

# The Effect of Family Control on Firm Value and Performance. Evidence from Continental Europe

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## Abstract

We investigate the relation between ownership structure and firm performance in Continental Europe, using data from 675 publicly traded corporations in 11 countries. Our results confirm that families are the type of controlling shareholders that most recur to the control-enhancing devices which are associated with lower valuation and performance. However, even after taking into account that family-controlled corporations exhibit larger separation between control and cash-flow rights, our results do not support the hypothesis that family control hampers firm performance. Valuation and operating performance are significantly higher in founder-controlled corporations, and are at least not worse than average in descendants-controlled corporations. Thus, our results lead to the conclusion that family control is positive for firm value and operating performance in Continental European firms. This is true not only when the founder is still alive, but also when the controlling stake is held by descendants that sit on the board as non-executive directors. When a descendant takes the position of CEO, family-controlled companies are not statistically distinguishable from non-family ones in terms of valuation and performance.

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Keywords: ownership structure, continental Europe, family control, corporate performance, corporate valuation.

JEL Classifications: G30, G32

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The effect of family control of public corporations is a growing field of interest in the finance and management literature. In this paper we address the point by studying a sample of 675 large public corporations in Continental Europe, where previous studies suggest family control is not less widespread than in developing areas like Asia and Latin America and, in truth, in most part of the world with the notable exceptions of U.S. and Great Britain.

Family control of public corporations is considered with mixed feelings by European public opinion. On one hand, family control is respected because many European large companies have prospered under the founding family for long time, sometimes for centuries, thereby accrediting the view that families are long-term investors committed to the success of the firm they invest in. On the other hand, the different priorities that families may have with respect to those of outside shareholders, are seen as a potential for conflicts of interest that may hinder value creation and growth of European companies. Families are clearly oriented to maintaining control of the companies they found or acquire, and recur often to the control-enhancing devices (dual-classes shares, pyramids and others) that several studies have proved to be associated with lower value-creation (Claessens *et al.*, 2002; Lins, 2003; Gompers, Ishii and Metrick, 2004), and that many critics would like to see banned by EC regulation (see the EC “High Level Group of Company Law Experts” report, also known as Winter report, HLG, 2002 a and b). Families are often accused of considering executive positions in the firm as a channel for providing highly-remunerated jobs to the offspring, thereby depriving outside shareholders of the value-creation potential that the selection of the best managers on the market would provide.

Since family control can have both positive and negative properties, empirical evidence is of paramount importance for judging about its final effect and for orienting regulations that could hamper the persistence of family control. But, turning to the academic field, we can see that empirical literature about family control of public corporations has been rather focused on the U.S., starting from Shleifer and Vishny (1986) and Morck, Shleifer and Vishny (1989). After them, Denis and Denis (1994)

study majority-owned firms, and find that, although most of them are characterized by family involvement, they do not exhibit specific inefficiency features. Many papers highlight that founder-CEOs have a positive effect on corporate performance (McConnaughey *et al.*, 1998; Palia and Ravid, 2002; Anderson and Reeb, 2003; Adams, Almeida and Ferreira, 2003; Falenbrach, 2003; Villalonga and Amit, 2004). A critical event for family control is clearly the retirement of the founder coupled to the “passing of the baton” to a heir, that often leads to a decline in the performance of the firm (McConnaughey *et al.*, 1998; Pérez-González, 2001, Villalonga and Amit, 2004). On the balance, Anderson and Reeb (2003) suggest that family ownership is an effective organizational structure in the U.S, while Villalonga and Amit (2004) remark that family control exhibits specific weaknesses when descendants are involved in top management.

Outside the U.S., recent theoretical analysis has highlighted the role families can be expected to play, especially when the financial markets are underdeveloped and the legal protection of investors is poor (Bhattacharya and Ravikumar, 2001; Burkart, Panunzi and Shleifer, 2003; Almeida and Wolfenzon, 2004). The empirical evidence about the effect of family control tends to be less benign than in the U.S.. Morck, Strangeland and Yeung (2000) find that family ownership does have negative implication for the efficiency of Canadian firms, and suggest that this “Canadian disease” can be spread in other parts of the globe. Faccio, Lang and Young (2001) report that family ownership in East Asia leads to severe conflicts with other claimants and hampers firm performance. Their results are supported by Claessens *et al.* (2002) who find that the negative effect of separation between ownership and control is largely driven by family control. There is no comprehensive evidence concerning European corporations, while the results of single-country studies (Gorton and Schmid, 2000; Volpin, 2002; Cronqvist and Nilsson, 2003; Sraer and Thesmar, 2004) give rise to a contrasted picture about the effect of family control.

Contrary to the results that could be expected on the basis of non-U.S. empirical studies, the evidence we obtain sheds light on the positive association of family control with market valuation and operating performance throughout Continental Europe. The

intriguing feature of the results we obtain is that families are the type of owners that most recur to control-enhancing devices associated with lower performance, yet there is no evidence that family control is negative for firm value and operating performance. If we consider both family affiliation and the percentage of cash-flow and voting rights held by the largest shareholder as explanatory variables of market valuation and operating performance, the effect of family control is neatly positive, meaning that for any given cash-flow/voting rights combination, families tend to be better than other types of controlling shareholders. If we put together the effect of family control with the ownership structure chosen by families, we obtain that part of the positive effect is wasted by the high use of wealth-reducing control-enhancing devices by families, but a residual positive effect is clearly still there. Thus, our results provide a contribution to the existing literature by warning that the simple observation of a large use of control-enhancing devices by family firms does not imply a global negative effect of family control, as it is often assumed.

We then move to consider what happens to family firms' performance when the company is still run by its founder or by the descendants, and what is the role that founders and/or descendants take up in the corporation. We obtain a confirmation of non-European results about the positive effect of founders. The presence of founders – either as CEO or as non-executive director – is associated with outstandingly high market valuation and operating performance. However, there is no evidence at all that descendants-controlled corporations underperform non-family firms. On the contrary, family firms remain better than non-family ones when descendants limit themselves to the role of non-executive directors, and are not worse than non-family ones when a descendant takes the helm of CEO.

## **I. Sample selection and data**

### *A. Sample selection*

Faccio and Lang (2002), in their study on the ownership structure in Western Europe, analyze a sample of 5,547 corporations, roughly corresponding to the universe of the

stock market listed corporations in 13 countries. Given the amount of data needed for the present study, we focus our attention on relatively larger companies – with assets worth more than € 300 millions as of the end of year 1999, according to Worldscope – on the assumption that more information can be found for them at a reasonable cost. We consider only Continental Western European countries, excluding Ireland and UK because their corporations are commonly considered to follow a different – “anglo-saxon” and more “shareholder -value-oriented” – style of management<sup>1</sup>. Therefore, we select corporations, according to the previously mentioned criterion, from 11 countries (Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Spain, Sweden and Switzerland<sup>2</sup>). We exclude financial (SIC 6000-6999) and regulated utilities (SIC 4900-4999); corporations in which the largest shareholder holds more than 95% of the share capital are also excluded<sup>3</sup>. We obtain the final sample composed of 675 corporations<sup>4</sup>.

In Table I we present the number of corporations in the sample by year, country<sup>5</sup> and industry (using Campbell’s (1996) classification of industries). The 675 corporations in 1999 decrease to 640 in 2000 and 606 in 2001 because of mergers, going-private and bankruptcies. The breakdown by countries shows that, quite surprisingly, the largest

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<sup>1</sup> Faccio and Lang also show persuasive evidence that this is associated with a different ownership structure pattern, featuring far more dispersed shareholdings and less relevance of family control.

<sup>2</sup> Of the continental Western European countries, we omit to consider Austria, Greece, Luxemburg and Portugal. For Austria, Luxemburg and Portugal, preliminary research showed that inclusion would have increased the sample size to a negligible extent. We included corporations of Greece at an early stage of the research, but we realized that during the period covered by the study this country’s firms experienced a major change in accounting rules, that made not comparable across years the valuation and performance variables.

<sup>3</sup> We include this requirement because in some countries, given the lack of efficient freeze-out regulations, corporations that are just nominally public, whose shares are not actually traded, may be still in the stock market list (this is relatively frequent in Germany).

<sup>4</sup> After excluding financial corporations and non-financial corporations smaller than the specified threshold, or with a too large first shareholder, we obtain 761 companies, 70 of which have more than one class of shares outstanding, but only the inferior voting rights one is listed (this is particularly relevant in the four Nordic countries, Germany and Switzerland). We exclude these companies because we cannot measure Tobin’s Q on the basis of the market value of their equity. We exclude also 12 companies that are public limited partnership (*accomandites* in French, *Kommanditgesellschaften* in Germany), and 4 companies for which we are not able to find reliable ownership structure data. We thus arrive to a final number of 675.

<sup>5</sup> In the table, the four Nordic countries are presented as a single aggregate. This is done for compactness in tables I, II and III. In the regression analysis we present later, each Nordic country is individually considered.

number of corporations belong to France (144 in 1999, or 21.3% of the total), and not to Germany (119, 17.5%), by far the largest economy of the area. Three countries, Netherlands, Italy and Switzerland, weigh in the sample for around 10%, the others for around 5%.

Finally, the breakdown of the corporations by industries shows a fairly widespread distribution. Basic industry (14.3%), consumer durables (12.2%) and capital goods (11.5%) are the most represented industries.

### *B. The construction of the dataset*

Given the objectives of the paper, we can divide the variables forming the dataset in three groups; i) ownership, ii) valuation and iii) control variables. The measures of these variables are collected for the years 1999, 2000 and 2001.

#### *i) Ownership variables*

We have to obtain the identity of the ultimate largest shareholder, and the size of its cash-flow and voting rights according to the standard methodology developed by La Porta, Lopez-de-Silanes and Shleifer (1999), and followed by Claessens, Djankov and Lang (2000), Faccio and Lang (2002), Claessens *et al.* (2002), to which we refer for a more in-depth description.

To do this, we work on the following sources, that we quote in the order of preference. Best sources of information were considered 1) official registers held by stock market authorities and 2) information disclosed by the corporations, either in the “investor relation” section of their websites, or inside the body of their annual reports (that we could download from the websites in the vast majority of cases). If we find all the information needed in 1) or 2) we end the search of data about the ownership. Less reliable sources of information were considered 3) Worldscope, Extel and Osiris, 4) information contained in the various national annual directories of listed companies published by private entities, 5) information contained in the financial press, that we obtain both through Lexis-Nexis and web-search engines. For sources 3-5 we considered an information valid only if confirmed by two different sources. In appendix A we make a list of sources used by country.



We collect from these sources also some additional information about corporate governance, concerning; the size and composition of the board<sup>6</sup>, with separate indication of executive and non-executive directors<sup>7</sup>; the number of members of the board belonging to the controlling family, when there is one; in this case, whether the founder is still alive and has a role in board, or the family members controlling the company have to be classified as descendants. To obtain the latter variable we have to perform a particularly careful scrutiny of the documentation supplied by family companies in their websites, and of information available through the press.

The starting point for the ownership variables are thus the *Direct voting rights* and *Direct cash-flow rights* held by the largest shareholders<sup>8</sup>, that are two different figures in case of a share capital structure departing from one share/one vote. A particular case in point is France, where it is possible for companies to adopt a provision whereby all shareholders that register by the company and hold their shares for more than a pre-specified number of years<sup>9</sup> obtain two votes for each share held. Since stock market regulations require that companies disclose separately in annual reports the voting and the cash-flow rights, we collect also this information and thus obtain differences between *Direct voting rights* and *Direct cash-flow rights* arising in France for this reason.

We then trace the map of the ownership of the stakes, in order to identify the ultimate shareholders and their ultimate ownership of voting rights and cash-flow rights. The final result is the measure of the share of voting and cash-flow rights of the largest ultimate shareholder in each corporation. Therefore, the *Ultimate cash-flow rights* are those held by the largest shareholder after taking into account the whole chain of

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<sup>6</sup> Or of the two boards, in countries where dual boards are mandatory – Germany and the Netherlands – or eligible – Finland and France.

<sup>7</sup> With dual boards, member of the Supervisory boards are considered non-executive, and members of the Management boards executive.

<sup>8</sup> The detail of mandatory disclosure about the minimum size of shareholdings varies across countries between 2% and 5%. We collect the largest three available, whatever the national regulation. In doing this, we sum up the direct shareholdings pertaining to a single ultimate owner, even if they are held through different juridical subjects.

