

# **FAMILY CONTROL AND THE INFORMATIVENESS OF ACCOUNTING EARNINGS IN SPAIN**

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## **ABSTRACT**

*This work examines the relationship between the ownership structure and family control of listed non-financial Spanish companies and the informativeness of their accounting earnings between 1996 and 2002. The results reveal a non-linear relationship between the level of voting rights of the controlling shareholder and the credibility of accounting information in non-family firms while the relationship is linear and positive in family firms. With regard to the influence of the controlling family's active control over the informativeness of accounting earnings, the results reveal that, the greater the family's concentration of power on the board of directors, either by the number of family directors or by the CEO's power in the decision making process, the lower the credibility of the accounting earnings in those firms.*

*Key words: voting rights, reputation, civil law, family firm, founder.*

*Classification JEL: G32; M41*

## **1. Introduction**

The impact of ownership structure on the informativeness of accounting earnings has been studied in institutional environments that are significantly different from the context in which corporate activities take place in Spain. In this respect, Warfield, Wild and Wild (1995), show that internal ownership exercises a positive influence on the credibility of accounting earnings in a sample of US companies. Nevertheless, Yeo, Tan, Ho and Chen (2002) state that, although it is true that low levels of internal ownership have a positive effect on that informativeness, the relationship becomes negative in the case of high levels of internal ownership. Fan and Wong (2002) study the effect of ownership structure on the informativeness of accounting earnings in East Asia. Their results reflect a negative relationship between the concentration of voting rights in the hands of the controlling shareholder and the informativeness of the accounting earnings. Moreover, they find that this relationship becomes stronger when there is divergence of voting and cash flow rights.

The contractual relationships of Spanish companies are set within a governance framework typical of a civil law country. Therefore, they fall under a legal system, which, unlike that of Anglo-Saxon countries, provides less protection to outside investors. So, the governance structure is characterized by high concentration of voting rights in the hands of the controlling shareholders, the significant use of ownership structures that permit the separation of voting and cash flow rights, and a notable presence of families in the control of the decision making process.

The presence of concentrated ownership structures produces a shift in the conflict stemming from the contractual relationships that are defined in the corporate framework. Thus, the agency conflicts move from the differences between shareholders and managers, typical of diffuse ownership structures (*e.g.*, Jensen and Meckling, 1976, Fama, 1980 and Fama and Jensen, 1983), to the conflict of interests between controlling and minority shareholders (La

Porta, *et al.*, 2000). Just as the ownership structure of listed Spanish firms defines the nature of their principal agency conflict, it can also be expected to affect the quality of the accounting information. This is because this type of structure places the controlling shareholder in a position of authority with the ability to influence the firm's policy regarding the provision of corporate accounting information. Earlier literature has basically drawn on two arguments to explain how the ownership structure is prone to create certain incentives that may influence the behavior of those in control of the reporting process (*e.g.*, Warfield, Wild and Wild, 1995, Yeo, Tan, Ho and Chen, 2002, Fan and Wong, 2002). The entrenchment effect, proposed by Morck, Shleifer and Vishny (1988), refers to the possibility that those individuals adopt non-value-maximizing actions aimed at obtaining private benefits, particularly when there is a legal environment that offers little protection to minority shareholders (Bebchuk, 1999), as is the case of Spain. The hypothesis of convergence of interests put forward by Jensen and Meckling (1976) suggests that increased participation in ownership could produce an alignment of the interests of the principal and the agent. Based on the arguments of Jensen and Meckling (1992), Fan and Wong (2002), add an information effect that considers opacity as a suitable strategy to avoid the transmission of relevant information about the firm's rent-seeking activities to competitors.

The concentration of voting rights can create certain incentives that may affect the behaviour conduct of those who control the preparation of accounting information and the provision of that information to the market. However, other equally important attributes may exercise considerable influence over the informativeness of accounting earnings. Morck *et al.* (1988) argue that characteristics of the managers, such as length of service in the position, the nature and even the personality of the founder, may be attributes that explain the market's evaluation of the firm. Faccio and Lang (2002) indicate that 43.9% of listed companies in Western Europe are controlled by family groups while the percentage of such companies in Spain was

55.79% in 1997. Therefore, there should be some consideration of whether the attributes inherent to the exercise of control by family groups, such as the wish to prevent control passing outside the family, long-term involvement, or concern for reputation, may give rise to incentives that guide the behaviour of those who control the preparation and provision of accounting information. Thus, Gomes (2000) argues that concern for the development or increase of the firm's reputation may produce an alignment of the majority and minority shareholders' interests. Logically, the market will consider such incentives generated by the distinctive characteristics of the family firm in order to give credibility to the accounting information supplied by the firm.

In that context, the objective of this work is to analyze the impact of family ownership and control of listed Spanish companies on the informativeness of their accounting earnings. This work broadens previous evidence in several aspects. Firstly, it contributes to broadening knowledge of the effect of family ownership and control on the informativeness of accounting earnings. More specifically, it analyzes how the quality of accounting information is affected by the family nature of the controlling shareholder, the divergence of voting and cash flow *rights*, the existence of other blockholders, the presence of family members on the board of directors, and the characteristics of the CEO (length of service, founder, descendant, or his/her condition of hired non-family member). Secondly, the analysis takes place in an institutional context of French legal origin in which outside investors are poorly protected. Finally, unlike earlier literature, this work uses a more complete measure for the analysis of the concentration of voting rights in the hands of the principal shareholder, since it identifies the complete chains of control up to the ultimate owner of the analyzed firms between 1996 and 2002.

The rest of the work is structured in the following way. The second section addresses the theoretical approaches that justify the effect of the ownership structure on the informativeness of accounting earnings. The third section describes the methodological issues of the empirical

study. The results are set out in the fourth section and the work ends with the presentation of the principal conclusions.

## **2. Theoretical arguments**

### *Ownership and informativeness of accounting earnings*

Many of the works that study ownership structure share the image of diffuse ownership proposed by Berle and Means (1932). However, various studies reflect that, in large corporations in the most developed countries, the presence of widely held ownership structures is not as common as those authors predict. Many works reveal the importance of concentrated ownership structures with one, or very few controlling shareholders exercising a notable level of control in listed companies (Demsetz, 1983; Demsetz and Lehn, 1985; Shleifer and Vishny, 1986; Holderness and Sheehan, 1988; Holderness, Kroszner and Sheehan, 1999; La Porta, López-de-Silanes and Shleifer, 1999; Pedersen and Thomsen, 1999; Claessens, Djankov and Lang, 2000 and Faccio and Lang, 2002).

