (more than 70.4 per cent) and then decreases, as a consequence of managerial entrenchment, with insider ownership at intermediate levels. Minichilli, Corbetta and MacMillan (2010) suggest that there is a U-shaped relationship with an inflection point of 48.2 per cent between the ratio of family members in top management to the total number of top management members and return on assets. Firms with top management in which the ratio of family to non-family members is either high or low perform better than the firms in which both family and non-family members are heavily represented. Minichilli and Berrone (2012) demonstrate that there is a U-shaped relationship between the presence of family CEOs in teams of co-leaders and profitability (an inflection point of 66.4 per cent), negatively moderated by the presence of family members on corporate boards. However, this relationship ceases to exist when family ownership is highly concentrated.

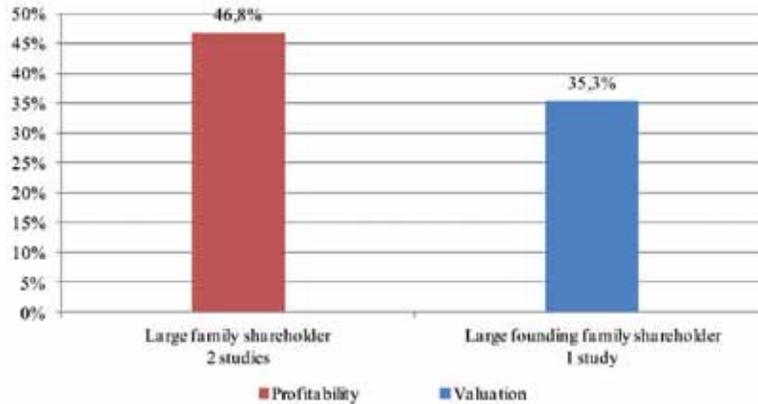
Figure 9: Inflection points of nonlinear relationships between family firms and performance

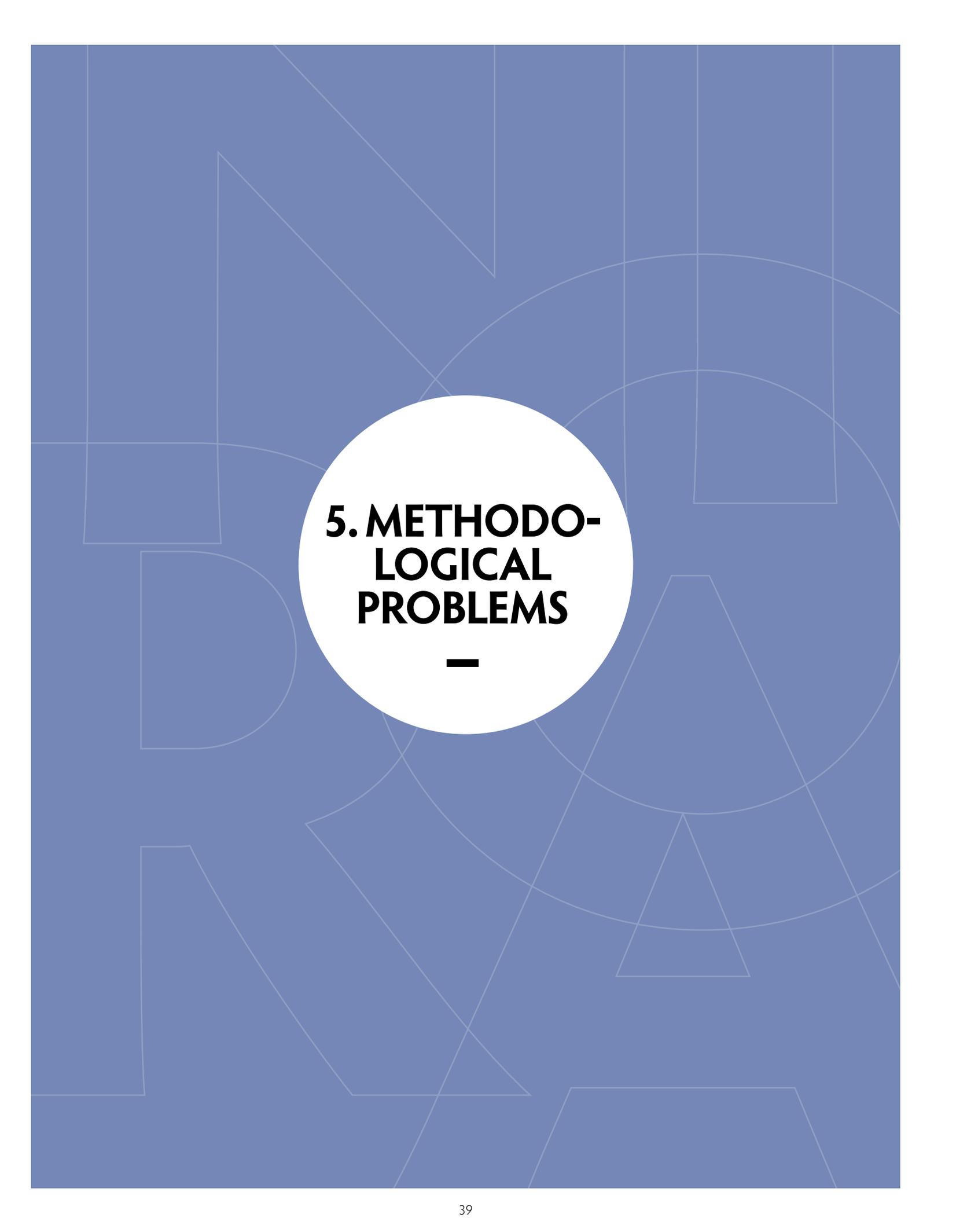
This figure shows the “inflection point” estimated in the finance (Panel A) and management studies (Panel B). The inflection point suggests an inverted U-shaped relationship between a family-firm dimension and corporate profitability or valuation. The inflection points shown in the graph are the percentage of the family-firm dimension at which the curve of the inverted U-shaped relationships between family-firm dimension and performance changes sign from positive to negative. This point can be regarded as the point at which a continuous family-firm dimension stops affecting the measure of corporate performance in each study positively and starts affecting it negatively. When the dependent variable is log transformed, we interpret the exponentiated regression coefficients. Definitions for each of the dimensions can be found in Table 1. Source: own calculations based on statistically significant results at conventional levels from relevant analyses in finance and management empirical studies included in this survey.

Panel A - Inflection points of the finance literature



Panel B - Inflection points of the management literature





5. METHODO- LOGICAL PROBLEMS

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5. METHODOLOGICAL PROBLEMS

In this section, we analyse several problems that may systematically affect the robustness of the results reported by the empirical literature on the corporate performance of family firms. The aim of this review is to make sure that results are robust, unbiased and not explained solely by sample selection of the best firms. Understanding the severity of these problems may also help guide future work in the field.