<sup>9</sup> That we find to be comprised between two and four years.

control<sup>10</sup> (if family A owns 50% of direct cash-flows of B and B owns 40% of direct cash-flows of C, family A owns ultimately  $50\% \times 40\% = 20\%$  of cash-flows of C) and *Ultimate voting rights* are the voting rights held in the weakest link of the control chain. 10% is the cutoff point for the existence of a control chain, in the sense that a listed company that has no shareholder larger than 10% can be the apex of a control chain, but is considered widely held and therefore not controlled.

The benefit of working on a not too large sample was evident in the search for the identity of the ultimate largest shareholder. While Faccio and Lang (2002), given the huge size of the sample of firms they deal with<sup>11</sup>, had to accept unavoidable limits in their effort to trace the ultimate owners, we can gather the identity of the ultimate shareholder for the quasi totality of the eligible firms.

#### *ii) Valuation variables*

The valuation and operating performance variables we employ are *Tobin's Q* and the accounting *Return on Assets* (ROA) measured at the end of 1999, 2000 and 2001.

We employ two definitions of Tobin's Q. In the first one we define Tobin's Q, as usual, as the ratio between (Book value of total assets - Book value of shareholders' equity + Market value of shareholders' equity) and (Book value of total assets). Book value is taken from Worldscope; the market value of equity is from Datastream, and is the sum of the market value of profit-participating shares (equal to the total number of shares outstanding multiplied by the market price at the end of each of the three years 1999, 2000 and 2001). The problem with this traditional Tobin's Q is that in the corporations of our sample, full consolidation of the financial statements of controlled companies is the norm<sup>12</sup>. Then, in the financial statements we find the "total assets" on the left side of

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<sup>10</sup> We also consider multiple control chains and cross-holdings in the sense defined by Faccio and Lang (2002).

<sup>11</sup> When Faccio and Lang failed to identify the owners of an unlisted firm, they classified them as a family. Whilst in their paper it is absolutely reasonable, in our paper exact identification of the ultimate shareholder is necessary. In Faccio and Lang less than half of the family controlled firms are controlled by an identified family, the remaining are controlled by an unlisted firm. However, it is to remark that the results we present in this paper do in general agree with theirs for what concerns the statistical diffusion of family control in Continental European countries.

<sup>12</sup> We wish to remark that 9 of the 11 countries belong to the European Community. This has positive implications for the homogeneity of accounting data across countries, because national accounting

the balance sheet to be equal to the sum of ‘liabilities’, ‘minority interests’ and ‘shareholders’ capital’ on the right side. To correctly measure Q, the point is that we can observe the market value of the shareholders’ capital only; the market value of ‘liabilities’ can be assumed to be approximately equal to its accounting value, but the same cannot be said for the ‘minority interests’, since the market-to-book ratio of ‘shareholders’ capital’ is usually larger than 1. Therefore, the traditional way of measuring Tobin’s Q is likely to understate more its true value, the more ‘minority interests’ are present. To obviate, we consider a second definition of Tobin’s Q, in which we assume that the unobserved market-to-book of ‘minority interests’ takes the same value of the observed market-to-book of the controlling company’s ‘shareholders’ capital’. The results we obtain with the two different definitions are very similar, anyway in the paper we report those obtained employing the second one.

We employ two definitions also for the *Return on Assets (ROA)*. In the first one, it is simply the ratio between ‘operating profit’ and ‘total assets’ (both variables are taken as supplied by Worldscope). The problem here is that ‘operating profit’ does not include ‘financial income’ and ‘income from associated companies’, that are generated by assets which are included in ‘total assets’. Thus, we employ a second definition of ROA, in which we deduct from ‘total assets’ the value of the two items ‘cash and short-term investments’ and ‘investment in associated companies’. Once more, the results we obtain are very similar, and in the paper we report those obtained employing the second one<sup>13</sup>.

### *iii) Control variables*

In regression analysis we employ the following control variables that are standard in the literature: the Industry in which each firm operates (two-digit SIC code)<sup>14</sup>; the Size of

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standards must comply with EC regulation concerning annual reports. Also in the two countries that do not belong to EC – Norway and Switzerland – the national rules tend to conform to EC regulation. A further consequence of EC regulation, is that in corporations of our sample, full consolidation of the financial statements of controlled companies is the norm.

<sup>13</sup> We also consider the ratio EBIT/Total Assets. We note that EBIT includes extraordinary gains and losses that add considerable variance to results without giving rise to systematic differences.

<sup>14</sup> We actually considered two alternative criteria for defining this control variable. The first one is Campbell’s classification (1996) of SIC codes into 12 industrial sectors. The second is the two-digit SIC

the corporation, measured by Total Assets (in the regressions, the logarithm of) as provided by Worldscope at the end of each year; a Growth variable, that we measure as the percent increase in sales in the previous year from Worldscope; and Leverage, defined as the book value of total financial debt divided by the book value of equity at the end of each year (these data too are from Worldscope)<sup>15</sup>.

## II. Descriptive Statistics

In this section we present descriptive statistics for the variables we employ in the regression analysis discussed in the following section III. In part A of the section we focus on the concentration of voting rights and cash-flow rights, and in part B on the descriptive evidence about family control.

### A. Ownership concentration

In Table II we present descriptive statistics for some variables of main interest by country (data for year 1999). In the upper part of the table we present the average and median values of the ultimate voting and cash-flow rights of the largest shareholder in the 675 companies (1999). These data provide evidence that is perfectly in line with Barca and Becht (2001) and Faccio and Lang (2002). European companies exhibit ownership pattern that are among the most concentrated in the world, even after discarding the smallest caps. In our total sample half of the companies have a shareholder with more than 37% of the ultimate voting rights, that is much more of what is observed not only in U.S. and Great Britain, but also in Asia (Claessens *et. al*,

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code. Since the two-digit SIC yields more explanatory power in the regressions, we normally use in the paper, and employ the more compact Campbell's classification only when showing descriptive statistics.

<sup>15</sup> We also considered as control variables the *Age* of the corporation and the *Number of years since IPO*. However, we have many missing observations for these two variables, even after performing a search on several sources. Since the results when we employ them are very similar to those we obtain without, we prefer usually to show in the paper the latter. We measure *Age* as the natural logarithm of the number of years from the foundation of the firm to 1999. *Number of years since IPO* is the natural logarithm of the number of years from the IPO to 1999.

2002, report that 77% of the companies of their sample do not have a controlling shareholder with 40% or more of ultimate voting rights).

The difference between the share of voting and cash-flows rights of the largest shareholder, arising from both dual-class shares and pyramiding, is also relevant though not huge (the median is 8.5%) and so it is in nearly all economies. In the table we present also the proportions of companies by the various types of the largest shareholder. *Families* are by far the most frequent largest shareholder (52.3% of the cases). After the families, we find the *widely held corporations*<sup>16</sup> (16.9%), *financial institutions* (15%), the *state* (8%), and *other entities* (6.9%).

In Table III we analyze the empirical distribution of cash-flow and voting rights across the corporations in the sample. In Panel A data are grouped according to the ultimate cash-flow rights held by the largest shareholder. The evidence confirms the high concentration of ultimate cash-flow right already noted in Table II. High cash-flow right ownership, however, does not preclude the existence of separation of voting and cash-flow rights, so that in the whole sample 42.1% of the corporations have some extent of separation between the two. Finally, in Panel A also the average Tobin's Q, ROA and size for the different cash-flow rights classes are shown. Their observation does not suggest the presence of univariate association between cash-flow rights on one side and Tobin's Q and ROA on the other.

In Panel B data are grouped according to the wedge between voting and cash-flow rights. It is interesting to consider the evidence in the right hand of Panel B, where we provide data about the sources of separation between voting and cash-flow rights. The separation, that we already noted to be present in 42.1% of the corporations, is due in 21.5% of the 675 corporations to dual classes of shares (including double voting shares in France), in 13% to pyramidal control<sup>17</sup>, and in 7.4% to the presence of both dual classes and pyramidal control. This means that nearly 80% of the corporations in our

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<sup>16</sup> In this group we include both widely-held corporations and corporations controlled by the widely-held ones.

<sup>17</sup> In this table and in all the others, we include under 'pyramidal control' also the cases of control through multiple control chains and cross-holdings.

sample are not controlled through a pyramidal scheme, suggesting that pyramidal groups are in Continental Europe fairly common, but not pervasive as they are in Asia<sup>18</sup>.

### *B. Family control*

In Table IV we present summary statistics about the type of the largest shareholder (Panel A), and about the involvement in the corporations of families (Panels B and C). In Panel A, corporations are grouped in the five traditional types *Widely held*, *Family*, *State*, *Financial* and *Other*. We already observed, while commenting the content of Table II, the prevalence of family as largest shareholders, that is clearly visible also in the first column of Table IV.

In the second and third column, average Tobin's Q and ROA for each class are presented. No clear pattern emerges from their observation, and we can anticipate that some inferences that could be suggested by this first figures are not confirmed by the regression results<sup>19</sup>. More relevant is actually the evidence about the average size of the corporations across the different groups, where it is clear that family control – as could be largely expected – is more diffused in the comparatively smaller firms.

The remaining columns are about the degree of separation between control and ownership across the different groups. Family- and state-controlled firms are those where the largest shareholder invests more, in the average more than one third of the total shareholder capital in terms of ultimate cash-flow rights. But, what better distinguishes family corporations is their larger wedge between voting and cash-flow rights, higher than 10%. Actually, for the majority of the family corporations in our sample (close to 57% of them) we find that some control-enhancing device is in place<sup>20</sup>.

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<sup>18</sup> Claessens et al. (2002) report that in their non-financial and non-utilities sample of 1301 corporations there are only 88 cases of dual-class shares. On the contrary, the vast diffusion of separation between control and cash-flow rights through pyramids in their sample can be inferred by the fact that when they collapse companies belonging to the same group into a single observation, the sample size shrinks from 1301 to 872.

<sup>19</sup> For instance, the average Tobin's Q of state-controlled companies seems to be comparatively high, but this is simply an effect of the industries in which these corporations tend to cluster.

<sup>20</sup> Anyway, the use of control-enhancing devices is relevant also for corporations controlled by miscellaneous entities (nearly 45% of them) state-controlled corporations (more than 35%) and financial-controlled corporations (close to 30%). About miscellaneous entities, it is to note that this group is formed mainly by corporations controlled by non-profits, cooperatives and employees-controlled-schemes. Closer

In Panels B and C of Table IV we present descriptive statistics about the involvement of families in the management of corporations. Beginning from now, we refer to the strict definition of family firm that we shall employ in the regression analysis presented in the following sections, according to which it is not enough that the largest shareholder at the 10% cut-off is a family (this is the only requirement for inclusion in the group of 355 family-controlled corporations in Panel A) but it must be true also that either the family controls more than 51% of direct voting rights, or controls more than the double of the direct voting rights of the second largest shareholder. We employ this definition to obtain neater evidence about the possible negative effect of family control often echoed in the popular opinion in Europe, because, when looking at our data, we realize that in several corporations a family is actually the largest shareholder with more than 10% voting rights, but there are one or more other shareholders (usually banks or the State) with similarly large holdings, so that these corporations may be thought of as controlled by a coalition of large shareholder more than by the family. In order to obtain a clearer response to the question whether family control is negative, indifferent or positive for European corporation, we resort to the strict definition of family control we have just described, in which the controlling power of the family through the voting rights held cannot be denied. This leads to the count of 314 family-controlled corporations we find in panels B and C, instead of the 355 reported in Panel A.

In Panel B we can observe that in nearly 35% of the 314 corporations the CEO is a member of the family; in half of them the CEO is not a member of the controlling family, but at least one member of the family sits on the board of directors<sup>21</sup>; in just 15% the family does not sit on the board at all. Average valuation and performance measures between corporations with family CEO and family-non-executives are quite similar, but Tobin's Q is lower for corporations in which the family stays outside of the board. The average family-CEO corporation is smaller. The percentage of corporations that are controlled through control-enhancing devices is quite similar across the three

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examination of data shows that cooperatives and employees-controlled-schemes often recur to control-enhancing devices.

<sup>21</sup> Often being its non-executive chairman (it happens in 49.3% of the corporations in which the CEO is not from the family, but at least one non-executive is).

types. However, the average size of the wedge between voting and cash-flow rights is smaller for family-CEO corporations.

In Panel C we split the sample by founder<sup>22</sup> and descendants corporations. Founder-controlled corporations are 92 out of 295<sup>23</sup>, or about 32% of family corporations. In more than half of them the founder is also the CEO, and in about 40% the founder is non-executive director (but then, it is not rare that the CEO is an other member of the family). In descendants-corporations the proportion between top-management and board-level family participation reverses. In little more than 25% of them the CEO is a member of the family, while one or more members of the family take a non-executive position in the board in about 55%.