In this context, together with the factors explaining the presence of concentrated ownership structures determined by Fama and Jensen (1983), Demsetz (1983), Shleifer and Vishny (1986) and Denis and Denis (1994), a growing body of studies focus their attention on the legal environment as a determinant of the governance system. Those studies explicitly analyze the level of efficacy of the legal system, not only in controlling the agency relationships established in organizations, but especially in protecting the interests of outside investors. In this respect, the level of defense provided by the legal environment becomes a determinant of the ownership structure<sup>1</sup>.

Bebchuk's (1999) study suggests a greater presence of concentrated ownership structures in countries where the wealth of minority shareholders is poorly protected by the legal system. For their part, Shleifer and Wolfenzon (2002) center their study on the capital market and

establish that, when the shareholders' interests are well defended, those markets will be more developed and there will be a lower concentration of ownership. Those theoretical arguments are in line with the empirical results of the works of La Porta, López-de-Silanes and Shleifer (1999), Claessens, Djankov and Lang (2000) and Faccio and Lang (2002).

In this respect, the presence of concentrated ownership does not limit agency costs, since there is still a divergence of interests between ownership and control. However, we cannot ignore the fact that this new context replaces the conflict stemming from the contractual relationships that are defined in the corporate framework. In this way, agency conflicts move from the difference between shareholders and managers, typical of diffuse ownership structures (Jensen and Meckling, 1976, Fama, 1980 and Fama and Jensen, 1983), to the conflicts of interests between controlling and minority shareholders (La Porta, López-de-Silanes, Shleifer and Vishny, 2000).

Therefore, an analysis of the impact of ownership structure on the informativeness of the accounting earnings requires agency conflicts to be considered. The relationship between internal ownership and the credibility of the accounting information in a context of diffuse ownership has been addressed by various authors. Warfield, Wild and Wild (1995) show how internal ownership is positively related to the explanatory power of the accounting earnings, since, when managers hold less company equity, they have more incentives to act in ways that do not maximize value. Nevertheless, Yeo, Tan, Ho and Chen (2002) point out that the informativeness of the accounting earnings does not always increase in line with internal ownership. They state that, although it is true that low levels of internal ownership have a positive effect on that informativeness, that relationship becomes negative in the case of high levels of internal ownership.

In a context of concentrated ownership, Fan and Wong (2002) analyze the effect of the concentration of ownership on the informativeness of the accounting earnings, using different

arguments that may explain this relationship. Firstly, the entrenchment effect, formulated by Morck *et al.* (1988) is based on the controlling shareholder's influence over the information prepared by the firm. On the basis of the previous argument, outside investors will pay little attention to the accounting information since they expect that the information will, to a great extent, be in the personal interests of the majority owner rather than a faithful reflection of the underlying economic situation. However, an increase in the level of ownership could lead to an alignment effect (Jensen and Meckling, 1976) that may have a positive influence on the informativeness of accounting earnings by reducing the incentives for the controlling shareholder to expropriate the wealth of minority shareholders. Moreover, based on the theoretical arguments of Jensen and Meckling (1992), Fan and Wong (2002) consider the information effect based on the limitation of the leakage of specific knowledge about the firm's rent-seeking activities to competitors. In that respect, majority and minority shareholders alike will be interested in providing the market with as little relevant accounting information as possible. Thus, the information effect associated with the concentration of ownership will have a negative impact on the informativeness of accounting earnings.

Furthermore, Bebchuk, *et al.* (2000) argue that the use of ownership structures, such as the issue of shares with different levels of vote, the use of pyramidal or crossholding structures that permit the separation of voting and cash flow rights, make it possible to combine the agency problems associated with both concentrated and diffuse ownership in one single contractual structure. This type of structure is more common in countries whose legal systems offer lower defense to the interests of outside investors, with pyramidal structures being the principal mechanism used by controlling shareholders to separate the voting and cash flow rights (La Porta, *et al.*, 1999). With reference to such ownership structures, Fan and Wong (2002) indicate that the separation between voting and cash flow rights may exacerbate the entrenchment effect typical of concentrated ownership structures since the internal agents



have more incentives to acquire private benefits at the expense of minority shareholders. That fact, together with the other weaker mechanisms of corporate governance, accentuates the incentives for expropriation by the controlling shareholders. All that could reduce the informativeness of the accounting information given to the market since, if those private benefits are detected, the external agents could take disciplinary actions against the insiders (*e.g.*, Zingales, 1994; Shleifer and Vishny, 1997) who, therefore, have incentives to conceal their private benefits.

With regard to the analysis of the relationship between concentration of ownership and the informativeness of accounting earnings, previous literature has shown the presence of both a positive (alignment effect) and a negative relationship (entrenchment/information effect). Therefore, it is not possible to propose a univocal hypothesis. In this sense, the empirical results will define which of the before mentioned effects prevails in the context of Spanish listed companies. Moreover, since the theoretical arguments clearly indicate an exacerbation of the entrenchment effect under structures that allow for the separation between voting and cash flow rights, we expect a negative relationship between divergence and the informativeness of accounting earnings.

#### *Family control and informativeness of accounting earnings*

The existence of ownership structures characterized by high concentration means that it is important to examine the effects of the nature of the controlling owner on corporate behavior. In that respect, it should be considered whether, as Thomsen and Pedersen (2000) indicate, the nature of the controlling shareholders affects certain aspects of corporate behavior and, therefore, the identity of those shareholders may affect corporate objectives and the way in which control is exercised in the firm.