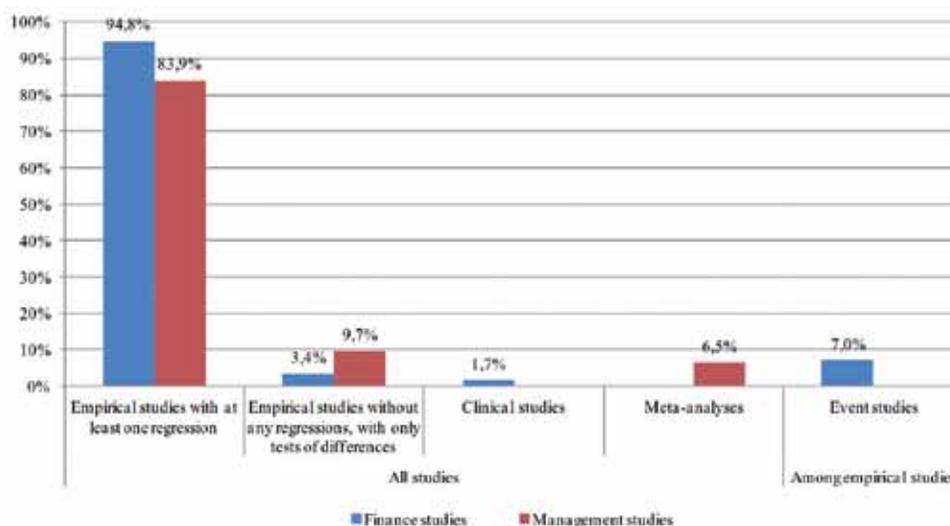
A. METHODS OF THE LITERATURE

Are the variations in results documented in the preceding sections caused by the use of different methods of analysis across papers? It is important to answer this question because some methods may pose problems that can affect the

robustness of the results. In Figure 10, we present differences in the methods used in the finance and management studies on corporate performance of family firms included in this survey. We analyse the cross-section of papers including: empirical studies with regression analysis; empirical studies using nothing but tests of differences in means and/or medians of performance between family and non-family firms; clinical studies (descriptive or explanatory analyses of a firm); and meta-analyses (studies in which results are based on combining results from different articles). We also report the proportion of all the empirical papers accounted for by event studies that analyse stock-price reactions to such events as announcements of the death of a family CEO or a succession.

Figure 10: Methods used across reviewed studies

This figure shows differences in the methods used in studies on corporate performance of family firms. *Empirical studies with at least one regression* refers to empirical analyses with at least a regression analysis. *Empirical studies without any regressions, with only tests of differences* refers to empirical analyses without any regression analysis but with tests of differences in means or medians between family and non-family firms. *Clinical studies* refers to descriptive, exploratory or explanatory analyses of a firm. *Meta-analyses* refers to studies which combine results from different articles. *Event studies* refers to empirical studies in which results are based on the analysis of stock-price reactions to a precise event (the announcement of the death of a family CEO or of a succession, for example).



Multivariate methods may be more suitable for evaluations of the relationship of several independent variables to corporate performance. The figure shows that the majority of the surveyed studies use standard econometric methods to analyse the comparative performance of family firms, as 94.8 per cent of finance papers and 83.9 per cent of management papers are based on regression analyses. For the rest, 3.4 per cent of finance studies and 9.7 per cent of management papers do not report any regression analyses; instead, they use only tests of differences in mean and median performance. Clinical studies, which may be difficult to generalise, account for 1.7 per cent of finance papers. Similarly, meta-analyses, whose findings are contingent on the accuracy and comprehensiveness of the studies included, account for 6.5 per cent of management studies. Lastly, only 7.0 per cent of finance empirical papers use event studies. The usual concerns about event studies are uncertainty about the event dates, the estimation period used to fit the parameters of the chosen generating process, the choice of event windows and contaminating events during the estimation window or the event date.

To all appearances, then, studies in both literatures generally use robust methods. The variations in results seem not to be driven by the use of specific methods. Examination of other potential sources of variations – the definitions of family control and of a family firm, the samples of firms, and the empirical methods used to deal with endogeneity – is thus called for.

B. THE DEFINITIONS OF A FAMILY FIRM AND FAMILY CONTROL

Whatever the empirical framework, substantial concerns when defining family control are inescapable. For this reason, a central challenge in the interpretation of the empirical tests of the

relative performance of family firms is establishing a common definition for a family company. In this respect, there are three separate issues that affect the comparability and accuracy of empirical results.

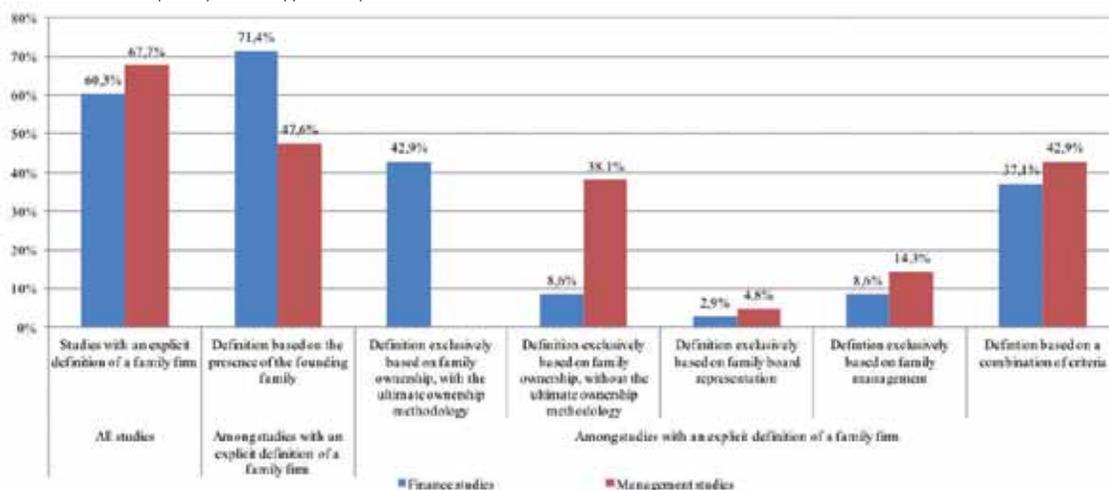
The first problem is that a surprisingly large number of papers actually fail to define what a family firm is, thus leaving the topic open to debate. The first set of bars of Panel A of Figure 11 shows that only 60.3 per cent of the finance papers and 67.7 per cent of management papers that we surveyed explicitly define a family firm (studies that report a definition of what they consider a family firm). In other words, what exactly is being studied is not always entirely clear. The second set of bars of Panel A shows that only 72 per cent of finance papers and 47.6 per cent of management papers that provide an explicit definition of family firms (those in the first set of bars) actually allow us to differentiate between founding and non-founding-family firms. This substantially reduces the sample of papers that allow us to look for differences between family firms.