Founder corporations are better off in terms of average Tobin's Q and operating performance. Founder corporations also exhibit a more concentrated ownership and far less separation between voting and cash-flow rights. This can be seen both in the percentage of corporations without such separation, that are more than the half in founder-corporations and just about one-third in descendants-corporations, and in the average wedge, that is clearly higher in descendants-corporations.

### **III. The effect of family control on firm value and performance**

We can then move to the core of the paper, i.e. the analysis of the relation between market valuation (Tobin's Q) and operating performance (ROA) on one side, and the

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<sup>22</sup> We have to explain what we mean with the term "founder". The simplest case is the one of a corporation whose founder is still alive (and, obviously, has voting-right control, alone or together with other members of his family). However, we consider a corporation founder-controlled also when it is controlled by an other corporation that, in its turn, is controlled by its own founder. Finally, we consider founder-controlled a corporation controlled by an individual that did not found it, but took control of it without being a descendant of the previous controlling family (an illustrious example that can be done is the one of Mr. Arnault, who became the controlling shareholder of the Dior-LVMH group without belonging to the founding family). We consider this individual as the founder of a new family dynasty. Consistently, we consider descendants also the descendants of someone that took control of a corporation without being its founder.

<sup>23</sup> We refer to a total of 295, because for 2 of the 314 family-controlled corporations we miss information about the composition of the board of directors, and for further 17 we were not able to conclude whether the corporation is still run by the founder or by his descendants.



variables representing ownership concentration and family control, on the other side.

The general form for the regressions is:

$$\text{Firm performance}_{it} = a + b(\text{family firm}_{it}) + c(\text{ownership variables}_{it}) + d(\text{control variables}_{it}) + e(\text{two digit SIC code dummy variables}) + f(\text{year dummy variables}) + g(\text{country dummy variables}) + \varepsilon_{it}$$

where

*Firm performance* = Tobin's Q (natural logarithm of) and ROA;

*Family firm* = binary variable that equals one when a corporation is controlled by a family<sup>24</sup>, and zero otherwise; in various regressions we use more binary variables identifying different types of involvement of families in management;

*Ownership variables* = a vector composed by the share of ultimate cash-flow rights, and the difference between share of voting and share of cash-flow rights (wedge); in some regression specifications this will be omitted;

*Control variables* = a vector of variables composed by total assets (natural logarithm of), leverage (book value of total financial debt / book value of equity), sales growth in the previous year;

*Two-digit SIC code dummy* = dummy variables that capture industry fixed effects;

*Year dummy variables* = dummy variables that capture year fixed effects;

*Country dummy variables* = dummy variables that capture country fixed effects.

A problem we encounter is the presence of outliers in the dependent variables, especially in Tobin's Q. In the years 1999-2001 the stock market conditions produce a number of very high Tobin's Q that is larger than in previous studies (for instance, average Tobin's Q are 4.22 in Campbell's classification "unregulated utilities" industry). Although we use the natural logarithm of Tobin's Q, we note that some extreme values of  $\ln(Q)$  affect the results in a significant way. We deal with this problem by applying a winsorizing procedure to clean data. In the regressions we present in the following sections, the observations for the dependent variables are winsorized at the 5% level.

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<sup>24</sup> We employ the strict definition of family control, that leads to a number of 314 family-controlled corporations, as we explain in section II.B.

In the following part A we present the results about the general relation between corporate performance, ownership concentration and family control; in part B the results of further analysis about the different cases of family control.

*A. The relation between corporation performance and ownership concentration*

Table V illustrates the general relation between corporate performance, ownership concentration and family control.

In columns 1 and 4 of the Table we report the results for the regression specification in which the dummy-variable for family control is omitted. In this specification we simply test the relationship between the performance variables on one side, and the share of cash-flow rights and the wedge between the voting and the cash-flow rights held by the largest shareholder on the other side, abstracting from family control matters, similarly to what Claessens *et al.* (2002), Lins (2003) and Gompers, Ishii and Metrick (2004) do. The general picture emerging from their works – that regard respectively East-Asia, various emerging markets, and U.S. – is that i) valuation and performance *increase* in the cash-flow rights of the largest ultimate shareholder and ii) valuation and performance *decrease* in the wedge between the voting and the cash-flow rights of the largest shareholder.

Our results are much weaker than theirs. The regression results in column 1 suggest that, in contrast with the strong positive relation that is found in Asia and U.S., there is no reliable relation between Tobin's Q and the share of cash flow -rights of the largest shareholder in European corporations<sup>25</sup>. More similar to Asia and U.S. is actually the regression result for the relation between Tobin's Q and the wedge between the voting and the cash-flow rights of the largest ultimate shareholder. Here we find that there is a negative relation between the two variables. The relation is statistically significant at the 10% level in regression of column 1, but becomes 1% significant in the regression of column 3 (we will comment extensively in the following part of this section about regressions 2, 3, 5 and 6, in which we introduce dummy-variables for family control).

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<sup>25</sup> A similar result is however found by Lins (2003) in a sample of 1433 firms from 18 emerging markets.

Therefore, our European evidence is consistent with the international evidence in showing the existence of negative association between corporate valuation and the control-enhancing devices that boost the voting power of the largest shareholder.

The results of the regression in column 4 show the further different picture emerging from the relation between accounting profitability and quantitative ownership variables. Here we find a strong positive relation between ROA and cash-flow rights – in line with the expectations and the Asian and U.S. results, and contrary to the absence of relation between Q and cash-flow rights in our sample – and a negative but non-significant relation between ROA and the wedge. To further complicate the picture, note the coefficients on the same variables in column 6 (after introducing dummy-variables for family control), that show a weaker positive relation (statistically non-significant) between ROA and cash-flow rights, and a stronger (but still statistically non-significant) negative relation between ROA and the wedge.

To sum up, we expected to find, both for market valuation (Q) and accounting profitability (ROA), a positive association with the cash-flow rights of the largest shareholder; we find practically no association as far as Q is concerned, and only weak evidence for ROA (the positive coefficients on ROA are not consistently statistically significant). We expected a negative association of both dependent variables with the wedge between the voting and the cash-flow rights of the largest shareholder; in this case results are more in line with expectations, since there is clear evidence of negative association for Q, and weak evidence of negative association for ROA (the estimated coefficients are actually negative, though not statistically significant).

#### *B. Corporation performance and family control*

Although these first results may be considered in themselves of some interest, they are just preliminary to the analysis of the interplay between quantitative ownership measures and family control, that is provided by the results in columns 2, 3, 5, 6 of Table V, where we report the outcome of two different regressions specifications in which the dummy-variable for family control is included.

Before considering the results, we wish to underline the meaning of these regression specifications. Much of the current diffidence about family control across the world stems from the observation that families grant their control by recurring heavily to those control-enhancing devices that seem tailored to majority shareholders willing to expropriate minority shareholders and/or entrench themselves in control. As a consequence, family control is suspected to be synonymous of lower profitability (at least in terms of profits declared in the official accounts) and lower market valuation. The results just presented about the negative association between valuation and the wedge between voting and cash-flow rights, together with the evidence that also in Europe families are the type of controlling shareholder that most recur to control-enhancing devices that generate wedge (see Table IV), are at first sight consistent with negative *ex-ante* expectations. The result that families are in the average a “bad” majority shareholder, however, should not be taken for granted on the basis of so simple observations, that may lead to hasty conclusions.

To understand this point, suppose, for instance, that we were in a world in which there are two types of controlling shareholders, A (families) and B (non-families), endowed with two different managerial skill levels, such that A is inherently more profitable than B. Suppose also corporate performance depended both on the skill of the controlling shareholder and on the controlling devices chosen between  $\alpha$  (one share-one vote) and  $\beta$  (control-enhancement devices), such that  $\alpha$  is more valuable than  $\beta$ . Also in the case a larger proportion of A controlling shareholders chose  $\beta$  strategies, it could still be possible that A were in the average better for of corporate valuation, depending on the actual size of the variables at play.

Suppose now that we perform a cross-sectional regression of corporate valuation on ownership variables, in the following two different ways:

- i) a cross sectional regression of valuation on a dummy-variable taking value 1 for families and 0 for non-families, without including quantitative ownership variables;
- ii) a cross sectional regression of valuation on the same dummy-variable, and on quantitative ownership variables (the first one, the cash-flow rights of the largest

ultimate shareholder, the second one, the wedge between cash-flow and voting rights).

Both regression specifications would be useful for the understanding of the empirical effect of the controlling shareholder type. The result of specification i) would inform us about the overall difference in average corporate valuation between the two types, without distinguishing the sources of this difference. The result of specification ii) would add something, informing us about how much the final effect is due to a differential skills effect – measured by the coefficient on the dummy – and to an ownership structure effect – measured by the coefficients on the two quantitative ownership variables. We have finally to add that, in order to allow for the possibility that the ownership structure effect is different between the two types, we could in a third specification include interaction terms (type\*quantitative ownership variables) among the regressors.

This is actually what we do on our sample. In the first specification (columns 2 and 5), that we can define “*gross-of-the-controlling-strategy*”, we do not include in the regressors the share of ultimate cash-flow rights and the difference between the share of voting and cash-flow rights. In the second one (columns 3 and 6), “*net-of-the-controlling-strategy*”, we include in the multivariate regression the dummy-variable for family along with the two continuous variables representing the share of cash-flow rights and the wedge between the voting and the cash-flow rights held by the largest shareholder. We can then look at the results in order to realize whether family-control, in the different ways we can measure it, is beneficial or harmful to value and operating performance.

The answer we can read in Table V is clearly favorable for family control in Continental Europe. In all the regressions, either with dependent variable Q (regressions 2 and 3) or with dependent variable ROA (regressions 4 and 5), the coefficient on the dummy-variable “family” is positive and highly statistical significant (in two cases at the 1% level, in the other two at the 5% level). This result seems particularly strong in its economic meaning. It suggests that family control is beneficial, both when we measure a “pure family effect” separated from an “ownership structure effect” (regressions 3 and

6) – and this could be not too much difficult to expect – and when we measure an “overall family effect”, in which we attribute to the type of control the effect of the ownership structures chosen by the firms belonging to this type – and this was more difficult to expect, given that families in the average do choose less value-efficient ownership structures – . Actually, the “overall family effect” turns out to be smaller than the “pure family effect”, but still large in statistical and economic sense.

More in detail, in regressions 3 and 6 (*net-of-the-controlling-strategy*) the coefficients on the family-dummies are positive and statistically significant both when the dependent variable is Q (regression 3, statistical significance 1%) and when it is ROA (regression 6, statistical significance 5%). This means that, for any given combination of cash-flow rights and wedge, family corporations tend to exhibit clearly better valuation and operating performance than non-family firms (in the terms of the previous example, the families’ skill is higher).

However, although it cannot be said that separation of voting and cash-flow rights is a necessary corollary of family control (in 43.1% of family-controlled corporations the family holds an identical share of voting and cash-flow rights), family corporations do recur more often to control-enhancing devices, that make their ownership structure inefficient in terms of valuation and operating performance<sup>26</sup>. Therefore, when we measure the joint effect of family control and ownership structure, as we do in regressions 2 and 5 (the *gross* specification), the effect of family control actually turns out to be still positive, but smaller. The estimated value of the coefficient on the dummy-variable falls by more than 40% when Q is the dependent variable (from regression 3 to regression 2), because of the large negative influence of the wedge between cash-flow and voting rights on market valuation; the fall is limited to 12% in ROA regressions (from 6 to 5) . But the most important final result is that even in the “*gross-of-the-controlling-strategy*” specification (regressions 2 and 5) the positive family effect is present and highly statistically significant (5% level for Q and 1% for

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<sup>26</sup> To be more precise, it should be noted that families hold in the average both more cash-flow rights and more wedge. Having more cash-flow rights is expected to be efficient, but regressions 1 show this is not the case when Tobin’s Q is the dependent variable. When ROA is the dependent variable, the efficiency of more cash-flow rights has an opposite effect to the inefficiency of more wedge, but empirically the latter prevails.