One of the characteristics specifically mentioned by La Porta, *et al.* (1999) and Faccio and Lang (2002) is the presence of family groups as large shareholders in listed companies in Continental Europe. One of the factors determining the high presence of this type of shareholder in the control of listed companies is the legal system. In this respect, Burkart, *et al.* (2003) argue that the level of legal protection of outside shareholders is the crucial factor in making delegation of management and the sale of shares attractive to the family. Thus, in those countries offering high legal protection to outside investors the presence of companies with diffuse ownership and professional managers will be significant while in countries with medium protection, the family delegates management and retains a significant part of the ownership, and lastly, in countries offering weak protection, the family maintains a notable presence in the management and ownership of the firm. Transferring those arguments to the civil law context of Spain, we can predict a notable presence of family, which is almost universal in unlisted companies, and dominant in listed ones, at least with regard to a family remaining in the ownership. Those predictions find support in the studies of La Porta, *et al.* (1999) and Faccio and Lang (2002), which show that family groups are the main controlling shareholders of listed Spanish companies. This type of shareholder is not only characterized by its participation in the ownership of the company, since it is also common in these firms that the family exercise an active control in the decision making process through family members either on the board of directors or in the position of CEO. In that context, it should be considered whether the attributes inherent to the family nature affect the informativeness of accounting earnings.

In that respect, when a family group is the principal shareholder of the company, the agency costs could increase since the controlling family can obtain greater benefits from control (Shleifer and Vishny, 1997). Similarly, Bebchuk (1999) argues that private gains are greater when the controlling shareholder is the founder of the firm, when control has always been in

the hands of the family, or when control gives the family prestige or reputation. Those agency costs could also increase if the family has active control in the decision making bodies. Smith and Amoako-Adu (1999) show how the market reacts negatively when a family member is appointed company manager while Gómez, *et al.* (2001) find evidence that the chairman of the board becomes entrenched when that figure has family links with the majority shareholders.

Contrary to the argument of expropriation in the context of family firms, previous literature has referred to certain characteristics of the family firm that could lead to the alignment of the interests of the family and minority shareholders. Such characteristics include: the existence of a non-diversified investment portfolio, which entails a special interest in the survival of the firm; the long-term vision of the controlling family, which, being interested in the future transfer of the firm to the heirs, attaches less importance to short-term objectives (*e.g.*, Donnelly, 1964; Danco, 1992 and Neubauer and Lank, 1998); and concern for reputation (Anderson and Reeb, 2003), which means that the firm is conceived as an asset to be handed down to descendants rather than as a wealth to be consumed during the lifetime of the founders. Under those premises and in comparison with other owners, family shareholders are more likely to adopt wealth maximizing decisions that would benefit economic agents with interests in the firm as a whole. Moreover, the presence of family members in top management posts could have a positive effect on corporate behavior since the family relationship between owners and managers may reduce agency conflicts (Fama and Jensen, 1983). With regard to the empirical evidence of such arguments Anderson and Reeb (2003) and Anderson, Mansi and Reeb (2003) suggest that some of the consequences of long-term family involvement are lower costs in external financing and better *performance* than in non-family firms. On the same lines, Ali, Chen and Radhakrishnan (2005) conducted a study in

which they showed that family firms provided better results to the market than non-family firms.

Finally, Wang (2005) verifies the presence of the two mentioned effects, expropriation and alignment, in a sample of American firms. In effect, he finds a non-linear relationship between family ownership and the informativeness of accounting earnings, in which lower levels of family ownership show a positive relationship while the credibility of the accounting earnings decreases with high levels of ownership.

Therefore, taking into account the works that link the firm's family nature and corporate behavior, it is not possible to propose a univocal hypothesis. It could be either the entrenchment/information or the alignment effect the one that explains the relationship between family ownership and the credibility of accounting information, so the empirical results will determine the sign of that relationship.

### **3. Methodological aspects**

#### *Sample*

The selection of the sample firms started with 117 non-financial companies listed on the Spanish stock market at the end of 2002. We rejected one of those companies because trading had been suspended since it was in liquidation, and six others that were not based in Spain. We excluded nine companies with fewer than three observations in the 1996/2002 period and two more that were excluded from the stock market in 2003, giving a final panel data of 99 companies.

In order to carry out the empirical analysis we had to build two data bases. The first was focused on determining the ownership relationships to enable us to determine the participation in the voting and cash flow of the blockholders in the firms under study. The second data base

allowed us to delimit the owner family's active control in the decision making process by means of the family presence on the board of directors and a series of attributes of the CEO.

### *Definition of control chains*

The methodology used to analyze the ownership structure starts with the classification of the companies into two main groups; on the one hand, companies with diffuse ownership, and on the other, those with one ultimate owner. For the purposes of this work, and in line with La Porta, *et al.* (1999), Claessens, *et al.* (2000) and Faccio and Lang (2002), we will assume that a company has an ultimate owner when the controlling shareholder holds a percentage of voting rights that is equal to, or above, an established level of control, which in our case is 10 percent<sup>2</sup>. We will classify a company as a family firm when its ultimate owner is a family group or individual. In both cases, the ownership must be represented on the board of directors<sup>3</sup>.

This means that, if a family is the main shareholder of company A, with 16 percent of its voting rights, and company A owns 20 percent of company B, we will say that company B is controlled by a family, with the level of control of 10 percent. This is because it has an ultimate owner who controls company B indirectly through company A and the family group is represented on the board of directors. In the example above, the family holds 3.2 percent of the cash flow rights of company B, in other words, the product of its holdings along the chain ( $0.16 \times 0.2$ ). However, following the methodology proposed by Claessens, Djankov and Lang (2000) and Faccio and Lang (2002), it holds 16 percent of the voting rights of company B, that is, the weakest link in the control chain [ $\min(0.16, 0.2)$ ]. Therefore, if the family holds 100 percent of the voting rights of A, there is no divergence of voting and cash flow rights, both being 20 percent in this case. On occasions, we see that a company is controlled through a multiple control chain, where the ultimate owner controls the company by means of various control chains. Thus, in our example, if the family directly holds 6 percent of the voting rights

of B, then that family group holds 9.2 percent of the cash flow rights of B ( $0.16 \cdot 0.2 + 0.06$ ), and 22 percent of its voting rights [ $(\min(0.16, 0.2) + 0.06)$ ].