The second problem is that researchers have defined a family firm in a variety of ways. There is no universal definition in the literature of what a family firm is. Instead, there is a broad spectrum of approaches to identifying a family firm and the literature provides many definitions. It is therefore difficult to reach consensus on an exact definition. In Panel A of Figure 11, we present the percentage of the studies that explicitly define a family firm that base their definition on family ownership, family management, family board representation or a combination of them. The third and fourth sets of bars of Panel A show that the most common definition of a family firm is based on ownership: roughly half of finance studies and 40 per cent of the management papers use an ownership-

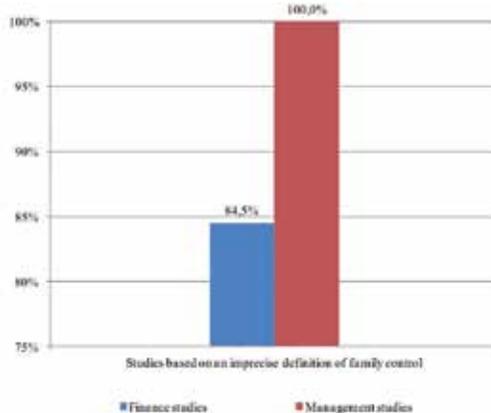
Figure 11: Definitions of family firm and family control

The various panels of this figure present differences in the definitions of family control and of a family firm in the empirical studies of family-firm performance. Panel A presents the percentage of reviewed studies explicitly defining a family firm (studies that report a definition of what they consider a family firm), and of these studies, (1) those that base their definition on the presence of the founding family in the firm (the presence of the founder and the descendants of the founder in ownership, board of directors and/or management), (2) those that base their definition of family firm on the criteria of family ownership with and without the ultimate ownership methodology, board representation, management or a combination of criteria (family ownership, board representation and/or management). Panel B presents the percentage of studies in which family control is measured without precision. These studies do not identify cash-flow and/or control rights held by families, do not identify a family owner as the largest controlling shareholder of the firm, or do not use the ultimate ownership methodology (when shares in a firm are owned by another company, these studies do not examine the ownership of that company, and so on).

Panel A - Studies explicitly defining a family firm



Panel B - Studies based on an imprecise definition of family control



stakes criterion to define a family firm. Less than 5 per cent of all studies use the presence of family members on the board of directors. This criterion for defining family firms is used in 2.9 per cent of

finance studies, and 4.8 per cent of management studies. At the same time, the identification of a family firm is based on family involvement in the management of the company in about 10 per

cent of the papers: it is applied in 8.6 per cent of finance studies, and 14.3 per cent of management studies. Finally, around 40 per cent of all papers are based on a combination of different kinds of family involvement, making it hard to compare results. La Porta, López-de-Silanes and Shleifer (1999), Claessens, Djankov and Lang (2000), and Faccio and Lang (2002) observe that family control and family management are highly correlated. However, using family management to define a family firm is by no means a perfect solution. In short, results are not altogether comparable, as studies define family firms in differing ways.²⁰

The third problem in the literature emerges from the multiplicity of methods used to measure family involvement. In the end, beyond establishing a standard definition it is important to also adopt a common method to determine family control. Accurately deciphering the control structure of a firm is difficult, as illustrated by La Porta, López-de-Silanes and Shleifer (1999). Voting rights are often separated from cash-flow rights through multiple stock classes, cross-shareholdings and pyramids. For this reason, it is important to find the identities of the *ultimate* owners of capital and voting rights (i.e., when shares in a firm are owned by another company, one needs to examine the ownership of that company, and so on), and to determine whether they are in control.

In Panel B of Figure 11, we show the surprisingly large fraction of studies in the literature that fail to determine family control with “precision.” The figure shows that this issue is central to the studies we survey, as 84.5 per cent of finance studies and all management studies are based on an imprecise definition of family control. This vagueness casts

considerable doubt on the interpretation of the results.

There are three main reasons for this failure. An initial group of papers do not identify the ultimate controlling shareholder of the firm, as defined in the paragraph above. This may be a problem as, in many cases, the main shareholders of firms are themselves corporate entities and financial institutions that may ultimately be held by families (La Porta, López-de-Silanes and Shleifer, 1999). The flip side of this problem involves papers that simply label as family firms all firms that are not listed on stock exchanges. Although these firms are typically closely held by family members, some may be owned by the state or listed corporations that are themselves not family firms. A second group of studies does not even identify a family owner as the largest controlling shareholder of the firm, so it is impossible to be sure the firm is correctly characterised as a family-controlled firm. Finally, some studies do not identify cash-flow and control rights held by families; instead, they rely on assessments of the degree to which the family is represented on the board or in management. Although these are proxies for family involvement, they may not reflect ultimate control of the firm.

C. SAMPLE-SELECTION BIASES

The previous section suggests that the object of analysis, the family firm, is not homogeneously defined casting doubt on the robustness of some findings. We now look at the samples used in the analyses, because some findings may be subject to sample-selection biases that may also weaken the results in the existing literature.

20 - Other differences in the definition of a family firm include the thresholds of the shares and votes held by family members. When the ultimate owner of the company is identified, thresholds retained by authors also vary, but authors generally look for all shareholders who control more than 10 per cent of the votes because (1) it provides a significant threshold of votes and, (2) most countries mandate disclosure of 10 per cent, and usually even lower ownership stakes (La Porta, López-de-Silanes and Shleifer, 1999). The identity of the controlling family owners (an individual, two or more persons related by blood or marriage, two or more persons unrelated by blood or marriage) also differs from one study to another.

Figure 12 shows differences in the samples of firms used in the finance and the management empirical studies included in our survey. The figure shows the percentage of studies that collect data by survey, studies based on multi-country analyses, studies based on public corporations, studies based on firms listed on large stock market indexes, studies including listed and unlisted firms, studies including state-owned or -controlled firms, studies including financial firms, and studies not dealing with survivorship bias. We use these categorisations to illustrate several sources of sample-selection bias. In the various panels of Figure 13, we compare the median economic magnitude of the performance difference between family and non-family firms in studies using different samples for those categories in which there are a substantial number of papers.

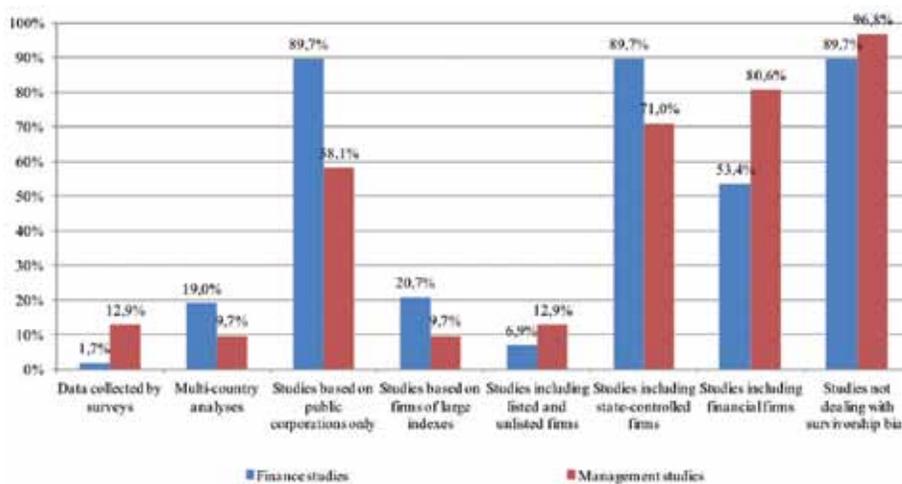
There are eight basic sources of sample-selection biases that we have identified. First, the sample-selection bias might be greater when data is

collected by survey. Figure 12 shows that only 2 per cent of finance studies but some 13 per cent of management studies are based on survey data. Classic issues concerning survey-based studies include question biases, non-response biases from poorly performing firms and the possibility of data-entry mistakes. Some respondents may misunderstand some questions, erroneously classify themselves as family or non-family firms, or consider data highly confidential and thus refuse to participate.²¹

Second, another potential sample bias concerns cross-country analyses. About one in five finance studies and one in ten management papers are based on multi-country analyses. Firms in common-law countries are larger, and larger firms might have higher valuations, perhaps because they have better investment opportunities (La Porta et al., 2002). Valuations are low when capital markets are small, as they are in countries where investors are not well protected. Another

Figure 12: Samples of firms used in reviewed studies

This figure presents differences in the sample firms in the empirical studies of family-firm performance included in this survey. Shown are the percentages of studies that collect data by survey, that are based on multi-country analyses, on public corporations, and on firms listed on large indexes; also shown are the percentages of studies including listed and unlisted firms, state-controlled firms, financial firms, and not dealing with survivorship bias.