ROA). Although in a large number of family-controlled corporations, the potentially beneficial qualities of family control are partly wasted by inefficient control strategies, i.e. by high separation of control and cash-flow rights, there is still clear evidence that family-controlled firms exhibit better market valuation and operating performance. These remarks are supported by the high economic significance of the point-estimates. For what concerns market valuation, the coefficients on the family-dummy variables can be taken to represent the increments of Q related to family control<sup>27</sup>. Thus, we can see that the increment is 8.9% in regression 3, and an increment of 4.9% remains after letting the dummy include the average effect of cash-flow rights and wedge (regression 2). For what concerns operating performance, we can express the size of the point-estimates for the family-dummies as percentages of the overall mean value of ROA (that we showed in Table II). This produces the evidence that the estimate of the dummy coefficient is 16.6% of the overall mean value of ROA in regression 6, and 14.6% in regression 5.

We have finally to mention that we run regressions specifications (not reported in the tables) in which we include as independent variables also the interaction terms family\*cash-flow rights, and family\*wedge. The estimates for the interaction terms are not significant when we employ ROA as the dependent. On the contrary, the estimates are significant when we employ Tobin's Q, since the value of the family-dummy becomes higher, and the regression line for both cash-flow rights and wedge is more steeply downward sloping in the case of family-controlled corporations. On one side, this suggests that the market is more diffident towards management-entrenching strategies when they are put in place by family firms (a similar result is documented for Swedish firms by Cronqvist and Nilsson, 2003). On the other side, this reinforces the evidence about the positive properties of family control once we separate it from the effect of the quantitative ownership variables.

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<sup>27</sup> Since the independent variable of the regression is the logarithm of Q, the coefficient  $c$  captures the increase in  $\ln(Q)$  due to the dummy variable and, therefore, the increment of Q is  $\exp(c)-1$ . The small coefficients of  $c$  imply that the increment of Q related to the type of family control is close to the coefficient itself (for example, if  $c = 8\%$ , the increment of Q is 8,33%).

As a concluding remark for this section, we wish to spend a few comments on the relevance of our results for the ownership structure theory and the implied policy issues. Although the theory has highlighted costs and benefits of family control without concluding for a clear prevalence of either of the two, there has been recently a widespread negative inclination towards it. For instance, Anderson and Reeb (2003) seem nearly surprised in finding an overall positive effect of family affiliation in the U.S., and they conclude that in a well-regulated and transparent market, family ownership can be an effective organizational form. Continental European markets are not as well-regulated and transparent as in the U.S., however the same result holds. This is in our view a warning about the need not to overlook the possible positive properties of family control around the world, on the basis of partial observations like the high average separation of control and cash-flow rights in this type of firms. In terms of policy implications, then, our results suggest that the large diffusion of family control and the means by which it is exerted are not a major problem for the efficiency of “corporate Europe”.

### *C. The relation between firm performance and family involvement*

Family control in general seems to have a positive effect, but what about different types of family control? There is evidence, mainly from the U.S., that the performance of corporations run by their founders is actually above the average (McConnaughy *et al.*, 1998; Palia and Ravid, 2002; Anderson and Reeb, 2003; Adams, Almeida and Ferreira, 2003; Falenbrach, 2003), but the same cannot be said when descendants take the reins (McConnaughy *et al.*, 1998; Pérez-González, 2001; Villalonga and Amit, 2004). Furthermore, it is possible to argue that outside managers can take into the corporation skills and experiences that not only descendants, but sometimes also founders, may not have. In this case, the mere fact that the CEO is a member of the family should have a negative effect on performance. Therefore, in the present section we turn to analyze different cases of family control.

In Tables VI and VII we report results of regressions in which we include dummy-variables representing the different types of family involvement in the corporation that



we described in Table IV. The regressions are run on the whole sample, therefore the coefficients on dummy-variables inform us if corporations characterized by a given type of family participation are different in their average valuation and operating performance from non-family corporations.

We seek in the results of the regressions evidence about the following points. First, we wish to understand the effect of family control when a member of the controlling family is CEO of the company. Second, we look at possible differences between family firms controlled by founders and by descendants, following the mainly U.S. evidence about superior performance of founders. Third, we are particularly interested about performance of family firms whose CEO is a descendant, a case that is often seen as a negative outcome of family control, since it is *a-priori* likely that the descendants do not share the founder's distinctive entrepreneurial skills.

#### C.1. Family CEO vs. Family non-executive-directors

In Panel A of Table VI we abstract from the founder-descendants alternative, and simply consider different degrees of involvement of the family, by considering a first dummy-variable that takes value one when the CEO belongs to the family, a second dummy-variable that takes value one when the CEO is not a member of the family but at least one member of the family sits on the board of directors, and a third dummy-variable for the case of family not present on the board at all. The picture released by these regressions is clear; the general positive effect of family control we already noticed can be split in different parts according to the degree of involvement of families in management. The effect is confirmed to be clearly positive when the family takes up the role of monitoring non-family executives by assuming non-executive positions in the board of directors, since the dummies for the presence in the board of non-executive family members is positive and highly statistically significant (in Q regressions, once at the 5% and the other at the 1% level; in ROA regressions, always at the 1% level). This means that there is strong statistical evidence that European firms run by non-family executives, but controlled and monitored by families, are largely – the size of the point-estimates is larger than the already large one we found for family firms in general –

better than non-family firms. On the other hand, when a family member takes the position of CEO, the evidence of the better position of family vs. non family-firms becomes weaker. Note that the size of the estimates for the family-CEO dummies does not decline abruptly with respect to the size of the family-non-executive dummies. What declines is rather statistical significance – both for Q and ROA, the coefficient remains significant at the 10% level in one of the two regressions – suggesting that there is a much larger variance in the market valuation and operating performance of companies run by family-CEOs, coupled with slightly lower average values, compared to what happens in companies that are simply monitored by families. But this does not mean that family-CEO firms are worse off than non-family firms, since the regression in the first column of Panel A Table VI shows that Q is 8.4 % higher in family-CEO firms, and the one in the third column shows that the coefficient on the family-CEO dummy is equal to 14% of the overall mean ROA.

Finally, note that the results of Panel A Table VI do not suggest that family firms perform better the less the family takes interest in the company. It is true that it seems better when the family does not manage and limits itself to monitoring; but the group of worst performing family firms are those in which the family does not manage and stays outside of the board. For this group there is no sign of better performance with respect to non-family firms, and there could even be worse performance, as is suggested by the (not statistically significant) negative sign of the coefficient when ROA is the dependent variable. This is consistent with the idea that family control is beneficial for the firm when coupled with some degree of involvement of the family in it<sup>28</sup>.

### C.2. Founders vs. descendants

In Panel B of Table VI, we consider a different grouping criterion of family firms, that distinguishes them in two types, those controlled by the founder and those controlled by descendants. The criterion tells simply that, if the founder is still alive – no matter her role in the firm, if any – the family-controlled firm is considered a founder-firm,

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<sup>28</sup> We also test whether the coefficients on the three dummy variables are statistically different one from the other. This is true when we compare the dummies for family-CEO and family-non-executive with the dummy for family-not-on-the board, in regressions in which ROA is the dependent variable.

otherwise it is considered a descendant-firm. Similarly to what we do in Panel A, we include in the regression one dummy-variable for founder and another one for descendants, so that the estimates inform us about how much each of the two groups is different from non-family firms in term of average Q and ROA.

The results are neat and statistically strong, showing that family firms perform much better when they are still controlled by their founders. The size of the difference in founder-firm average valuation and operating performance with respect to both descendants controlled and non-family corporations is impressive. If we compare the size of the point-estimates, we note that founder-controlled corporations' average Tobin's Q is 12.3% higher than in non-family firms, and their ROA is 28.2% higher than the overall mean (*gross-of-the-controlling-strategy* specification).

Although a similarly large overperformance of founder-led corporations is found in the U.S. too (see Adams, Almeida and Ferreira, 2003), we consider the hypothesis that this strong result is due to the omission of control variables representing age since foundation or since IPO. However, when we run regressions on the sub-samples formed by the corporations for which these data are available, including age-foundation and/or age-IPO as control variables, the results for the founder dummy-variable are nearly unchanged. We interpret this as evidence that the founder effect is distinct from a young-firm effect<sup>29</sup>.

It is thus clear that founder-corporations perform significantly better than descendants-corporations<sup>30</sup>. However, this evidence is not accompanied by the result that descendants-corporations are in a bad position *vis-à-vis* the non-family firms, as the positive sign of coefficients on the dummy-variable *descendants* show. Tobin's Q is 6.6% higher than in non-family firms in the *net* specification, and 2.4% in the *gross* one; ROA is higher than the overall mean by, respectively, 15.3% and 12.0%. But,

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<sup>29</sup> To appreciate this, consider that only 20% of the 264 corporations whose IPO took place after 1988, and 30% of the 65 corporation founded after 1978, are still run by their founder. Therefore, we can effectively measure the distinct effects of the age and of the presence of the founder. The coefficient on the age variable is always positive, that means that younger corporations, in term of foundation date or IPO date, do actually perform better. However, the size and the statistical significance of the *founder* dummy-variable are nearly unchanged.

<sup>30</sup> The dummy for founder is statistically different from the dummy for descendants in regressions in which Tobin's Q is the dependent variable.

although sizeable – especially in the case of ROA – these point-estimates are never accompanied by statistical significance, so that we cannot reliably say that descendant-firms are better than non-family ones.

To sum up, the result in Panel B of Table VI seem fully in line with non-European international evidence that shows a strongly positive effect of the presence of the founder, both in comparison to descendant-firms and non-family firms. Differently from part of the literature, however, we do not yet find negative evidence concerning descendant corporations, that in the worst case are no better than non-family ones.

### C.2. Founders and descendants, and their involvement in the family company

Some of the papers we quoted highlight a negative evidence regarding the case in which a descendant assumes the role of CEO. This result has intuitive appeal. While stock-market listed companies run by founders have developed from scratch to success, and are therefore quite likely to have been run by the best entrepreneurs, there is no reason to suppose that heirs do inherit the managerial skills of founders. Thus, the decision to keep the CEO position in the family can simply mean that a selection of the best candidates for the position has not been put in place, in view of the advantages of enjoying the private benefits of this position in the family.

In Table VII, therefore, we present a finer partition of the family involvement in management, by considering both the founder/descendants alternative and the different roles in the board. Thus, we include in the regression six dummy-variables representing different groups of family-firms:

- 1- Founder CEO = family-controlled firm in which the founder is CEO (often also chairman);
- 2- Founder non-executive = family-controlled firm in which the founder sits on the board but neither the founder nor any other family member is CEO (the founder may be and often is non-executive chairman);
- 3- Founder not on the board = family-controlled firm in which the founder is still alive but neither the founder nor any other family member sits on the board;
- 4- Descendant CEO = family-controlled firm, family in the second or later generation, CEO belonging to the family;
- 5- Descendant non-executive = family-controlled firm, family in the second or later generation, member of the family on the board as non-executive;

6- Descendant not on the board = family-controlled firm, family in the second or later generation, no member of the family on the board.

The evidence in table VII suggests the following results.

- i) As obvious, the evidence reported in Panel B Table VI – that suggests that founder-firms are better off than descendant-firms – is confirmed; more interesting is that both founder and descendant firms seem to be better off when the CEO is from outside the family.
- ii) There is anyway a statistically significant positive difference between founder-firms and non-family firms, both when the founder is CEO and when she is non-executive.
- iii) While we showed (Panel B Table VI) that we cannot say that descendant-firms, taken as a whole, have higher valuation and operating performance than non-family firms, we can now note a difference when we separate descendant-CEO and descendant-non-executive firms. There is rather strong statistical evidence that descendant-non-executive firms perform better than non-family firms. Descendant-CEO firms, on the contrary, are not statistically different from non-family firms.
- iv) There is no suggestion that Descendant-CEO firms are inferior to non-family firms in terms of market valuation or operating performance, contrary to what is found in non-European papers. We already noted that the estimate of the Descendant-CEO dummy is not statistically significant, yet its sign is always positive. The only negative signs appear for the dummy-variables of family not in the board.

More in detail, about i) we can note in Table VII that, both for founder and descendant, the positive coefficient on the dummies is always larger for the non-executive group than for the CEO group. If we focus on market valuation (Q) we note however that the values of the estimates for founder-CEO and founder-non-executive are rather close, and both of them are quite large compared to the estimates for descendant-CEO and descendant-non-executive. When we consider instead operating performance (ROA) we note that only the founder-non-executive dummy takes a clearly larger value; the value

taken by the founder-CEO is even slightly lower in the *net* regression than that of the descendant-non-executive. In some sense, the market valuation of family firms seems to be affected by more confidence on the value added by a founder-CEO of what would be justified on the basis of operating performance.