With the objective of determining the ownership-control relationship, based on the control chain methodology shown above, we start with information about significant shareholdings provided by the Spanish Stock Exchange Commission (Comisión Nacional del Mercado de Valores). From that data, we extracted the holdings of direct and indirect shareholders with at least 5 percent of the stock, as well as the ownership in the hands of directors, irrespective of the size of the holding. In addition, we obtained complementary information using the Informa database, which provided information about the ownership and the boards of directors of listed and unlisted Spanish companies. That information was necessary to complete the entire control chain. In order to determine the representation of an individual's or family's control on the board, we consulted the company's annual reports to analyze the composition of that board. In cases where companies not based in Spain were shareholders, we accessed their websites to consult their annual reports and so complete their ownership structure. When we had any queries, we contacted the company for clarification to enable us to obtain an accurate picture of the control chain.

Table 1 shows the results obtained regarding the voting and cash flow rights in the hands of the controlling shareholder. Panel A shows that the median cash flow rights are around 25 percent, as opposed to 29 percent in the case of the voting rights, which are shown in Panel B. This fact determines, on the one hand, the high concentration of ownership in the hands of the controlling shareholder and, on the other, that the controlling owner has more voting rights than cash flow rights. Panel C shows that the relationship between the main shareholder's ownership and control follows a downward evolution, which implies that, in Spain, the divergence of voting and cash flow rights increased between 1996 and 2002 although the median of that relationship was 1 for the period as a whole<sup>4</sup>.

## **INSERT TABLE I**

With reference to the family nature of the main shareholder, Table 2 shows the influence of family control in listed Spanish companies in the 1996/2002 period. That table reveals that 52.5 percent of the companies studied were controlled by family groups in 2002, with that percentage tending to increase throughout the period of the study. Furthermore, 11.1 percent of the ownership structures were diffuse, with no shareholder possessing more than 10 percent. Therefore, the results obtained regarding the relevance of the family nature of the controlling shareholders of large listed companies are in line with the theoretical proposals in the works of Bebchuck (1999) and Burkart, *et al.* (2003) and with the empirical results in the studies of La Porta, *et al.* (1999) and Faccio and Lang (2002).

## **INSERT TABLE II**

### *Family control*

To obtain the variables of the board of directors and the CEO attributes that enable us to analyze the effect of family control on the informativeness of accounting earnings, we had to build a second data base from two fundamental sources. The first source was the annual reports of the sample companies, where we examined the composition of the board to identify family directors by comparing the surnames of the directors and of the CEO with those of the controlling family. The second source of information was the firms themselves since current Spanish legislation does not require the firm to reveal the CEO's characteristics. Therefore, we contacted the firms directly to check the CEO's length of service in the position, and his/her character of founder or descendant, in order to obtain the historical data necessary to undertake the study of the effect of family control on the informativeness of accounting earnings.

### *Variable Definitions*

*Endogenous variable.* The stock returns,  $CAR_i$ , enables us to analyze the informativeness of the accounting earnings, being measured by the cumulative net-of-market stock returns of the company's market evolution  $i$  in year  $t$ . Stock return is calculated continuously with the prices 12 months before the last day for the presentation of the annual accounting reports under Spanish stock exchange regulations<sup>5</sup>. The data used to construct that variable was provided by the Spanish Stock Exchange (Sociedad de Bolsas).

*Endogenous variable.* The stock returns  $CAR_i$ , measured as the cumulative returns adjusted by the market evolution of the firm  $i$  in year  $t$ , permits us to analyze the informativeness of accounting earnings. Following Fan and Wong (2002), profitability is calculated continuously with the prices 12 months before the last day for the presentation of annual reports as established by Stock Exchange regulations<sup>6</sup>. The data used in the construction of that variable were the historical series of share quotations provided by the Spanish Stock Exchange (Sociedad de Bolsas).

*Explanatory variables.* The analysis of the informativeness of accounting earnings is traditionally performed from the value of the coefficient estimated in the regression between share profitability and accounting earnings –*earnings response coefficient*- (e.g., Teoh and Wong, 1993; Imhoff and Lobo, 1992; Warfield *et al.*, 1995; Subramanyan and Wild, 1996; Fan and Wong, 2002; Gul and Wah, 2002; Yeo, *et al.*, 2002). For the analysis of the informativeness of accounting earnings and in line with earlier literature, this study uses  $NIE_i$ , that is, the earnings of the company  $i$  before non-recurring revenues in the year  $t$  divided by the market value of equity at the beginning of year  $t$ .

The variables used to analyze family control include  $Famy_i$ , which is a dummy variable adopting the value of 1 if the principal shareholder is a family group or individual and 0 otherwise;  $DirecFamy_i$ , which refers to the presence of family members on the board of



directors and is measured as the percentage of family members on the board. The variables regarding the characteristics of the CEO include the CEO's length of service  $AntCEO_i$ , which represents the number of years in the position; the CEO's character of company founder  $CEOFund_i$ , a dummy variable taking the value of 1 if the CEO is the founder and 0 otherwise; the character of the CEO as descendant, a dummy variable taking the value of 1 if the CEO is a descendant and 0 otherwise; and lastly,  $CEOHire_i$ , a dummy variable taking the value of 1 if the CEO is a hired non-family member, and 0 otherwise. Other variables are  $V_i$ , the level of voting rights measured as the controlling shareholder's percentage of voting rights, and  $CV_i$ , the divergence of voting rights and cash flow rights, measured as the ratio of principal shareholder's cash flow rights over voting rights. As can be seen,  $CV_i$  is inversely related to the divergence of voting rights and cash flow rights. Finally, the dummy variable  $BLOCK_i$  is included to analyze the influence of other blockholders on the credibility of accounting earnings and takes the value of 1 if another shareholder holds more than 5% of the company shares and 0 otherwise.

*Control variables.* In order to analyze the possible influence of other corporate characteristics on the informativeness of accounting earnings, a series of control variables are introduced in line with previous works. In order to consider the effect of growth opportunities in the analysis of the earnings-returns relationship, the model includes  $Qi$ , which measures the relationship between the market value and the book value of the shares at the beginning of year  $t$ . The analysis also includes the level of debt,  $LEV_i$ , measured by means of the relationship between the accounting value of the debt and total assets at the beginning of year  $t$ , with the aim of identifying the risk arising from the use of external resources. Finally, the size of the firm,  $SIZE_i$ , measured as the logarithm of the market value of equity in thousands of euros at the start of year  $t$ , is included in order to consider other factors that could affect the earnings-returns relationship.