21 - To investigate the possibility of non-response bias in the data, Molly, Laveren and Deloof (2010) test for statistically significant differences in the responses of early and late waves of returned surveys, the latter considered representative of non-respondents. No statistical differences between the early and late respondents are observed. Molly, Laveren and Deloof (2010) also compare business characteristics of the responding firms and the original firms of the survey population and find similar characteristics for the two groups.

source of sample-selection bias comes from the greater availability of data from industrialised countries, the firms in which may perform better. Data availability tends to be greater in the more developed countries (and perhaps for the better-performing firms in those countries), so developed countries (and better-performing firms) are overrepresented in empirical analyses. Cross-country firm analyses could therefore be biased, as their samples include a disproportionate share of firms that perform well. Moreover, even if accounting laws and principles may be similar, the industry structures may differ and the countries may be subject to different macroeconomic conditions (they may have different currencies, for instance). Colinearity between family control and country dummies may therefore represent a potential problem in regressions. In Panel A

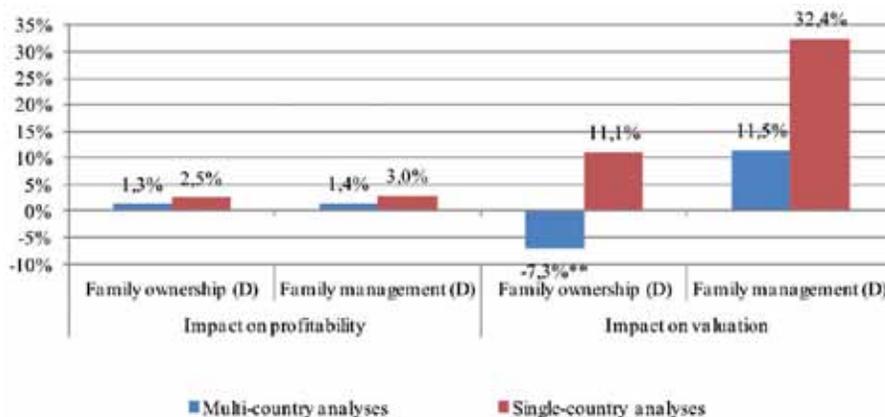
of Figure 13, we compare the median economic magnitude of studies done with multi-country samples of firms and that from relevant studies done with single-country analyses. The figure clearly shows that sample-selection bias has a substantial impact on the economic magnitudes of the results, particularly for valuation measures. Multi-country analyses generally report lower economic magnitudes.

A third potential source of bias comes from the intense coverage of listed corporations. Indeed, 89.7 per cent of finance studies and 58.1 per cent of management studies use samples of listed firms. Such samples are thus biased towards the largest and probably best-performing firms. The possibility of sample-selection bias can arise from families' desire to make their

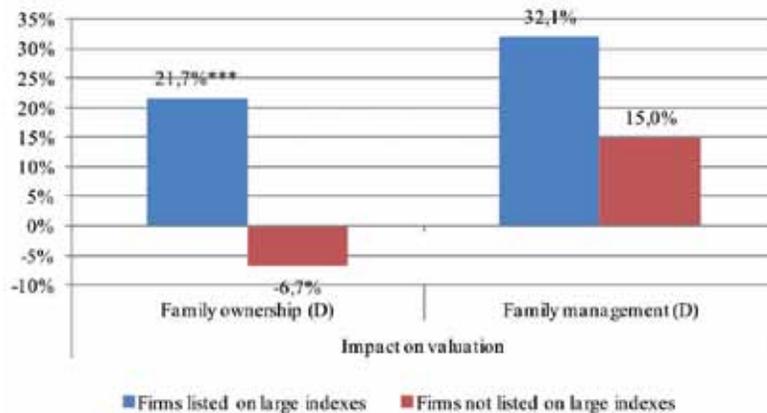
Figure 13: Economic magnitude of the potential biases in the literature.

This figure presents a standardisation of the difference in profitability and valuation between family firms and non-family firms across different family-firm characteristics for the finance studies reviewed. Panel A compares multi-country studies with single-country papers. Panel B compares studies based on listed firms listed that are part of large stock market indexes with studies including firms outside of large stock market indexes. Panel C compares papers including financial firms with studies excluding financial firms. Panel D compares studies that do not address potential survivorship bias with those that do. Panel E compares single-country studies of firms located in common-law countries with single-country papers using firms based in civil-law countries. Finally, Panel F compares single-country studies of firms in countries with high investor protection with single-country studies based on firms located in countries with low shareholder protection. In all panels, (D) indicates studies that proxy for family presence with a dummy variable, (C) indicates studies that proxy for family presence with a continuous variable. The figure also reports statistical significance levels for a test on the equality of medians across the two different groups. Asterisks indicate statistical significance at the 1% (***), 5% (**), or 10% (*) level, respectively.

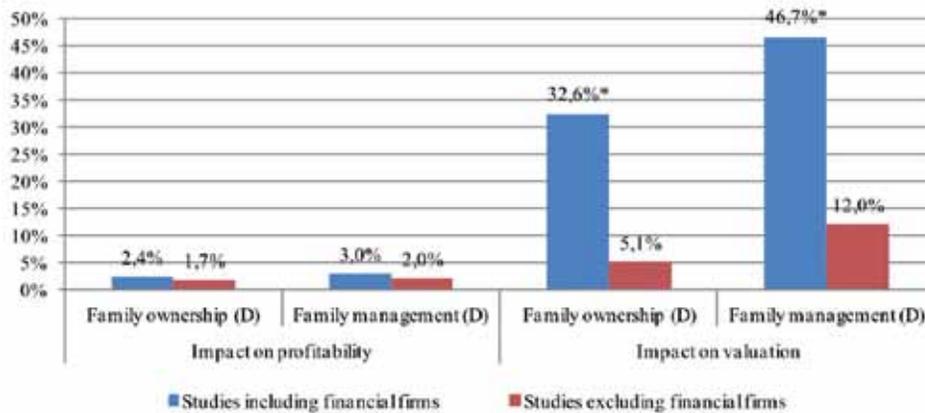
Panel A - Multi-country vs. single-country analyses



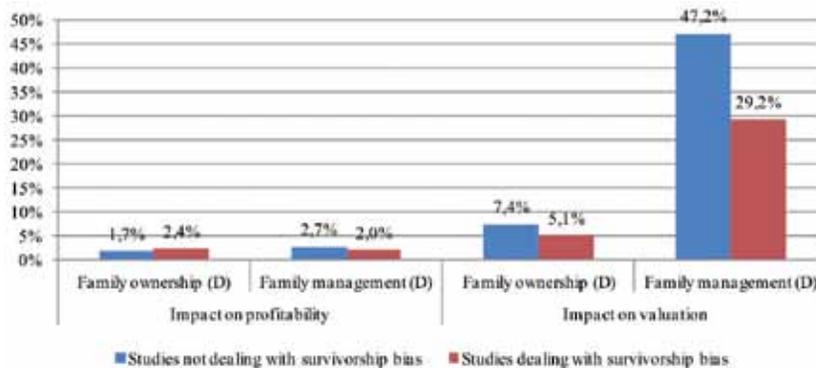
Panel B - Studies based on firms listed on large indexes vs. studies based on firms not from large indexes