A similar but opposite remark can be made when we consider the difference between descendant-CEO and descendant-non-executive (statement iii). In this instance, we find that the difference in market valuation (Q) in favor of descendant-non-executive is larger than what seems implied by the difference in operating performance (ROA), so that the market seems suspicious of a descendant-CEO beyond what should be on the basis of accounting profits<sup>31</sup>.

Finally, about iv), we wish to point that in five out of eight cases the dummy for founder or descendant out of the board takes a negative sign, confirming that the absence of the family from both management and monitoring is really the most critical case for family control.

#### *D. Some final remarks about the effect of family control*

The evidence about family control in Europe in the light of results in Tables V, VI and VII is therefore positive. Family control in general exerts a beneficial role, more so when the founder is still alive, and when the family is able to inject in the management of the company the skills of non-family executives, while retaining a monitoring role by sitting on the board of directors.

When we compare our results to the existing academic literature, we note that U.S. evidence about superior performance of founders is confirmed in our European sample. The other point matching U.S. evidence is that performance in the case of CEO-descendants is worse than in the case in which descendants limit themselves to a monitoring role by sitting on the board. However, the distinctive feature of family

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<sup>31</sup> This is not to say that there is no evidence of better performance in the case of descendant-non-executive, given that in ROA regressions the dummy for this case is positive and statistically significant far beyond the 5% threshold, while the dummy for the descendant-CEO case takes a smaller value and is not statistically significant. The dummy for descendant-non-executive is also positive and statistically significant in the *net* specification of the regression when Q is the dependent variable; it is not in the *gross* specification, due to the important value-discount arising from the diffuse presence of control-enhancing devices in descendant-firms (that was clearly visible in Panel C of Table IV).

control in Europe is the better results for descendants corporations *vis-à-vis* non-family corporations. There is a clear suggestion that non-executive-descendants corporations perform better than non-family corporations, and no evidence that CEO-descendants corporations are worse than non-family corporations<sup>32</sup>.

These results are surprising if it is a-priori expected that aptitudes to minority expropriation and self-entrenchment – supposedly inherent in family control – should weigh more as we move away from the best practice of investor protection found in Anglo-American financial markets. However, the better performance of family firms goes together with the larger diffusion of family firms in Europe compared to U.S., and suggests that this ownership structure is fitter to the European environment. An obvious suggestion for future research is trying to understand what makes family control more effective than in Anglo-American markets (or non-family control less effective). As for the policy debate at the EU level, the results of this section reinforce our view that the diffusion of family control in Europe is not a major problem of corporate Europe.

#### **IV. Further analysis and discussion of the statistical evidence**

##### *A. Single year and pooled (average) regressions*

To check the robustness of the results presented in the previous sections, we run separate regressions for each year and pooled (average) regressions employing alternative regression methods.

The single-year cross-sectional regressions yield results that are fully consistent with the whole-sample evidence<sup>33</sup>. The sign of the point-estimates for the coefficients on the ownership variables are always in line with those we obtain on the whole sample, although the statistical significance of results is less strong. We conclude that, even

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<sup>32</sup> Even stronger results in favor of families are found for France, in this respect, by Sraer and Thesmar, (2004).

<sup>33</sup> For reasons of space, we do not report the results, but limit ourselves to a qualitative summary and some comments (detailed results are available by the authors).

though the correlation in the dependent variables across years is far from perfect<sup>34</sup>, the results we obtain are stable in the three years considered.

In Table VIII we report the results of pooled (average) regressions, that we employ in order to minimize, when performing non-OLS regressions, the problem of correlation across residuals that is solved in OLS by the Hubert-White standard error estimation procedure. In Table VIII we report the results of; i) random-effect regressions in which we introduce a country random-effect in place of country fixed-effects; ii) robust regressions, in which a robust weighting function substitutes the winsorization procedure employed in OLS regressions (and in random-effect pooled regressions too)<sup>35</sup>.

In table VIII we report only some results – for reasons of space – that parallel those obtained by the OLS panel-cross-section. In columns 1, 2, 5 and 6 we show the same regressions specifications we employ in columns 2, 3, 5 and 6 of table V; in columns 3, 4, 7 and 8, the same regressions specifications we employ in table VII. In Panel A we report the results of random-effect regressions; in Panel B, those of robust regressions. Overall, the results of pooled regressions confirm the picture suggested by OLS regressions. Results are very similar for what concerns robust regressions (Panel B), both in term of the estimated value of coefficients and of statistical significance. They

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<sup>34</sup> The correlation coefficient between Tobin's Q (log of) 1999 and 2001 is .76. The same correlation coefficient for ROA is .66.

<sup>35</sup>We use the robust regression Biweight estimator, that belongs to the class of estimators known as M-estimators of location, and works by minimizing a function of the deviations of each observation from the estimate of location<sup>35</sup> (Huber, 1981). Least squares estimates are very sensitive to contaminated observations and sometimes outliers can not be detected by looking at residuals, since they affect the estimator in such a way that outlier diagnostics are not able to discover them anymore. M-estimators may be used to address this inconvenience, though these estimators are not robust with respect to leverage points (i.e. outliers in the space of the covariates). We used this procedure because in our dataset the main source of bias comes from contamination in the error term (vertical outliers) and not in the explanatory variables (leverage points).

The procedure used consist of the following steps:

- 1) estimate the residuals from OLS regression;
- 2) identify deviant cases by comparing residuals with the MAD (Median Absolute Deviation) estimates, and find the weights according to Hubert or Biweight methodologies;
- 3) perform a robust regression using weighted least squares;
- 4) estimate the residuals from WLS and continue iteratively with step 2), until weights converge (usually within 10 iteration).

The biweight procedure downweights outlying data points more than the Huber methodology. Results from this last weighing function, not presented in the paper, are however similar to the Biweight estimates.



are also similar in random-effect regressions, though statistical significance is lower. In *gross* specifications of random-effect regressions (Panel A, columns 2, 4, 6, 8) the signs of coefficients are fully consistent with the results of OLS and robust regressions while statistical significance is reached only for the founder-non-executive dummy, but in the *net* specifications (Panel B, columns 1, 3, 5, 7) we obtain both the same signs and the achievement of statistical significance as in alternative regression techniques. In conclusion, the results of pooled regressions are supportive of the evidence presented in the previous sections.

*B. On the endogeneity of ownership variables and firm performance*

Possible endogeneity problems in the regressions results have to be considered. In its simplest form, a problem of endogeneity might arise if firm performance caused choices about the share of cash-flow rights held by the largest shareholder. This could happen if under- or over-valuation prompted adjustments in the stakes of controlling shareholders, who could take advantage of private information about the true value of corporations. There could be however other more elaborate reasons for endogeneity. Demsetz and Lehn (1985) and Himmelberg, Hubbard and Palia (1999) argue that both firm performance and managerial ownership may be endogenously determined by unobserved characteristics in the firm's contracting environment.

Endogeneity arguments could apply also to the relation between performance and family control (Anderson and Reeb, 2003), and to the relation between performance and CEO-founder persistence (Adams, Almeida and Ferreira, 2003).

We believe that some of these problems are of less concern in the Continental European setting. An equilibrium interpretation of optimal managerial compensation design does not look fit to the European ownership structures, since family control and the share of voting and cash-flow rights that families hold can hardly be interpreted as the outcome of compensation contracts between the corporations and the family. We also share the skepticism that some authors manifest (Claessens *et al.*, 2002; La Porta *et al.*, 2002) towards the possibility that in concentrated ownership settings outside Anglo-Saxon markets, the share of voting and cash-flow rights may be determined by the fluctuations

of valuation and performance of corporations, given the strong stability of shareholdings in time. However, the possible relevance of the endogeneity issue cannot be ruled out just on the basis of *a-priori* beliefs. Therefore, we test the robustness of our results by employing linear instrumental variable regressions, in which the ownership variables representing the cash-flow rights of the first shareholder, the wedge between its voting and cash-flow rights, and the occurrence of family control, are estimated using instrumental variables. As instrumental variables we employ the alpha of the ordinary share, its volatility<sup>36</sup>, and the age of the corporation (log of). To avoid potential problems of “weak instruments” (Stock, Wright and Yogo, 2002) due to the modest correlation between the endogenous variables and our instruments, we employ LIML estimates (Anderson, Kunitomo and Takamitsu, 1982) instead of traditional 2SLS methods.

The results in Table IX show that after controlling for endogeneity Tobin’s Q is still negatively correlated with the wedge between voting and cash-flow rights and positively correlated with family control. Moreover, the positive effect of the presence of the founder - both as CEO and as non-executive – is still highly significant, and the effect of “descendant -non-executive” is positive and significant (10% level) too.

When the dependent variable is ROA, the results are qualitatively similar to those of simple regression analysis, but are generally lacking in statistical significance, since only the presence of descendants as non-executives seems to exert a clear positive effect on performance.

The final conclusion about the endogeneity issue is thus clouded by results of regressions of operating performance. Overall, however, we think there are no clear suggestions that the evidence provided by OLS results is driven by endogeneity in the variables we employ.

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<sup>36</sup> Volatility is the stock return variance, estimated over 40 months prior to each year-end; alpha is estimated by regressing 40 months of returns in excess on treasury bills on the excess returns of an index representative of the country stock market.

### *C. Results by country*

It is obviously interesting to see how much the effect of family control, that up to now we considered for the Continental European area as a whole, holds at the single-country level. To do this, we run regressions on the whole sample of 675 firms similar to those in Tables V, VI and VII, except that we substitute to each family-dummy of interest (in regressions in Table V, the dummy representing family control; in Table VI, Panel A the three dummies ‘Family CEO’, ‘Family non -executive’, ‘Family not on the board’, and so on) eleven family-dummy variables, one for each country, while maintaining the regressions identical for all the rest. Some results are summarized in Table X, where we report the sign of coefficients of these ‘family\*country’ dummy variables for two selected regressions, corresponding to those already presented in Tables V and VII (in the *net* specifications, that include cash-flow rights and wedge in the independent variables). Table X is divided into Panel A, reporting results of regressions in which Tobin’s Q is the dependent variable, and Panel B, in which it is ROA. In the first line of each panel we present the sign of the eleven coefficients on the family-control dummy in the regressions corresponding to Table V, columns 3 and 6, and in the second line the number of family controlled firms in each country; in the following lines we present the sign of the coefficients on the family dummies in regressions corresponding to Table VII, columns 1 and 3, together with the number of observations per country. The signs we report, together with their statistical significance, have the immediate meaning of telling us whether in the single country the family-effect of interest is positive or not<sup>37</sup>. In Table X, countries are ordered according to the origin of their legal system, so we present first the five ‘French-origin’ countries (Belgium, France, Italy, Netherlands), then the two ‘German-origin’ (Germany and Switzerland), and finally the four ‘Scandinavian-origin’ (Denmark, Finland, Norway and Sweden). This allows to highlight the following fact. If we look back to the evidence of Table I, we find no evident relation between the legal origin and the diffusion of family control, since the

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<sup>37</sup> We also run separate regressions by country, that yield similar results. However, the regressions we comment upon exploit more efficiently the information embedded in the whole sample. For instance, in countries for which we have a small number of observations, the industry fixed-effect tends to become in practice a firm fixed-effect.

incidence of family control in the various countries looks widely scattered across the legal origin groups. On the contrary, if we look at the percentage of family firms in which the CEO position is held by a member of the family, we can see (line added at the bottom of Panel A) a tendency to find more family-CEOs in French-origin countries than in German-origin and, to a clearer extent, in Scandinavian-origin ones. We can note, in particular, that firms in which the CEO is a descendant are concentrated in France and Italy (the latter is clearly the most ‘familist’ country in all respects), given that in these two countries we find 35 cases out of 55 for the whole sample. In French-origin countries it is also rarer that no member of the family sits on the board.

The regression results in Table X are in line with those we commented upon when we considered the family effect in Continental Europe as a whole, in the sense that the relevant results are not due to the concentration of ‘good’ observations in one or two countries, but are actually widespread across them.

When we look at the regressions in which the simple family-control dummy variable is considered (first line of Panel A and B), we note that in 8 out of 11 countries it takes a positive sign, as it does in the whole sample when not split by country (see Table V). In just two countries – Italy and Denmark – the family effect seems to be in both Panels A and B negative, so that for them we find an unequivocal suggestion that family control negatively affects both market valuation and operating performance. For Switzerland, the effect is positive (and highly statistically significant) for market valuation and negative for operating performance, while the reverse is true for Norway. In the other 7 countries, family control has a positive effect on both market valuation and operating performance.