The descriptive statistics, as well as the correlation matrix of the variables are reported in table 3. It can be seen that the variable *CAR* has an average value of 0.120 and the representative average of accounting earnings *NIE*, has an average value of 0.052. The statistical values of the ownership variables *V* and *CV* are consistent with the values shown in Table 2. Thus, the ultimate owner holds an average of 34.52% of the voting rights, a percentage that is higher than that of cash flow rights. In fact, the controlling shareholders have on average 8.2% less of the cash flow rights than of the voting rights, with the average ratio being 0.918. The values shown in the correlation matrix lead us to assume that there are unlikely to be problems of multicollinearity in the specification of the regression models.

### **INSERT TABLE III**

#### **4. Results analysis**

The results of the regressions to analyze the influence of family control on the informativeness of accounting earnings are shown in Table 4. Fixed effects were included in the regressions using dummy variables for each of the years in the sample, which comprises a pool of 605 company-year observations<sup>7</sup>. We also ran the estimations controlling the correlation and heteroskedasticity using the Huber White Sandwich estimator of variance.

### **INSERT TABLE IV**

Focusing on the analysis of the influence of the ownership structure on the informativeness of accounting earnings, column 1 shows how the concentration of voting rights in the hands of the controlling shareholder (*V*) has a statistically significant negative effect on the informativeness of accounting earnings. Moreover, the estimation of the effect of the divergence of voting and cash flow rights (*CV*) shows a statistically non-significant relationship between the separation of voting and cash flow rights and the credibility of accounting information. With regard to the influence of the ownership structure of family

firms on the credibility of accounting information, the results reflect a statistically non-significant effect of divergence in firms controlled by family members (*CVFamy*). However, the level of voting rights held by the controlling family (*VFamy*) has a statistically significant positive influence on the informativeness of accounting earnings. Column 2 gives the results of the regression to test the non-linear relationship between the voting rights in the hands of the principal shareholder and the informativeness of accounting earnings. The results show that, while the relationship between ownership concentration and informativeness is quadratic in non-family firms, it is linear in family firms. This reflects that in non-family firms the alignment effect is stronger than the entrenchment effect when the levels of ownership are low although above a certain level of ownership the latter effect determines the relationship between ownership and the credibility of accounting information. However, in the case of family firms, the alignment/reputation effect determines the relationship between ownership and the quality of accounting earnings, irrespective of the controlling family's level of voting rights.

Concerning the presence of other blockholders (*BLOCK*), the results in column 3 reveal that, while in non-family firms there is a statistically significant positive relationship between credibility of accounting information and the presence of other blockholders in the ownership structure of the company, that presence displays no statistical significance in the case of family firms.

Focusing on the active control of the family in the decision making process and on the presence of family members on the board of directors (*DirecFamy*), we tested the linear and quadratic relationships between the percentage of family directors and the informativeness of accounting earnings. The results in columns 4 and 5 reflect a statistically significant negative relationship between the number of family directors and the credibility of accounting earnings while the non-linear relationship between the two variables is not statistically significant.

Finally, columns 6 to 9 display the results of the regressions in the analysis of the effect of the CEO's characteristics on the credibility of accounting earnings. More specifically, column 6 shows how the CEO's length of service (*Antg*) has a statistically significant positive influence on informativeness in non-family firms, and a negative effect in family firms. That negative sign is repeated (column 7) when we analyze the influence of the CEO's character of founder (*CEOFund*). However, the fact that the CEO is a descendant (*CEODesc*) of the founder (column 8) has no statistically significant effect on the informativeness of accounting earnings. Finally, column 9 reflects that the presence of a hired non-family member CEO (*CEOHire*) has a statistically significant positive effect on the credibility of family firms' accounting earnings.

With regard to the control variables, the regression results indicate that the level of borrowing has a statistically significant negative effect on the informativeness of accounting earnings, in keeping with expectations. However, neither company size nor the presence of growth opportunity has a statistically significant effect on the credibility of the accounting information provided by listed Spanish companies.

#### *Analysis of robustness*

With the aim of analyzing the robustness of the results obtained, a regression of the models defined in the study of ownership structure was conducted considering only those companies in which an ultimate owner of voting rights was identified; that is, companies whose *V* is 10 percent or higher. The results are shown in Table 5 and indicate that the regressions do not qualitatively change the results obtained when all the companies were included.

### **INSERT TABLE V**

Furthermore, the descriptive statistics of variable *CV* (Table 1) show that the first quartile of that variable is equal to 1 in every year except two (2001 and 2002), while the average values

are considerably lower than that in the first quartile. This suggests that there are outlying observations with unusually small values of CV. Therefore, we carry out the analysis removing any observations that fall within the 1 per cent at each extreme of the observations of CV. The results obtained do not modify the previous conclusions. Finally, regressions were performed using an alternative measure of *CAR*, accumulated returns net of market, in a window of 6 months before and after the end of the fiscal year. The results of the regressions on this endogenous variable show a statistically non-significant effect of ownership structure on the credibility of accounting information<sup>8</sup>.

## **5. Conclusions**

The growing concern about the effect of the corporate governance system, particularly the ownership structure, on the credibility of accounting information offers the opportunity to analyze the earnings-return relationship in a context other than the institutional environments in which previous works have studied that relationship. This work focuses on listed Spanish companies, an institutional context typical of a civil law country, where the interests of external investors are hardly protected by the legal system and where the image of ownership is determined by various issues. These include a high concentration of voting rights in the hands of the principal shareholder, the use of ownership structures that permit the divergence of voting and cash flow rights and the notable presence of family groups in control of companies.

This study has analyzed the effect of ownership structure and family control on the credibility of accounting information. The empirical results obtained in this work reveal that the relationship between ownership and informativeness is non linear in non-family firms, in that at low levels of ownership the alignment effect has greater weight and at higher levels of ownership the entrenchment effect defines the relationship between the two magnitudes. However, in family firms the relationship between ownership and credibility is linear and

positive, in line with the alignment effect. This seems to reflect that the market gives greater credibility to the accounting information in family firms at all levels of voting rights in the hands of the controlling family, while in non-family firms the relationship between ownership and informativeness depends on the controlling shareholder's level of voting rights.