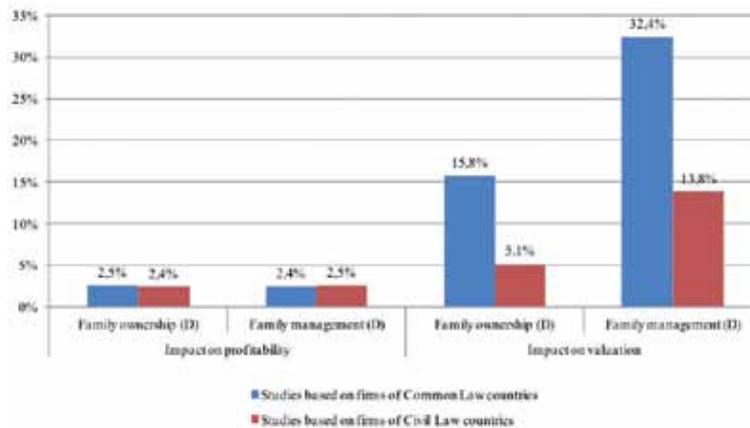
Panel C - Studies including financial firms vs. studies excluding financial firms



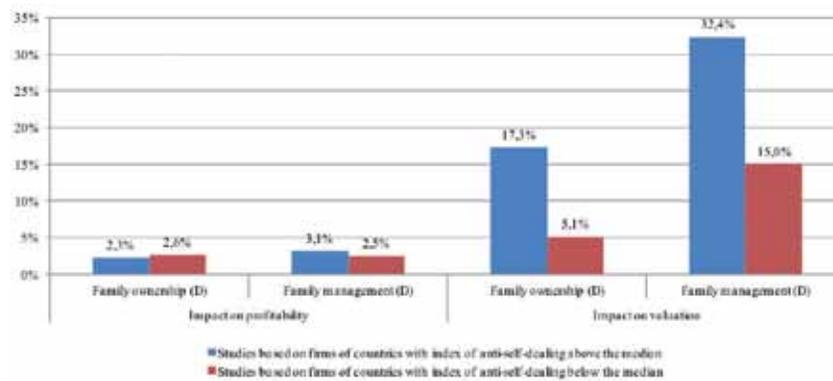
Panel D - Studies not dealing with survivorship bias vs. studies dealing with survivorship bias



Panel E – Single-country studies based on firms in common-law vs. those in civil-law countries.



Panel F – Single-country studies based on firms located in countries with high vs. low investor protection



firms look good by listing their healthiest firms. Moreover, listed family firms do not necessarily reflect the behaviour of unlisted firms. Thus, care must be taken not to generalise findings beyond large publicly traded firms: conclusions may not apply to smaller, younger, privately held companies.²²

Fourth, studies based on firms listed on large indexes are also biased. More than 20 per cent of finance studies and some 10 per cent of management studies included in this survey are studies of firms listed on large indexes. These firms, having already in some sense outperformed

companies that have not made it onto the list (Miller, Le Breton-Miller and Lester, 2011), are special. Turnover of index firms is common. Focusing on the survivors alone may skew the estimate. Panel B of Figure 13 compares studies based on firms listed on large indexes with studies using listed firms not included in large indexes. The panel suggests that the performance of family firm documented in studies that include firms outside of large stock indexes is statistically lower than that of studies based only on firms that are part of large stock indexes.

22 - Miller et al. (2007) and Miller, Le Breton-Miller and Lester (2011) suggest that results differ for large and small family firms. Morck, Shleifer and Vishny (1988), McConaughy et al. (1998) and Jayaraman et al. (2000) suggest that firm age may be a moderator of the results.

Fifth, comparisons of listed and unlisted firms may lead to measurement problems. This problem may be present in roughly 7 per cent of finance papers and 13 per cent of management papers. Accounting rules and regulations are similar for the two, but it may be that less outside scrutiny allows unlisted firms to account more conservatively (via earnings smoothing, for example). Additionally, a potential risk is colinearity with family-firm characteristics: as seen above, family ownership is nearly universal among privately held firms.

Sixth, including state-owned or state-controlled companies in samples may lead to biased results, as these firms are sometimes neither widely held nor market-oriented. These two possibilities introduce large biases as the comparison group of non-family firms is not pure. The table shows that 89.7 per cent of finance studies and 71.0 per cent of management studies, an overwhelming majority in both instances, include state-owned and state-controlled firms. If these firms are not segregated, the relative performance of family firms is not meaningfully comparable.

Seventh, industry composition may be a concern in empirical studies, as family ownership is concentrated in some industries (Villalonga and Amit, 2010). Faccio and Lang (2002) compare the ownership structure of financial firms and non-financial firms. They find that financial firms are much less likely to be family controlled (26.54 vs. 48.15 per cent). As Figure 12 shows, more than half of the finance papers and 80.6 per cent of management studies include financial firms in their samples. Indeed, many of the studies include financial, real-estate and regulated firms

in their samples, possibly casting doubt on the validity of results, as it is difficult to compare the performance measures of financial and non-financial firms. Inclusion of these firms may skew the results because of the difficulty of calculating Tobin's Q for banks and because government regulations may affect performance. In contrast, the exclusion of certain firms from analyses may create a natural holdout sample. There is always the possibility that any satisfactory findings are the result of mere chance. In Panel C of Figure 13 we compare the median economic magnitude of studies excluding financial firms. The results are again very clear: studies including financial firms obtain higher profitability and valuation than studies excluding them. A promising avenue for future research would be further analysis of industry effects: for example, a better understanding of the industry distribution of family-owned companies as a prerequisite to understanding their relative performance.

Eighth, there is a large body of literature on the impact of investor protection on firm performance, corporate valuation, and ability to raise capital at lower cost (e.g., La Porta et al., 1997, 1998, 2000, 2006, 2008). This literature has shown that firms in good corporate governance environments perform better and pay less to raise outside debt and equity financing. Based on the results of this literature, in Panels E and F of Figure 13 we analyse whether the level of investor protection has an effect on the relative performance of family firms versus non-family firms. To measure the of investor protection per country, we use the two most commonly used proxies in this literature. Panel E shows all the single-country studies included in our survey by the legal origin of the laws of the country in which the firms are located.

Panel F breaks these studies down based on the level of legal investor protection afforded by the country's regulation as proxied by the anti-self-dealing index in La Porta et al. (2008). In both panels, the results are similar: family firms located in countries with better corporate governance do relatively better than family firms located in countries with poor investor protection. The greatest differences are those emerging from the studies on valuation. These suggestive new findings may be a reflection of family firms' ability to raise more capital at lower cost in environments in which corporate governance is solid, as outside investors and financiers feel more secure about their investments.