We then show the results of the regressions in which we split the family effect along both the founder/descendant and the CEO/non-executive dimensions. It is clearly appropriate to be cautious in considering the results of this regression, given that in many countries there is a small number of companies for each case. However, also in this regression the results at the country level are in line with the evidence for the whole of Europe. The evidence of Tables VI and VII showed that there is a large positive effect when the founder is present; and actually the coefficient on the founder-CEO

dummy is positive in 7 countries out of 8 (the total does not amount to 11 because there is no founder CEO in Sweden, Denmark and Finland) and the coefficient on founder-non-executive is positive in 8 out of 10 (no founder non-executive in Denmark), both when Tobin's Q and when ROA are the independent variable. The evidence of Table VII then showed that descendant-non-executive firms exhibit better performance than non-family firms, while descendant-CEO firms do not, and actually, in 8 countries out of 11, the descendant-non-executive effect is positive for both market valuation and operating performance, while the descendant-CEO effect is positive in only 6 out of 10 countries (no descendant-CEO in Sweden) for market valuation, and in 5 out of 10 for operating performance. Finally, the evidence of table VII showed that the case in which members of the family do not sit on the board is the relatively worse case for family firms, and this is confirmed clearly at least for what regards market valuation.

To sum up, the single-country-level evidence supports the results we obtain when we consider Continental European family firms as a single group. The single-country-level also offers some suggestions for further comparative analysis at country level. One case that has already attracted some interest in the literature is the Italian one; Italy – that has a reputation for less-than-average corporate governance quality – is clearly the “most familist” country in Europe, yet family control seems not to add value (see also Volpin, 2002). France is often considered cousin to Italy in terms of culture, traditions and origin of the legal system, and family control in France too is actually pervasive, but its effect is clearly positive (see also Sraer and Thesmar, 2004). It is possible that focused cross-country comparisons, and France-Italy could be a good case, would yield interesting insights.

## **V. Summary and conclusion**

In the paper we highlighted the link existing also in Continental Europe between corporate performance and ownership structure. European corporations exhibit concentrated ownership structures, a relevant degree of separation between control and cash-flow rights, and widespread diffusion of family control. Family control is clearly

associated with the control-enhancing devices that allow separation between control and cash-flow rights.

However, regression analysis of the link between corporate valuation and ownership structure shows that, notwithstanding the negative effect of the more frequent recourse to control-enhancing devices, family control is positive for European corporations. It is highly positive at the founder stage – provided the founder still exerts an active role as CEO or non-executive director – much in the same way as it is in the U.S. The different result with respect to U.S., is that the family effect continues to be positive also at the descendants stage – when descendants limit themselves to non-executives roles – or at least non-negative – when descendants assume the role of CEO. Only when the family is not represented in the board family-controlled firms seem to perform worse than non-family firms.

We therefore provide a confirmation of non-European results about the negative effect of control-enhancing devices. However, we show that although control-enhancing devices are associated throughout the world with family control, this does not *per se* allow to jump to the conclusion of a negative effect of the latter. Outside of U.S., U.K. and a few other countries, the majority of listed non-financial corporations are family-controlled, and it is important to reach conclusions about the desirability of this type of control. The Continental European evidence tells that, notwithstanding the frequent preference of family corporations for apparently inefficient ownership structures, the general effect of family control may still be positive.

Finally, our findings suggest an empirical argument of caution – that adds to the several theoretically-founded others that have been deployed (Berglof and Burkart, 2002) – towards the usefulness of a regulation aiming to prohibit separation of control and cash-flow rights, of the kind that is debated at the E.C. level. It is true that separation *per se* is associated with lower performance. However, separation may have in several cases a role in allowing control of subjects who are able to better manage or monitor corporations, whose beneficial skills may more than counterweight the costs of an inefficient ownership structure. Therefore, it is not clear that abrupt dissolution of existing controlling equilibria would lead to a more efficient European corporate sector.

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## Appendix A : Data sources

For all countries: Worldscope and Extel (Thomson financial); Osiris (Bureau Van Dijck); corporations' websites; news searched on lexis-nexis and the world wide web (google search engine).

Belgium: Euronext ([www.euronext.com](http://www.euronext.com)); L'Echo ([www.lecho.be](http://www.lecho.be)).

Denmark: Copenhagen Stock Exchange ([www.cse.dk](http://www.cse.dk)).

France: AMF ([www.amf-france.org](http://www.amf-france.org)), Euronext ([www.euronext.com](http://www.euronext.com)).

Germany: Wer gehoert zu wem (Commerzbank), Onvista ([www.onvista.de](http://www.onvista.de)).

Italy: CONSOB ([www.consob.it](http://www.consob.it)), Il taccuino dell'azionista (Il Sole 24 Ore Libri)

The Netherlands: Euronext ([www.euronext.com](http://www.euronext.com)); Elsevier Ondernemings Rapport (available on Lexis-Nexis).

Spain: CNMV ([www.cnmv.es](http://www.cnmv.es)).

Switzerland: Bilanz on line ([www.aktienfuehrer.ch](http://www.aktienfuehrer.ch)); Guide des Actions suisses (Verlag Finanz und Wirtschaft).

For Finland, Norway and Sweden we do not rely on specific national data sources.

**Table I: The composition of the sample of publicly traded European corporations**

In the first three rows, we present the number of corporations in the sample across the different countries in each year. In the second part of the table we present the breakdown by industrial classification for the year 1999, based on Campbell (1996). Industries are defined as follows: Petroleum (SIC 13, 29), Consumer durables (SIC 25, 30, 36, 37, 50, 55, 57), Basic industry (SIC 10, 12, 14, 24, 26, 28, 33), Food and tobacco (SIC 1, 2, 9, 20, 21, 54), Construction (SIC 15, 16, 17, 32, 52), Capital goods (SIC 34, 35, 38), Transportation (SIC 40, 41, 42, 44, 45, 47), Unregulated utilities (SIC 46, 48), Textiles and trade (SIC 22, 23, 31, 51, 53, 56, 59), Services (SIC 72, 73, 75, 76, 80, 82, 87, 89), and Leisure (SIC 27, 58, 70, 78, 79). The sample excludes financial companies (SIC 60-69) and regulated utilities (SIC 49), however, we look at the financial statements of holding companies and investment companies. When they present consolidated financial statements that are typical of operating companies, we include them in the twelfth category Other, together with companies whose SICs are not assigned to any of the 11 Campbell industries. In order to reduce the size of the table, the 4 countries Denmark, Finland, Norway and Sweden are jointly considered in the single category "Nordic countries".

	All countries	Nordic countries				Italy	Netherlands	Spain	Switzerland
		Belgium	France	Germany	Nordic countries				
All sectors, year 1999	675	33	142	118	65	72	139	44	62
All sectors, year 2000	644	30	137	116	61	66	131	42	61
All sectors, year 2001	610	30	128	111	59	63	120	41	58
Petroleum	2,9%	0,0%	4,2%	1,7%	3,1%	1,4%	5,0%	4,5%	0,0%
Consumer durables	12,2%	12,1%	16,0%	13,4%	16,9%	12,3%	11,5%	4,5%	3,2%
Basic industry	14,3%	15,2%	12,5%	18,5%	6,2%	8,2%	17,3%	13,6%	19,4%
Food and tobacco	8,0%	6,1%	9,0%	5,9%	4,6%	12,3%	6,5%	9,1%	11,3%
Construction	10,8%	12,1%	7,6%	10,9%	15,4%	13,7%	6,5%	29,5%	4,8%
Capital goods	11,5%	6,1%	4,9%	15,1%	9,2%	4,1%	16,5%	2,3%	29,0%
Transportation	5,9%	0,0%	5,6%	3,4%	3,1%	6,8%	10,8%	4,5%	6,5%
Unregulated utilities	5,3%	6,1%	4,2%	5,0%	3,1%	6,8%	6,5%	6,8%	4,8%
Textiles and trade	10,9%	12,1%	13,9%	13,4%	13,8%	12,3%	4,3%	11,4%	8,1%
Services	7,8%	12,1%	10,4%	6,7%	4,6%	6,8%	7,2%	9,1%	6,5%
Leisure	4,4%	3,0%	4,9%	0,8%	10,8%	8,2%	2,9%	4,5%	3,2%
Others	6,0%	15,2%	6,9%	5,0%	9,2%	6,8%	5,0%	0,0%	3,2%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

**Table II: Descriptive data of the sample of publicly traded European corporations**

In the table we present the average and median values of some variables of main interest in 1999. Ultimate voting rights is the amount of ultimate voting rights held by the largest (in term of direct voting rights) shareholder. Ultimate cash-flow rights is the amount of ultimate cash-flow rights held by the largest shareholder. We present the breakdown of the companies in the sample according to the type of their control, across the different countries (see the text of the paper, § I.B.i., for the definitions). Tobin q is the ratio between (Book value of total assets - Book value of shareholders' equity + Market value of shareholders' equity), and Book value of total assets. ROA is the ratio "Operating Profit / Total Assets". Size (Total assets) is the amount (millions €) of balance-sheet Total assets, Size (Market value equity) is the stock market value (millions €) of all the shares outstanding of any category. In order to reduce the size of the table, the 4 countries Denmark, Finland, Norway and Sweden are jointly considered in the single category "Nordic countries".

	All countries				Nordic countries				
	Belgium	France	Germany	Italy	Netherlands	Spain	Switzerland		
Ultimate voting rights	38,2	44,7	46,5	40,8	47,6	23,9	33,8	31,8	31,4
Ultimate cash-flow rights	37,0	40,1	49,0	39,5	51,6	14,2	32,4	30,4	28,3
average	32,0	40,6	35,9	36,0	40,7	23,0	26,5	30,1	26,1
median	28,5	34,9	33,8	32,0	45,4	14,2	22,0	28,4	20,2
family	52,6%	64,5%	63,2%	48,3%	76,9%	35,6%	43,5%	43,2%	51,6%
state	8,3%	3,2%	9,7%	5,9%	7,7%	4,1%	14,5%	4,5%	6,5%
financial institution	15,1%	6,5%	11,1%	24,6%	7,7%	17,8%	13,8%	20,5%	14,5%
other entity	7,0%	12,9%	2,8%	8,5%	7,7%	2,7%	11,6%	6,8%	4,8%
widely held corp.	17,0%	12,9%	13,2%	12,7%	0,0%	39,7%	16,7%	25,0%	22,6%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
Tobin's q	2,06	2,24	2,17	1,86	2,26	2,09	1,98	2,32	1,91
average	1,39	1,42	1,43	1,30	1,30	1,55	1,32	1,40	1,59
median	6,8%	10,8%	6,6%	3,8%	6,3%	12,4%	6,2%	5,1%	7,3%
ROA	6,4%	5,1%	6,7%	3,9%	6,0%	10,0%	6,6%	6,0%	8,0%
average	5,421	1,824	6,924	7,890	7,304	3,697	2,825	5,010	4,833
assets	1,256	842	1,598	1,184	1,593	1,337	1,022	1,413	1,179
Size (Market value equity)	5,168	1,375	6,787	5,825	5,442	4,051	4,385	3,955	5,794
average	767	703	970	587	792	745	659	938	935
median	14,9%	17,2%	14,1%	12,6%	14,2%	21,3%	12,7%	27,0%	9,2%
Growth	10,2%	11,2%	10,6%	8,1%	8,4%	12,7%	9,6%	16,5%	8,5%
average	120	132	116	168	119	123	97	98	98
median	96	84	89	142	80	94	86	76	81

**Table III: Descriptive statistics for cash-flow rights and the wedge between cash-flow and voting rights**

In Panel A, each row presents descriptive statistics for a class of ultimate cash-flow rights held by the largest shareholder. In the column Number is presented the count of corporations in each class. In the columns Tobin's Q, ROA, Size are presented the averages of these variables in each class. In the columns under the header Wedge classes are presented, in each row, the percentage of the total number of corporations of that cash-flow rights class, by classes defined in terms of wedge size.

In Panel B, each row presents descriptive statistics for a class of wedge between the cash-flow and the voting rights held by the largest shareholder. In the columns under the header Sources of wedge are presented, for each wedge class, the percentage of the total number of corporations in that class divided in the three groups Dual shares only, Pyramidal control only, Both devices. In the group Dual shares only corporations non controlled through a pyramid, but that have dual classes of shares with different voting rights. In the group Pyramidal control only we include corporations with a one share-one vote structure, controlled through a pyramidal scheme. In the group Both devices we include companies that have a dual class structure and are controlled through a pyramid.