The results also show that, in both family and non-family firms, the divergence of voting and cash flow rights in the hands of the principal shareholder has a statistically non-significant effect on the informativeness of accounting earnings. Thus, the controlling shareholders' use of pyramid structures does not appear to affect the credibility of accounting information in the case of listed Spanish companies.

With regard to the presence of other blockholders in the ownership structure of firms, the results once again show differences between family and non-family firms. In effect, while we found that the presence of other blockholders has a positive effect in the case of non-family firms, there is no statistical significance in that of family firms. Those results seem to indicate that the market perceives a more active role of blockholders in controlling the majority shareholder in non-family firms, while that control is not perceived when the principal shareholder is a family member.

Regarding the effect of the presence of family directors on credibility, the results show a negative relationship between the number of family members on the board and the informativeness of accounting earnings. This could be due to the lesser importance of public accounting information in family firms where the family has broad powers in the controlling bodies since, in those cases, it is the private information channels between family members that are more important in the definition of corporate decisions.

Finally, the results regarding the CEO's characteristics seem to determine that family ownership is positively evaluated by the market. However when the controlling family has

more power on the board of directors, either by the number of family directors or by the power of the CEO, there is a negative effect on the credibility of accounting earnings.

The results of this study show that the market gives more credibility to accounting information prepared by family firms, in keeping with the reputation effect usually associated with this type of shareholder. However, the effect of the family reputation on that informativeness diminishes as family control increases since this type of controlling shareholder has more incentives to obtain private benefits.

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<sup>1</sup> La Porta, López-de-Silanes, Shleifer and Vishny (1998) examine, at an international level, the level of protection of outside investors' interests by the legal system. Two types of legal origins or families are distinguished: common law, whose origins lie in Anglo-Saxon law and civil law, based on the principles of Roman law. The latter comprises three branches: the French (into which Spain falls), the German and the Scandinavian. Their study reveals a higher level of protection in countries with Anglo-Saxon legal origins, while countries with legislation based on civil law offer fewer safeguards. The weakest protection of outside investors is found in legislations of French origin.

<sup>2</sup> La Porta, López-de-Silanes and Shleifer (1999), Claessens, Djankov and Lang (2000) and Faccio and Lang (2002) use 10 and 20 percent as the level of control. However, in this work, we only show the results for a level of 10 percent, since the empirical results do not significantly change between the two control levels. Moreover, the use of a control level of 10 percent is more suitable for the reality of ownership relations of listed Spanish companies.

<sup>3</sup> In the works of La Porta, López-de-Silanes and Shleifer, 1999), Claessens, Djankov and Lang (2000) and Faccio and Lang (2002), companies controlled by individuals or families are automatically classified as familiar, while in this work that classification is dependent on the ownership being represented on the board of directors. We consider that this condition is appropriate since the occasional presence of an individual or family in the ownership of a company is hardly related to family involvement in a firm; something that usually entails family participation in ownership and the decision making process.

<sup>4</sup> The ownership structure used by the ultimate owners of the analyzed companies in order to separate voting and cash flow rights is based exclusively on the use of pyramid structures since the use of shares with different voting rights and the use of *cross-holding* is nil.

<sup>5</sup> In companies where the fiscal year end does not match with the calendar year, the results were calculated using the close of the accounts year.

<sup>6</sup> In the case of companies whose fiscal year does not coincide with the natural year, profitability was calculated using the closing date of the accounting period.

<sup>7</sup> Zhou (2001) argues that, in studies of ownership structure, cross-sectional models are preferable to the specification of fixed effects when dealing with data that evolve over time, given the low variation in the values of the ownership variables. Our work uses Hausman's specification test, whose results support Zhou's arguments.

<sup>8</sup> The regression results not shown in the work are available from the authors on request.



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**Table 1. Voting and cash flow rights of the controlling shareholder of listed Spanish companies**

<b>Panel A. Cash flow rights</b>					
	<b>Mean</b>	<b>Median</b>	<b>Deviation</b>	<b>1<sup>st</sup> Quartile</b>	<b>3<sup>rd</sup> Quartile</b>
<b>1996</b>	33.5	25.1	22.5	14.1	50.5
<b>1997</b>	31.5	25.0	21.7	14.5	48.2
<b>1998</b>	30.9	26.5	21.6	12.5	49.1
<b>1999</b>	31.3	26.7	22.4	11.2	50.4
<b>2000</b>	32.3	26.9	23.0	11.4	50.4
<b>2001</b>	31.6	27.7	22.9	10.9	49.4
<b>2002</b>	31.9	24.9	24.7	10.5	49.4

  

<b>Panel B. Voting rights</b>					
	<b>Mean</b>	<b>Median</b>	<b>Deviation</b>	<b>1<sup>st</sup> Quartile</b>	<b>3<sup>rd</sup> Quartile</b>
<b>1996</b>	35.4	28.1	22.4	15.0	51.2
<b>1997</b>	33.6	29.5	21.4	15.8	50.2
<b>1998</b>	33.6	29.5	21.5	15.2	50.2
<b>1999</b>	33.8	28.3	22.5	14.7	53.5
<b>2000</b>	35.2	28.8	23.5	14.2	54.0
<b>2001</b>	34.9	29.7	23.5	13.7	51.0
<b>2002</b>	35.0	29.1	24.4	14.9	51.2

  

<b>Panel C. Cash flow/Votes</b>					
	<b>Mean</b>	<b>Median</b>	<b>Deviation</b>	<b>1<sup>st</sup> Quartile</b>	<b>3<sup>rd</sup> Quartile</b>
<b>1996</b>	0.94	1	0.15	1	1
<b>1997</b>	0.94	1	0.17	1	1
<b>1998</b>	0.92	1	0.20	1	1
<b>1999</b>	0.93	1	0.18	1	1
<b>2000</b>	0.91	1	0.19	1	1
<b>2001</b>	0.91	1	0.20	0.99	1
<b>2002</b>	0.89	1	0.22	0.98	1

The sample comprises 99 non-financial listed Spanish companies between 1996 and 2002.

To determine the controlling shareholder, we followed the methodology for defining the ultimate owner proposed by La Porta, López-de-Silanes and Shleifer (1999), Claessens, Djankov and Lang (2000) and Faccio and Lang (2002). That way, we can say that a company has an ultimate owner when its controlling shareholder directly or indirectly possesses a percentage of the voting rights that equals or exceeds an established level of control, in our case 10 percent.