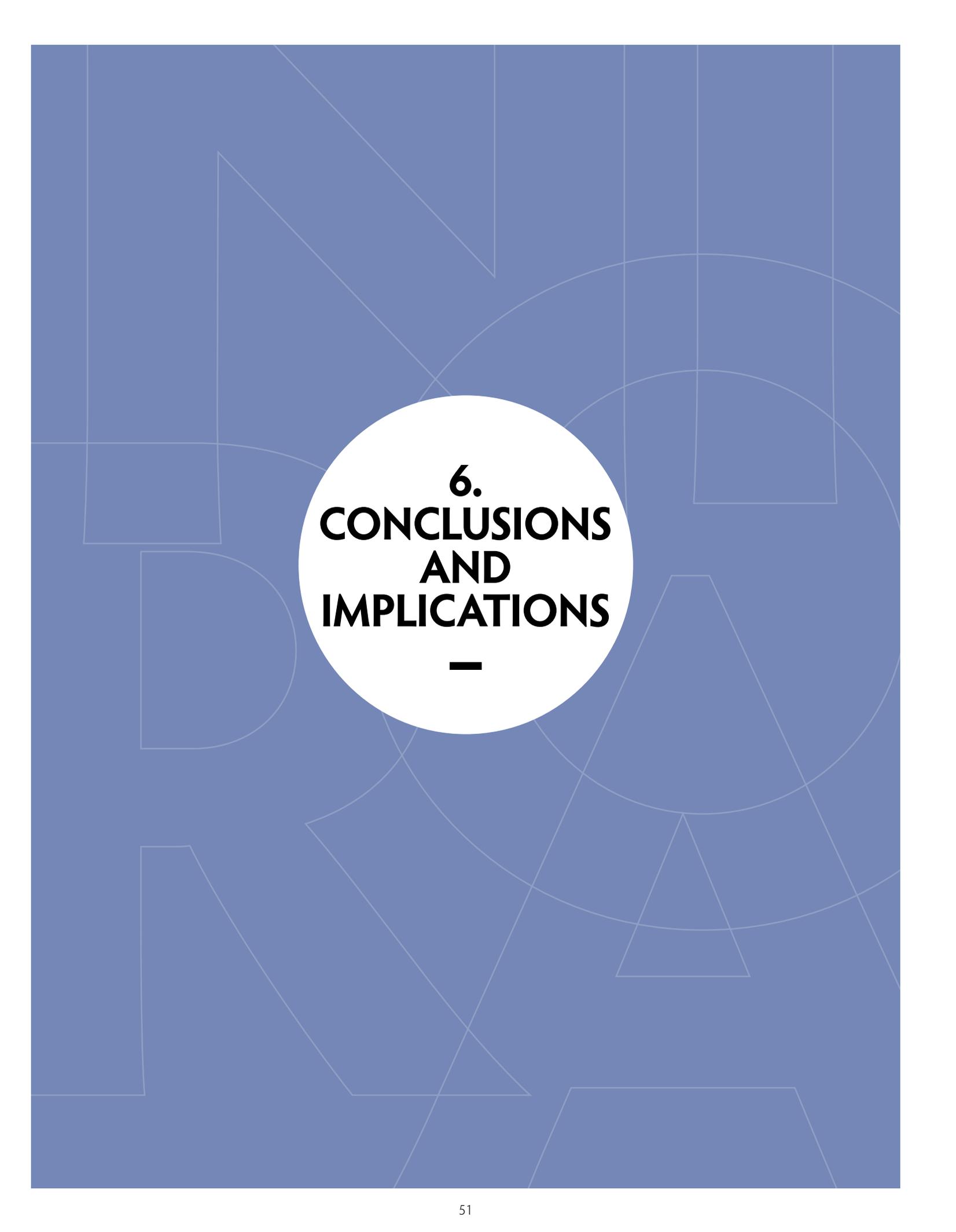
The last set of columns of Figure 12 shows the percentage of studies not dealing with survivorship bias. A survivorship bias is introduced by requiring firms to survive beyond the evaluation period. The figure shows that some 90 per cent of finance papers and 96.8 per cent of management papers do not deal with survivorship bias. When a firm fails, it is often removed from a database, together with its ownership and performance history. Its removal creates a survivorship bias because the database then tracks only the successful companies. Analyses that do not correct for this bias can lead to overstated results.²³ In Panel D of Figure 13, we show the differences in economic magnitudes between studies dealing with survivorship bias and studies not dealing with survivorship bias. The figure also suggests that not dealing with survivorship bias modifies the economic magnitude of the results.

On the whole, substantial data reclassification, as well as new data collection, is clearly needed. The results of each of the groups of studies we discuss

above must be kept in perspective. A significant amount of empirical work remains to be done to arrive at appropriate samples and benchmarks.

A final problem that may affect studies across all samples of firms is the probable endogeneity of family-firm regressors (Demsetz and Lehn, 1985; Bennedsen, Pérez-González and Wolfenzon, 2010). There is reason to believe that the formation of family businesses is a non-random process and some positive selection bias is to be expected. If because of their experience and longer time horizons families have superior information about their firms' outlook, they would tend to exit from firms with poor prospects. If this is the case, then the better performance of family firms may be the result not of less severe agency problems but of the tendency of families to persevere only in firms with brighter prospects. In other words, it is unlikely that a firm will be family-controlled unless the company is quite successful. Endogeneity leads to biased and inconsistent parameter estimates. For more information on endogeneity issues in studies on corporate performance of family firms and the ways to deal with endogeneity, the reader should refer to López-de-Silanes and Waxin (2014).

23 - Palia and Lichtenberg (1999) include all firms, even if they are delisted because of mergers and acquisitions or bankruptcies. Anderson and Reeb (2003a, 2003b) control for potential survivorship bias as robustness checks by using the subset of firms that is available for the entire sample period. Wang and Zhou (2012) restrict the sample, as a robustness check, to those firms that are consistently present in the S&P 500 index in each year through the sample period and re-run the regressions. As a robustness test, Lins, Volpin and Wagner (2013) identify all firms that do not survive as listed firms and add to this all firms that meet the data availability requirements of their baseline sample. The authors use this sample to estimate the determinants of non-survival, using both hazard rate and logit regression models. Their results show that family firms are not more likely to survive than other firms and that survival bias does not drive performance results. Kashmiri and Mahajan (2014) use a logistic regression analysis to determine whether there is a difference in the failure rates of family and non-family firms during the observation period. They find no statistical difference in the failure rates of family and non-family firms. Thus, they do not find evidence of survivorship bias in their data.



**6.
CONCLUSIONS
AND
IMPLICATIONS**

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6. CONCLUSIONS AND IMPLICATIONS

In view of the prominence of family firms in the global corporate landscape, it is not surprising that there should have been a recent surge of interest in family businesses and their performance. Our review attempts to shed light on the ongoing debate among financial economists about the performance of family businesses. Since there are conflicting reports on the effects of the presence of a family on firm performance, it is important to analyse the empirical literature and accurately differentiate between theories. We look at top academic research conducted over the past 35 years and evaluate what has been learned to date about the corporate performance of family firms. Combining the finance and management literatures, we assess the relationship of performance under different dimensions of family control; we likewise examine the economic magnitude of that relationship.

The findings of empirical studies of the performance of family firms are, as we have noted, often contradictory. Different studies use different types of firms, different countries, different sample periods and look at different dimensions of a family firm. Results are likely to vary from one institutional environment to another, from sample to sample, and from method to method. Our analysis of the data highlights three distinct patterns. First, empirical finance studies report largely conflicting effects of family control on firm performance. Studies of the profitability of family firms often yield positive results, but these positive results do not translate into higher valuations, and it appears that family firms do not distribute as many dividends to shareholders as do non-family

firms. Second, the management literature reports more positive performance evidence for all family-firm dimensions. Third, there is a large variation in the magnitude of the effects between and within the finance and the management literatures.