**Panel A**

Cash-flow	Number	Tobin's Q	ROA	Size	Wedge classes			Total	
					No wedge	<10%	10-19.99% > 20%		
0-9.99%	157	2.05	7.8%	6.941	47.8%	16.6%	20.4%	15.3%	100.0%
10-19.99%	126	2.01	5.9%	5.437	60.3%	16.7%	10.3%	12.7%	100.0%
20-29.99%	91	1.94	6.4%	4.246	47.3%	14.3%	20.9%	17.6%	100.0%
30-39.99%	79	2.29	4.9%	2.964	63.3%	5.1%	16.5%	15.2%	100.0%
40-49.99%	67	2.09	8.5%	3.455	47.8%	17.9%	22.4%	11.9%	100.0%
50-59.99%	79	2.34	7.0%	2.683	72.2%	12.7%	12.7%	2.5%	100.0%
60-69.99%	39	1.72	6.9%	4.229	66.7%	17.9%	15.4%	0.0%	100.0%
>69.99%	37	1.83	6.1%	1.500	86.5%	10.8%	2.7%	0.0%	100.0%
Total	675	2.06	6.8%	4.521	57.9%	14.4%	16.1%	11.6%	100.0%

**Panel B**

Wedge	Number	Tobin's Q	ROA	Size	Sources of wedge			Total
					dual shares only	pyramidal control only	both devices	
no wedge	391	2.14	7.1%	4.566	71.1%	25.8%	3.1%	100.0%
0< to 9.99%	97	2.02	7.5%	5.543	51.4%	34.9%	13.8%	100.0%
10-19.99%	109	1.85	5.9%	3.989	25.6%	38.5%	35.9%	100.0%
20-29.99%	39	1.91	5.0%	2.687	34.5%	20.7%	44.8%	100.0%
30-39.99%	29	2.32	6.5%	4.719	10.0%	40.0%	50.0%	100.0%
>39.99%	10	1.73	5.8%	5.975	21.5%	13.0%	7.4%	41.8%
Total	675	2.06	6.8%	4.521				

**Table IV: Descriptive statistics of the 675 corporations, by the type of their largest shareholder and by different types of family control**

In panel A corporations are grouped according to the following classification. We consider a corporation to be Widely held when it has no controlling shareholder with 10% ultimate voting rights or more, or is controlled by a widely held non financial corporation. We consider a corporation to fall into the groups Family, State, Financial, Others when a corporation is controlled at the 10% level by (respectively) a family, the State, a widely held financial institution or an other entity. In panels B and C we present descriptive statistics of the 314 family-controlled corporations in our sample, grouped by the degree of involvement of the family in the corporation. In panel B we include in the CEO group corporations in which the CEO is a member of the family. In the Non-executive group we include corporations in which the CEO does not belong to the controlling family, but at least one member of the family serves as non-executive director (non-executive chairman included). In the None group we include corporations in which no member of the controlling family sits on the board. In Panel C we analyze 285 of the 314 corporations partitioned in two groups. In the group founder we include corporations whose founder is still alive. Founder CEO is when the founder serves as CEO. Founder non-executive is when the founder serves as non-executive director. Other member CEO is when the founder serves as non-executive director, and another member of the family is CEO (these corporations are also included in the previous group). No member director is when no member of the family sits on the board. In the columns Tobin' s Q, ROA, Size, Ultimate CF and Wedge, the averages of these variables in each class are presented. In the column No separation the percentage of corporations with no difference in the voting and cash-flow rights of the largest shareholder. In the column Dual classes, the percentage of corporations with dual classes of shares, not controlled through a pyramid. In the column Pyramid, the percentage of corporations with a one share-one vote structure, controlled through a pyramidal scheme. In the column Both we include companies that have a dual class structure and are controlled through a pyramid.

**Panel A: Type of the largest shareholder**

	number	%	Tobin' s Q	ROA	Size	Ultimate CF	Wedge	No separation	Dual classes	Pyramids	Both	Total
Widely held	115	17%	2,31	6,8%	6.492	18,3	0,5	90,4%	8,7%	0,9%	0,0%	100,0%
Family	355	53%	2,05	7,3%	2.892	35,6	10,4	43,1%	30,7%	14,6%	11,5%	100,0%
State	56	8%	2,29	5,5%	9.339	36,6	5,1	64,3%	10,7%	19,6%	5,4%	100,0%
Financial	102	15%	1,61	5,4%	5.346	17,3	2,4	70,6%	6,9%	17,6%	4,9%	100,0%
Other	47	7%	2,42	7,1%	4.779	32,7	7,0	55,3%	25,5%	12,8%	6,4%	100,0%
<b>Total</b>	<b>675</b>	<b>100%</b>	<b>2,06</b>	<b>6,8%</b>	<b>4.521</b>	<b>29,7</b>	<b>6,8</b>	<b>58,0%</b>	<b>21,3%</b>	<b>13,0%</b>	<b>7,7%</b>	<b>100,0%</b>

**Panel B: Family participation in the board of directors, all family controlled corporations (n = 314)**

	number	%	Tobin' s Q	ROA	Size	Ultimate CF	Wedge	No separation	Dual classes	Pyramids	Both	Total
CEO	109	35%	2,03	8,5%	2.151.414	44,4	8,6	43,5%	42,6%	8,3%	5,6%	100,0%
Non-executive	157	50%	2,06	6,9%	3.538.610	36,6	12,0	42,9%	30,1%	12,8%	14,1%	100,0%
None	48	15%	1,92	8,2%	2.943.845	28,6	12,2	41,7%	12,5%	27,1%	18,8%	100,0%

**Table IV (follows): Descriptive statistics of the 675 corporations, by the type of their largest shareholder and by different types of family control**

**Panel C: Family participation in the board of directors, founder controlled corporations (n = 92) and descendants controlled corporations (n = 203)**

<b>1) Founders</b>												
	number	%	Tobin' s Q	ROA	Size	Ultimate CF	Wedge	No separation	Dual classes	Pyramids	Both	Total
Founder CEO	46	50%	2,46	7,3%	2.306.316	47,6	6,7	52,2%	39,1%	4,3%	4,3%	100,0%
Founder non-executive - and other member CEO	26	28%	2,59	7,8%	3.866.803	39,7	8,2	53,8%	30,8%	11,5%	3,8%	100,0%
No member director	10	11%	2,92	11,5%	856.914	47,5	3,0	70,0%	30,0%	0,0%	0,0%	100,0%
Total / Average	92	100%	2,49	9,8%	2.574.466	44,5	7,3	50,0%	20,0%	20,0%	10,0%	100,0%
								52,4%	34,1%	8,5%	4,9%	100,0%
<b>2) Descendants</b>												
	number	%	Tobin' s Q	ROA	Size	Ultimate CF	Wedge	No separation	Dual classes	Pyramids	Both	Total
Descendant CEO	55	27%	1,76	6,8%	2.159.270	42,9	10,5	34,5%	47,3%	10,9%	7,3%	100,0%
Descendant non-executive	111	55%	1,96	6,8%	3.926.657	35,1	14,3	36,9%	30,6%	13,5%	18,9%	100,0%
None	37	18%	1,81	4,4%	3.219.571	24,0	13,7	37,8%	10,8%	29,7%	21,6%	100,0%
Total / Average	203	100%	1,88	6,5%	3.318.930	35,2	13,2	36,5%	31,5%	15,8%	16,3%	100,0%

**Table V: The results of regressions of firm valuation and performance on ownership concentration and family control**

In the table we report the results of OLS regressions, with dependent variables Tobin' s q and ROA, for the years 1999-2001. Family is a dummy variable taking value 1 for family-controlled corporations. Cash-flow rights is the share of cash-flow rights held by the largest shareholder. Wedge is the difference between the share of voting and cash-flow rights held by the largest shareholder. Ln (Size) is the natural logarithm of Total Assets. Leverage is the book value of total financial debt divided by the book value of equity. Sales growth is the growth of sales in the previous year. We include among the regressors the fixed effects for SIC two digits, years, and countries. T-statistics from heteroskedasticity consistent (Huber/White) standard errors appear in parentheses.

Dependent variable	Ln (Tobin' s Q)			ROA		
	1	2	3	4	5	6
Regression specification						
Family		0,0481 (2,16)	0,0849 (2,68)		0,0099 (2,66)	0,0113 (2,43)
Cash-flow rights	0,0004 (0,73)		-0,0003 (-0,41)	0,0002 (3,55)		0,0001 (1,21)
Wedge	-0,0022 (-1,93)		-0,0039 (-2,74)	-0,0001 (-0,45)		-0,0003 (-1,47)
Ln (Size)	0,0176 (1,24)	0,0174 (1,08)	0,0199 (1,36)	0,0039 (2,22)	0,0035 (2,39)	0,0042 (2,43)
Leverage	-0,0003 (-2,39)	-0,0002 (-2,11)	-0,0003 (-2,39)	-0,0001 (-4,36)	-0,0001 (-4,12)	-0,0001 (-4,47)
Sales growth	0,1727 (4,20)	0,1729 (4,37)	0,1698 (4,22)	0,0181 (2,14)	0,0180 (2,16)	0,0178 (2,14)
R-squared adj	32,56%	32,46%	33,09%	19,94%	20,03%	20,40%
N. Observations	1852	1852	1852	1852	1852	1852



**Table VI: The relationship between firm value and performance, and family involvement in management**

In the table we report results of OLS regressions of Tobin's Q and ROA on proxy variables for the involvement of the family in managing the corporations. In columns 1 and 3, we include among regressors Cash-flow rights (share of cash-flow rights held by the largest shareholder) and Wedge (difference between the share of voting and cash-flow rights held by the largest shareholder. In panel A Family CEO takes value 1 for corporations in which the CEO is a member of the controlling family. Family non-executive takes value 1 for corporations where the CEO is not a member of the family, but at least one member sits on the board as non-executive director. Family not on the board takes value 1 when no member of the family sits on the board. In panel B Founder takes value 1 when the founder is still alive, Descendants takes value 1 in all other family-controlled corporations. In all regressions we include as control variables (but do not report the results in the table): Ln (Size) (natural logarithm of Total Assets), Leverage (book value of Debt divided by the book value of Total assets), and Sales growth (growth of sales in the previous year). We then include the fixed effects for SIC two-digits, years and country. T-statistics from heteroskedasticity consistent (Huber/White) standard errors appear in parentheses.

**Panel A: Family CEO vs. family non-CEO**

Dependent variable	Ln (Tobin' s Q)		ROA	
Family CEO	0,0806 (1,72)	0,0532 (1,34)	0,0095 (1,59)	0,0091 (1,78)
Family non-executive	0,1007 (2,78)	0,0603 (2,29)	0,0172 (3,41)	0,0154 (3,95)
Family not on the board	0,0416 (0,89)	0,0026 (0,07)	-0,0051 (-0,63)	-0,0075 (-1,05)
Cash-flow rights	-0,0004 (-0,48)		0,0001 (1,05)	
Wedge	-0,0039 (-2,53)		-0,0003 (-1,29)	
R-squared adj	33,15%	32,54%	20,96%	20,63%
N. Observations	1852	1852	1852	1852

**Panel B: Founder vs. descendants**

Dependent variable	Ln (Tobin' s Q)		ROA	
Founder	0,1405 (4,33)	0,1164 (4,02)	0,0194 (5,13)	0,0192 (4,54)
Descendants	0,0657 (1,55)	0,0239 (0,75)	0,0104 (1,55)	0,0082 (1,49)
Cash-flow rights	-0,0004 (-0,52)		0,0001 (0,91)	
Wedge	-0,0037 (-2,33)		-0,0003 (-1,41)	
R-squared adj	33,34%	32,84%	20,74%	20,43%
N. Observations	1852	1852	1852	1852

**Table VII: The relationship between firm value and performance, and the involvement in management of founders and descendants**

In the table we report results of OLS regressions of Tobin' s Q and ROA on proxy variables for the involvement of founders and descendants in managing the corporations. In regressions in columns 1 and 3, we include among regressors Cash-flow rights (share of cash-flow rights held by the largest shareholder) and Wedge (difference between the share of voting and cash-flow rights held by the largest shareholder. Founder CEO represents when the founder is CEO, Founder non-executive when the founder sits on the board as non-executive director, Founder not on the board when the founder is still alive but no member of the family sits on the board. Descendants CEO, Descendant non-executive, Descendant not on the board represent equivalent situation for family controlled corporations in which the founder passed away. In all regressions we include as control variables (but do not report the results in the table): Ln (Size) (natural logarithm of Total Assets), Leverage (book value of Debt divided by the book value of Total assets), and Sales growth (growth of sales in the previous year). We then include the fixed effects for SIC two-digits, years and country. T-statistics from heteroskedasticity consistent (Huber/White) standard errors appear in parentheses.