The ratio of cash flow rights over voting rights has a range of values between 0 and 1.

**Table 2. Distribution in percentages of the family nature of the ultimate owner**

	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>
<b>Family companies</b>	38.3	40.8	50.6	48.9	48.5	46.5	52.5
<b>Non-family companies</b>	55.1	46.6	33.8	37.3	42.4	44.4	36.4
<b>Widely held ownership</b>	6.6	12.6	15.6	13.8	9.1	9.1	11.1
<b>Total number of companies</b>	<b>60</b>	<b>71</b>	<b>83</b>	<b>94</b>	<b>99</b>	<b>99</b>	<b>99</b>

The sample comprises 99 non-financial listed Spanish companies between 1996 and 2002.

A company is defined as a family company when it has an ultimate owner and that owner is a family group or individual. In either case, the ownership must be represented on the board of directors.

**Table 3. Descriptive statistics and correlation matrix**

	<b>CAR</b>	<b>NIE</b>	<b>V</b>	<b>CV</b>	<b>BLOCK</b>	<b>DirecFamy</b>	<b>AntCEO</b>	<b>CEOFund</b>	<b>CEODescd</b>	<b>CEOHire</b>	<b>SIZE</b>	<b>LEV</b>	<b>Q</b>
<b>Media</b>	0.012	0.052	34.525	0.918	0.519	16.627	10.038	0.160	0.186	0.132	13.289	0.644	1.295
<b>Median</b>	0.014	0.057	29.51	1	1	0	6	0	0	0	13	0.565	0.719
<b>Deviation</b>	0.402	0.120	22.794	0.190	0.5	25.604	9.712	0.367	0.389	0.339	1.696	0.562	2.916
<b>Minimum</b>	-2.057	-0.990	0	0.052	0	0	1	0	0	0	10	0.034	0.050
<b>Maximum</b>	1.216	1.204	99.5	1	1	100	46	1	1	1	18.035	8.592	57.828

  

<b>Correlation matrix</b>													
<b>CAR</b>	1												
<b>NIE</b>	0.124	1											
<b>V</b>	0.001	-0.043	1										
<b>CV</b>	-0.063	-0.001	-0.0003	1									
<b>Block</b>	0.144	0.046	-0.194	-0.113	1								
<b>Dircfamy</b>	-0.016	0.014	0.344	0.147	-0.178	1							
<b>AntCEO</b>	0.056	-0.054	0.207	0.156	-0.026	0.337	1						
<b>CEOfund</b>	-0.047	-0.070	0.238	0.061	-0.070	0.283	0.431	1					
<b>CEODescd</b>	-0.005	0.070	0.236	0.181	-0.133	0.627	0.129	-0.209	1				
<b>CEOhire</b>	0.033	-0.054	-0.043	-0.404	0.151	-0.015	-0.177	-0.170	-0.180	1			
<b>SIZE</b>	0.063	0.049	0.005	-0.122	0.123	-0.311	-0.093	-0.121	-0.246	-0.015	1		
<b>LEV</b>	-0.043	0.014	0.031	0.072	0.058	-0.014	-0.049	0.056	-0.003	-0.032	0.074	1	
<b>Q</b>	0.033	-0.034	0.008	0.031	0.011	-0.027	0.015	0.011	-0.016	-0.043	-0.102	0.518	1

The sample comprises 99 non-financial listed Spanish companies between 1996 and 2002.

$CAR_{i,t}$ , accumulated returns net-of-market of company  $i$  in year  $t$ . The stock return is continuously calculated starting from the prices 12 months before the latest date for the company to disclose its annual report, under Spanish stock market regulations.  $NIE_{i,t}$ , the earnings of the company  $i$  before non-recurring revenues in the year  $t$  divided by the market value of equity at the beginning of year  $t$ .  $V_{i,t}$ , measured by the percentage of voting rights in the hands of the controlling shareholder of the company  $i$  in year  $t$ .  $CV_{i,t}$ , measured by the ratio cash flow rights over voting rights of the controlling shareholder of company  $i$  in year  $t$ .  $BLOCK_{i,t}$ , is a binary variable that takes the value of 1 when there is another shareholder with more than 5% of the shares of company  $i$  in year  $t$ .  $Famy_{i,t}$ , is a dummy variable used to analyze the effect of family control and adopts a value of 1 when the ultimate owner is a family group or individual, with representation on the executive board and value of 0 if that is not the case.  $DirecFamy_{i,t}$ , measured as the percentage of family directors on the board of firm  $i$  in year  $t$ .  $AntCEO_{i,t}$ , which measures the number of years that the CEO has held that post in firm  $i$  in year  $t$ .  $CEOFund_{i,t}$ , is a binary variable that takes the value of 1 when the CEO is the founder of firm  $i$  in year  $t$  and 0 if not.  $CEODescd_{i,t}$  is a binary variable that adopts the value of 1 if the CEO is a descendant in firm  $i$  in year  $t$  and 0 if not.  $CEOHire_{i,t}$ , is a binary variable that takes the value of 1 if the CEO is a contracted individual not belonging to the controlling family in firm  $i$  in year  $t$ .  $Q_{i,t}$  measures the relationship between the market value and the book value of equity at the beginning of year  $t$ .  $LEV_{i,t}$ , measured by the relationship between the book value of the debt and total equity at the beginning of year  $t$ .  $SIZE_{i,t}$ , measured by the natural logarithm of the market value of equity in thousands of euros at the beginning of year  $t$ .