Although there is considerable variation from study to study, a more careful analysis of the different forms of family involvement and the methods used in the literature provides support for the three following conclusions. First, the presence of the large founding family is very often linked to better firm performance. Approximately 80 per cent of the studies in profitability and valuation find that the presence of a large founding-family shareholder in the firm is reflected in superior performance. Second, founder-CEO family firms exhibit higher median profitability and valuations than other firms with family CEOs. Descendant-CEO family firms, for their part, exhibit larger variation, with results going in both directions. Third, the evidence suggests that family firms with control-enhancing mechanisms and located in countries with poor investor protection perform worse.

In view of these conclusions, it is natural to ask whether the results are robust, unbiased, and not explained solely by samples that select the best firms. For this reason, we present an analysis of the potential problems besetting the literature and highlight their impact on the evidence. We see the methods scholars rely on, the ways they define family control and a family firm, and the samples in which they examine the behaviour of family firms.

Our analysis of the potential problems in the current literature identifies two key patterns. First, although variations in the results are not driven by the use of specific methodologies, over 85 per cent of finance studies and practically all management studies rely on an imprecise definition of family control. Furthermore, only about 60 per cent of finance papers and management papers explicitly define what they mean by a family firm. It is clear that there is a wide spectrum of opinion regarding what constitutes a family firm and what does not. The results may therefore not be comparable.

Second, several potential selection biases – question and non-response biases in surveys, multi-country analyses, intense coverage of public corporations and firms listed on large indexes, inclusion of listed and unlisted firms, inclusion of state-owned and -controlled firms, inclusion of financial firms, and survivorship bias – may affect the robustness of empirical results. Some of the studies we survey suggest tests to alleviate some of these concerns. The next generation of papers should try to empirically address the relevance of such possibilities and attempt to correct these biases, if they do indeed exist.

Our review shows that last decade has seen an explosion in research on family firms. But although much has indeed been learned about the performance of family firms, there are several important areas in which more research could and certainly should be done. We believe there are five aspects of family firms that need to be better understood.

First, as we have discussed above, many of the studies have failed to provide satisfactory definitions of family control. A more profound

analysis of family control may inform the reader of whether the results are robust. Second, we need to examine more closely the set of factors that may account for the performance differences in family firms. The generally positive performance effect of the presence of a large founding shareholder or a founder CEO raises the question of what makes these firms different and what about founding families and CEOs enables them to outperform. Some features of family firms are difficult to measure (e.g., the long-term view of family firms), but a potentially fruitful direction for further inquiry is to extend the understanding of these firms and to provide tangible proxies for the characteristics that make them different from widely held corporations. The large variation in outcomes of descendant-CEO family firms calls for further work to analyse the type of descendant who becomes CEO. The third vital area of further study is how to make sense of the different results across performance measures. As pointed out earlier, it is not clear how to match the positive relative profitability of family firms with the relatively lower corporate valuations and productivity, and the less generous distribution policies to shareholders by these firms. Fourth, although there has been some work on the dynamics of the boards of family firms, the impact of various governance structures still needs more examination. Research on corporate governance moderators in family firms has focused mostly on the proportion of independent directors. Useful progress can be made by examining more governance mechanisms, particularly board committees and board make-up. Finally, the vast majority of the literature covers large family firms in developed countries. Some of the evidence reviewed above suggests that the results can vary significantly depending on the country of analysis,

the size of the firm, and whether or not the firms are listed. The performance of small and non-listed family firms could thus be a rather profitable area for future work.

APPENDIX



List of finance studies reviewed:

Performance indicators,
dimensions of a family firm and
key topics for a family firm

APPENDIX: LIST OF FINANCE STUDIES REVIEWED: PERFORMANCE INDICATORS, DIMENSIONS OF A FAMILY FIRM AND KEY TOPICS FOR A FAMILY FIRM

This appendix lists the finance (Panel A) and management (Panel B) studies we reviewed; these studies of the corporate performance of family firms are listed by performance measure and family-firm dimension. An "x" in a cell indicates whether the particular performance measure is covered in the study or whether the paper presents tests of differences in means and medians or regressions with a certain family-firm dimension.

Panel A - Finance studies

Study	Performance measure				Ownership				Family-firm dimension				Board representation
	Profitability	Valuation	Productivity	Dividend policy	Large family shareholder	Family control	Family firms with control-enhancing mechanisms	Family CEO	Founder CEO	Descendant CEO	Management		
											Family CEO	Descendant CEO	
Jacquemin and De Ghelincq (1980)	x				x								
Holderness and Sheehan (1988)	x	x				x							
Morck, Shleifer and Vishny (1988)		x						x					
McConnell and Servaes (1990)		x			x								
Yermack (1996)		x						x					
McConaughy, Walker, Henderson Jr. and Mishra (1998)	x	x						x	x		x		
Claessens, Djankov, Fan and Lang (1999)		x						x					
Palia and Lichtenberg (1999)			x										
Short and Keasey (1999)	x	x											
DeAngelo and DeAngelo (2000)	x	x		x				x					x
Morck, Stangeland and Yeung (2000)	x							x					
Faccio, Lang and Young (2001)				x				x					
Claessens, Djankov, Fan and Lang (2002)		x						x					
Anderson and Reeb (2003a)	x	x						x					
Anderson and Reeb (2003b)	x		x					x					
Anderson and Reeb (2003c)	x	x						x					
Cronqvist and Nilsson (2003)				x									
Gugler (2003)													
Lins (2003)		x											
Barth, Gulbrandsen and Schøene (2005)			x										
Klein, Shapiro and Young (2005)		x											
Maury and Pajuste (2005)	x	x											
Yeh (2005)		x											x
Yeh and Woitátke (2005)	x	x											x