Dependent variable	Ln (Tobin' s Q)		ROA	
Founder CEO	0,1338 (3,67)	0,1184 (2,79)	0,0137 (2,52)	0,0140 (2,14)
Founder non-executive	0,1813 (3,27)	0,1597 (2,92)	0,0255 (4,84)	0,0250 (4,38)
Founder not on the board	-0,0197 (-0,23)	-0,0569 (-0,87)	0,0150 (0,89)	0,0129 (0,91)
Descendant CEO	0,0453 (0,59)	0,0143 (0,22)	0,0110 (1,19)	0,0097 (1,21)
Descendant non-executive	0,0808 (2,22)	0,0392 (1,39)	0,0149 (2,31)	0,0122 (2,43)
Descendants not on the board	0,0285 (0,56)	-0,0089 (-0,18)	-0,0033 (-0,35)	-0,0063 (-0,73)
Cash-flow rights	-0,0003 (-0,45)		0,0001 (0,74)	
Wedge	-0,0035 (-2,16)		-0,0003 (-1,27)	
R-squared adj	33,57%	33,10%	21,02%	20,72%
N. Observations	1852	1852	1852	1852

**Table VIII: The results of pooled time-series average regressions**

This table gives the estimated coefficients from regressing Tobin's Q and ROA on ownership and various control variables using a pooled (mean) regression. For each dependent variable and specification we present the results of two different regression methods. In Panel A, results for OLS with random-effects (country level) specification are reported. In Panel B, results for robust regressions (Bisweight procedure) are reported. In regressions in columns 1, 2, 5 and 6, we include as regressors the same variables we employ in the regressions in table V. In regressions in columns 3, 4, 7 and 8 we include the same variables of the regressions in table VII, the only difference being that in random-effects regressions country fixed-effects are not included. In Robust regressions we include also country fixed-effects, and observations are not winsorized. T-statistics are in parentheses.

**Panel A : Random-effects regressions**

Dependent variable Regression specification	Ln (Tobin' s Q)				ROA			
	1	2	3	4	5	6	7	8
Family	0,0723 (1,98)	0,0458 (1,51)			0,0111 (1,88)	0,0070 (1,42)		
Founder CEO			0,1057 (1,65)	0,0914 (1,50)			0,0113 (1,09)	0,0102 (1,02)
Founder non-executive			0,2193 (3,16)	0,2045 (3,05)			0,0375 (3,35)	0,0358 (3,28)
Founder not on the board			-0,0387 (-0,30)	-0,0615 (-0,49)			0,0183 (0,89)	0,0143 (0,70)
Descendant CEO			0,0307 (0,52)	0,0072 (0,13)			0,0049 (0,51)	0,0016 (0,18)
Descendant non-executive			0,0760 (1,65)	0,0446 (1,10)			0,0130 (1,74)	0,0073 (1,11)
Descendants not on the board			0,0005 (0,01)	-0,0274 (-0,44)			-0,0008 (-0,07)	-0,0064 (-0,63)
Cash-flow rights	-0,0001 (-0,07)		-0,0002 (-0,23)		0,0001 (0,41)		0,0000 (0,18)	
Wedge	-0,0029 (-1,90)		-0,0026 (-1,70)		-0,0006 (-2,26)		-0,0006 (-2,18)	
R-squared adj	35,93%	35,51%	36,84%	36,53%	20,11%	19,23%	21,32%	20,63%
N. Observations	663	663	663	663	663	663	663	663

**Table VIII: (follows) The results of pooled time-series average regressions**

**Panel B : Robust regressions**

Dependent variable Regression specification	Ln (Tobin' s Q)							
	1	2	3	4	5	6	7	8
Family	0,0980 (3,36)	0,0429 (1,86)				0,0119 (2,39)	0,0126 (2,93)	
Founder CEO			0,1491 (2,86)	0,1379 (2,72)			0,0113 (1,24)	0,0152 (1,71)
Founder non-executive			0,2505 (4,64)	0,2191 (4,15)			0,0329 (3,44)	0,0354 (3,78)
Founder not on the board			-0,0107 (-0,11)	-0,0583 (-0,61)			0,0143 (0,83)	0,0147 (0,86)
Descendant CEO			0,0692 (1,47)	0,0276 (0,62)			0,0074 (0,90)	0,0086 (1,10)
Descendant non-executive			0,0667 (1,80)	0,0118 (0,36)			0,0130 (2,06)	0,0128 (2,28)
Descendants not on the board			0,0458 (0,90)	-0,0039 (-0,08)			-0,0003 (-0,03)	-0,0039 (-0,45)
Cash-flow rights	-0,0003 (-0,49)		-0,0002 (-0,35)			0,0003 (2,39)	0,0002 (2,07)	
Wedge	-0,0052 (-4,04)		-0,0044 (-3,43)			-0,0003 (-1,49)	-0,0003 (-1,42)	
R-squared adj	45,46%	45,58%	46,17%	46,15%	29,81%	27,46%	28,77%	27,46%
N. Observations	663	663	663	663	663	663	663	663

**Table IX: Instrumental variable results**

In the table we report the results of instrumental variable LIML (limited-information maximum likelihood) regressions (with Fuller's modification), with dependent variables Tobin's  $q$  and ROA, for the years 1999-2001. All independent variable(s) reported, in each regression, are considered endogenous. Instrumental variables are the following: Alpha and variance of the ordinary share (alpha is estimated by regressing 40 months of returns in excess on treasury bills on the excess returns of an index representative of the country stock market; variance is estimated over 40 months prior to the date of performance valuation), and the age of the corporation (log of). Cash-flow rights is the share of cash-flow rights held by the largest shareholder. Wedge is the difference between the share of voting and cash-flow rights held by the largest shareholder. Family is a dummy variable taking value 1 for family-controlled corporations. Founder CEO represents when the founder is CEO, Founder non-executive when the founder sits on the board as non-executive director, Founder not on the board when the founder is still alive but no member of the family sits on the board. Descendants CEO, Descendant non-executive, Descendant not on the board represent equivalent situation for family controlled corporations in which the founder passed away. In all regressions we include as control variables (but do not report the results in the table): Ln (Size) (natural logarithm of Total Assets), Leverage (book value of Debt divided by the book value of Total assets), and Sales growth (growth of sales in the previous year). We then include the fixed effects for SIC two-digits, years and country.  $k$  is the stochastic parameter used to estimate the first stage predicted values of endogenous variable(s). T-values are in parentheses.

Regression specification	Ln(Tobin's Q)				ROA			
	1	2	3	4	1	2	3	4
Cash-flow rights	0,0008 (1,12)		-0,0001 (-0,13)	-0,0004 (-0,52)	0,0003 (2,33)		0,0002 (1,60)	0,0002 (1,22)
Wedge	-0,0014 (-1,00)		-0,0034 (-2,11)	-0,0026 (-1,79)	-0,0003 (-1,21)		-0,0005 (-1,61)	-0,0006 (-2,05)
Family		0,0767 (2,27)	0,0964 (2,62)			0,0081 (1,27)		
Founder CEO				0,1704 (3,04)				0,0082 (0,77)
Founder non-executive				0,2108 (3,46)				0,0164 (1,42)
Founder not on the board				0,0392 (0,36)				0,0150 (0,73)
Descendant CEO				0,0465 (0,88)				0,0100 (1,00)
Descendant non-executive				0,0726 (1,74)				0,0183 (2,37)
Descendants not on the board				-0,0380 (-0,63)				-0,0023 (-0,20)
$k$	76,25%	80,28%	75,88%	68,53%	74,91%	80,53%	74,58%	68,70%
R-squared adj	29,88%	29,91%	30,08%	30,48%	17,54%	17,17%	17,56%	17,62%
N. Observations	1804	1804	1804	1804	1804	1804	1804	1804

**Table X: The relation between family control and valuation and operating performance by country**

In this table we report the signs of the estimated coefficients on family dummy variables in regressions where Tobin's Q (Panel A) or ROA (Panel B) is the dependent variables, and the independent variables are ownership variables and the various control variables. The regressions are the same whose results are reported in tables V (for "Family") and VII (for "Founder CEO", "Founder non-executive", "Descendant CEO" and "Descendant non-executive"), except that we substitute the family dummies we use in tables V and VII with eleven family dummies, one for each country, for which we report results. The regression specification includes in the independent variables (results not reported) cash-flow, wedge, size, leverage, sales growth, fixed effects for SIC two-digits, years and country. T-statistics from heteroskedasticity consistent (Huber/White) standard errors appear in parentheses as follows ; (\*\*\*) significant 1%, (\*\*) significant 5%, (\*) significant 10%. In the row "% of family CEOs" we show for each country the % of family firms in which the CEO is a member of the family.

**Panel A: Dependent variable Tobin's Q**

	n.countries positive	Belg.	Fra.	Ita.	Neth.	Spain	Germ.	Switz.	Den.	Fin.	Norw.	Swe.	Total
Family n. obs. dummy = 1	8	+ (**)	+ 84	- 47	+ (**)	+ (**)	+ (**)	+ (**)	- 12	+ (**)	- 14	+ (**)	315
Founder CEO n. obs. dummy = 1	7	+ (**)	+ 20	+ 10	+ 1	- (**)	+ (**)	+ (**)	n.a.	n.a.	+ (**)	n.a.	46
Founder non-executive n. obs. dummy = 1	8	+ (**)	+ 9	+ (**)	+ (**)	+ 3	- (**)	+ (**)	n.a.	- 1	+ 1	+ (**)	36
Founder not on the board n. obs. dummy = 1	2	+ (**)	+ (**)	n.a.	- 3	- 1	- 2	n.a.	n.a.	n.a.	- 1	n.a.	10
Descendant CEO n. obs. dummy = 1	6	+ 2	+ (**)	- 17	+ (**)	+ (**)	- 4	+ 3	- 1	+ (**)	- 2	n.a.	55
Desc. non-executive n. obs. dummy = 1	8	+ (**)	+ 25	- 12	+ (**)	+ (**)	+ 17	+ 13	- 6	+ (**)	+ 7	+ (**)	111
Desc. not on the board n. obs. dummy = 1	4	- 1	- (**)	- (**)	+ (**)	+ 2	+ 11	+ 5	- (**)	- (**)	n.a.	- (**)	37
% of family CEOs		20%	45%	57%	20%	38%	27%	17%	8%	9%	21%	0%	

**Table X (follows): The relation between family control and valuation and operating performance by country**

**Panel B: Dependent variable ROA**

	n.countries	Belg.	Fra.	Ita.	Neth.	Spain	Germ.	Switz.	Den.	Fin.	Norw.	Swe.	Total
Family	8	+ (**)	+ (**)	- (**)	+ (**)	+ (**)	+ (**)	-	- (**)	+	+	+ (**)	315
n. obs. dummy = 1		20	84	47	20	13	49	29	12	11	14	16	
Founder CEO	7	+ (**)	+ (**)	-	+ (**)	+	+ (**)	+ (**)	n.a.	n.a.	+ (**)	n.a.	46
n. obs. dummy = 1		2	20	10	1	1	9	2	0	0	1	0	
Founder non-executive	8	+ (**)	+ (**)	+ (**)	-	+ (**)	- (**)	+ (**)	n.a.	+ (**)	+ (**)	+ (**)	36
n. obs. dummy = 1		3	9	6	4	3	2	6	0	1	1	1	
Founder not on the board	4	-	+ (**)	n.a.	+ (**)	+ (**)	+	n.a.	n.a.	n.a.	- (**)	n.a.	10
n. obs. dummy = 1		1	2	0	3	1	2	0	0	0	1	0	
Descendant CEO	5	+ (**)	+ (**)	- (**)	+ (**)	-	+ (**)	-	- (**)	+	- (**)	n.a.	55
n. obs. dummy = 1		2	18	17	3	4	4	3	1	1	2	0	
Desc. non-executive	8	+ (**)	+ (**)	- (**)	+ (**)	+ (**)	+	+	- (**)	-	+ (**)	+	111
n. obs. dummy = 1		9	25	12	6	2	17	13	6	5	7	9	
Desc. not on the board	5	+	+	- (**)	+ (**)	+ (**)	+ (**)	- (**)	- (**)	- (**)	n.a.	+ (**)	37
n. obs. dummy = 1		1	5	1	2	2	11	5	2	3	0	5	

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