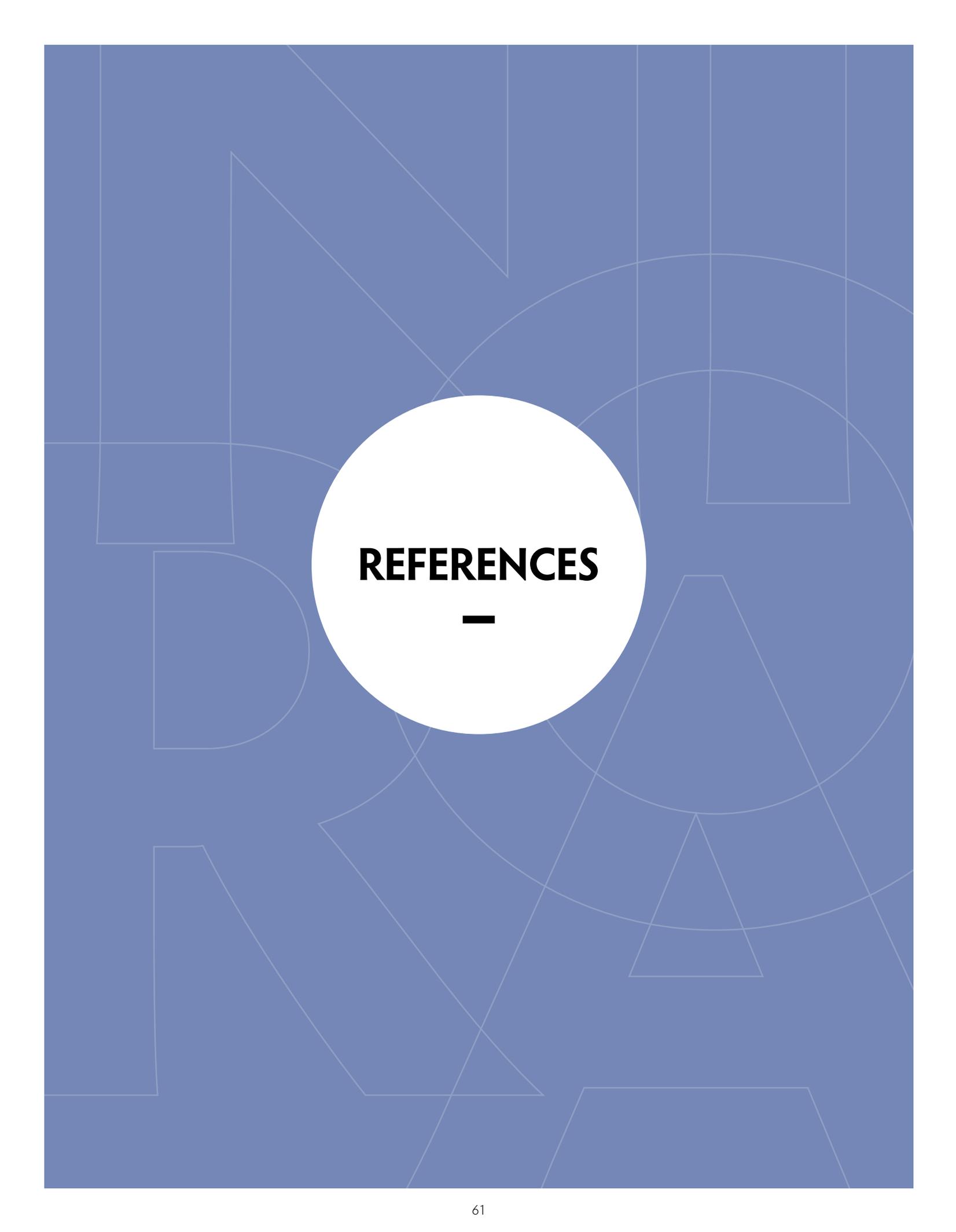
Study	Performance measure				Family-firm dimension								
	Profitability	Valuation	Productivity	Dividend policy	Ownership			Management					
					Large family shareholder	Family control	Family firms with control-enhancing mechanisms	Family CEO	Founder CEO	Descendant CEO	Board representation		
Barontini and Caprio (2006)	x	x					x			x			x
Corsijens, Peyer and Van der Heyden (2006)	x	x		x			x						
Ehrhardt, Nowak and Weber (2006)	x								x	x			
Favero, Giglio, Honorati and Panunzi (2006)	x	x							x	x			
Maury (2006)	x	x							x				
Villalonga and Amit (2006)	x	x		x					x	x			
Ali, Chen and Radhakrishnan (2007)	x	x											
Choi, Park and Yoo (2007)		x											
Miller, Le Breton-Miller, Lester and Cannella Jr. (2007)		x											
Snaer and Thesmar (2007)	x	x		x						x			x
Andres (2008)	x	x								x			x
Bertrand, Johnson, Samphantharak and Schoar (2008)	x												
Bozec and Laurin (2008)	x	x					x						
Hu and Zhou (2008)	x		x										
King and Santor (2008)	x	x					x						
Palia, Ravid and Wang (2008)	x	x											
Adams, Almeida and Ferreira (2009)	x	x								x			
Anderson, Duru and Reeb (2009)	x	x					x						x
Fahlenbrach (2009)		x											
Setia-Atmaja, Tanewski and Skully (2009)		x		x									
Villalonga and Amit (2009)		x											x
Chen, Chen, Cheng and Shevlin (2010)	x	x							x				
Chen and Nowland (2010)	x	x											
Margaritis and Psillaki (2010)	x												
Becker, Cronqvist and Fahlenbrach (2011)	x			x									
Li and Srinivasan (2011)		x											x
Masulis, Pham and Zein (2011)	x	x											
Connolly, Limpapayom and Nagarajan (2012)	x	x											
Wang and Zhou (2012)	x	x											
Chen, Gray and Nowland (2013)	x	x								x			x
Feldman, Amit and Villalonga (2013)		x											

Study	Performance measure				Ownership				Family-firm dimension			
	Profitability	Valuation	Productivity	Dividend policy	Large family shareholder	Family control	Family firms with control-enhancing mechanisms	Management			Board representation	
								Founder CEO	Family CEO	Descendant CEO		
Isakov and Weiskopf (2013)				x	x			x				x
Lins, Volpin and Wagner (2013)		x				x						
Mehrotra, Morek, Shim and Wiwattanakitang (2013)	x	x			x							
Isakov and Weiskopf (2014)	x	x			x				x			x

Panel B - Management studies

Study	Performance measure				Ownership				Family-firm dimension			
	Profitability	Valuation	Productivity	Dividend policy	Large family shareholder	Family control	Family firms with control-enhancing mechanisms	Management			Board representation	
								Founder CEO	Family CEO	Descendant CEO		
Daily and Dalton (1992)	x	x								x		
Willard, Feesser and Krueger (1992)	x	x	x							x		
Wall (1998)			x		x				x			
Jayaraman, Khorana, Nelling and Covin (2000)		x								x		
Thomsen and Pedersen (2000)	x	x			x							
McConaughy, Matthews and Fialko (2001)	x	x		x						x		
Randey and Goel (2003)	x	x								x		x
Anderson and Reeb (2004)		x			x							x
De Miguel, Pindado and De La Torre (2004)		x			x							
Lee (2006)	x				x							x
Braun and Sharma (2007)		x			x							
Martinez, Storch and Quiroga (2007)	x	x			x							
Uhlaner, Floren and Geerings (2007)	x				x							
Allouche, Amann, Jausaud and Kurashina (2008)	x				x				x			
He (2008)	x									x		
Sciascia and Mazzola (2008)	x				x				x			
Silva and Majluf (2008)	x	x			x				x			x
Randey, Dibrell and Craig (2009)	x	x			x				x			x

Study	Performance measure				Family-firm dimension							
	Profitability	Valuation	Productivity	Dividend policy	Ownership			Management				
					Large family shareholder	Family control	Family firms with control-enhancing mechanisms	Family CEO	Founder CEO	Descendant CEO	Board representation	
Kowalewski, Stetsyuk and Talavera (2010)	x				x				x			x
Minichilli, Corbetta and MacMillan (2010)	x								x			
Molly, Laveren and DeLoof (2010)	x										x	
Yoshikawa and Rasheed (2010)	x			x								x
Miller, Le Breton-Miller and Lester (2011)	x				x				x			
Miller, Minichilli, Le Breton-Miller, Corbetta and Pittino (2012)	x									x		x
Minichilli and Berrone (2012)	x				x				x		x	x
O'Boyle Jr., Pollack and Rutherford (2012)	x				x				x			
Van Essen, Carmey, Gedajlovic and Heugens (2012)	x	x			x							
Barbera and Moores (2013)			x		x							
Mazzola, Sciascia and Kellermanns (2013)	x				x				x			x
Miller, Minichilli and Corbetta (2013)	x								x			
Kashmiri and Mahajan (2014)		x			x						x	x



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