**Table 4. Informativeness of the accounting earnings and the influence of family control**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
NIE	0.520 (0.34)	0.840 (0.66)	0.467 (0.40)	0.139 (0.11)	0.132 (0.13)	0.279 (0.21)	0.380 (0.35)	0.400 (0.29)	0.624 (0.51)
NIE*V	-0.013* (-1.72)	0.058** (2.19)							
NIE*V <sup>2</sup>		-0.008*** (-2.82)							
NIE*CV	-0.392 (-0.68)								
NIE* VFamy	0.017** (2.07)	-0.030 (-1.23)							
NIE* V <sup>2</sup> Famy		0.005 (1.08)							
NIE*CVFamy	-0.681 (-1.32)								
NIE*BLOCK			0.854*** (2.65)						
NIE*BLOCKFamy			0.250 (0.59)						
NIE*DirecFamy				-0.007** (-1.88)	-0.024 (-1.46)				
NIE*DirecFamy <sup>2</sup>					0.002 (1.12)				
NIE* Antg						0.064** (2.03)			
NIE* AntgFamy						-0.057** (-2.16)			
NIE*CEOFund							-0.684** (-2.04)		
NIE*CEODesc								-0.014 (-0.05)	
NIE*CEOHire									1.167*** (2.70)

NIE*LEV	-0.566*	-0.484	-0.454**	-0.450*	-0.407	-0.533**	-0.709***	-0.615***	-0.537**
	(-1.84)	(-1.60)	(-1.96)	(-1.71)	(-1.53)	(-2.05)	(-2.66)	(-2.64)	(-2.31)
NIE*Q	0.219	0.229	0.208	0.193	0.167	0.177	1.195	0.223	0.221
	(1.04)	(1.08)	(1.00)	(0.95)	(0.85)	(0.92)	(1.06)	(1.08)	(1.07)
NIE*SIZE	0.083	0.087	0.073	0.076	0.065	0.067	0.117	0.094	0.098
	(0.77)	(0.90)	(0.90)	(0.92)	(0.85)	(0.68)	(1.39)	(1.04)	(1.18)
C	-0.048	-0.071*	-0.062	-0.052	-0.051	-0.032	-0.051	-0.053	-0.054
	(-1.16)	(-1.67)	(-1.47)	(-1.23)	(-1.20)	(-0.69)	(-1.24)	(-1.24)	(-1.28)
R-Sq	0.223	0.229	0.234	0.218	0.221	0.214	0.225	0.215	0.227
F	12.99***	11.94***	13.27***	14.5***	13.53***	12.89***	13.02***	12.81***	13.71***
N° observations	605	605	605	605	605	605	605	605	605

The sample comprises 99 non-financial listed Spanish companies between 1996 and 2002.

$CAR_i$ , accumulated returns net-of-market of company  $i$  in year  $t$ . The stock return is continuously calculated starting from the prices 12 months before the latest date for the company to disclose its annual report, under Spanish stock market regulations.  $NIE_i$ , the earnings of the company  $i$  before non-recurring revenues in the year  $t$  divided by the market value of equity at the beginning of year  $t$ .  $V_i$ , measured by the percentage of voting rights in the hands of the controlling shareholder of the company  $i$  in year  $t$ .  $CV_i$ , measured by the ratio cash flow rights over voting rights of the controlling shareholder of company  $i$  in year  $t$ .  $BLOCK_i$ , is a binary variable that takes the value of 1 when there is another shareholder with more than 5% of the shares of company  $i$  in year  $t$ .  $Famy_i$ , is a dummy variable used to analyze the effect of family control and adopts a value of 1 when the ultimate owner is a family group or individual, with representation on the executive board and value of 0 if that is not the case.  $DirrecFamy_i$ , measured as the percentage of family directors on the board of firm  $i$  in year  $t$ .  $AntCEO_i$ , which measures the number of years that the CEO has held that post in firm  $i$  in year  $t$ .  $CEOFund_i$ , is a binary variable that takes the value of 1 when the CEO is the founder of firm  $i$  in year  $t$  and 0 if not.  $CEODescd_i$ , is a binary variable that adopts the value of 1 if the CEO is a descendant in firm  $i$  in year  $t$  and 0 if not.  $CEOHire_i$ , is a binary variable that takes the value of 1 if the CEO is a contracted individual not belonging to the controlling family in firm  $i$  in year  $t$ .  $Q_i$ , measures the relationship between the market value and the book value of equity at the beginning of year  $t$ .  $LEV_i$ , measured by the relationship between the book value of the debt and total equity at the beginning of year  $t$ .  $SIZE_i$ , measured by the natural logarithm of the market value of equity in thousands of euros at the beginning of year  $t$ .

\*\*\*, \*\*, \*: statistically significant at 1.5 and 10 percent, respectively.

$t$ -statistics are corrected for serial correlation using the Huber White Sandwich Estimator for variance.

Fixed-effects of calendar years are included for each regression, but not reported.



**Table 5. Informativeness of accounting earnings and the influence of family control. Firms with concentrated ownership <sup>a</sup>**

NIE	0.312 (0.16)	2.878 (1.17)	1.420 (0.94)	0.716 (0.40)	0.051 (0.03)	0.748 (0.47)	0.939 (0.69)	1.274 (0.66)	1.448 (0.94)
NIE*V	-0.025*** (-2.66)	0.080** (2.49)							
NIE*V <sup>2</sup>		-0.001*** (-3.17)							
NIE*CV	0.423 (0.67)								
NIE* VFamy	0.027*** (2.69)	-0.019 (-0.83)							
NIE* V <sup>2</sup> Famy		0.004 (1.53)							
NIE*CVFamy	-1.201 (-1.07)								
NIE*BLOCK			0.844** (2.39)						
NIE*BLOCKFamy			0.304 (0.66)						
NIE*DirecFamy				-0.005 (-1.21)	-0.026 (-1.37)				
NIE*DirecFamy <sup>2</sup>					0.002 (1.13)				
NIE* Antg						0.071** (2.10)			
NIE* AntgFamy						-0.064** (-2.27)			
NIE*CEOFund							-0.694** (-2.02)		
NIE*CEODesc								0.094 (0.24)	
NIE*CEOHire									1.284*** (3.08)

NIE*LEV	-0.610** (-1.82)	-0.489** (-1.97)	-0.504*** (-2.66)	-0.523** (-2.16)	-0.424 (-1.51)	-0.569** (-2.40)	-0.764*** (-3.12)	-0.716*** (-3.36)	-0.587*** (-3.10)
NIE*Q	0.226 (1.03)	0.244 (1.11)	0.215 (1.01)	0.207 (0.98)	0.172 (0.84)	0.187 (0.95)	0.208 (1.09)	0.239 (1.13)	0.232 (1.10)
NIE*SIZE	0.133 (0.94)	0.202* (1.65)	0.145 (1.36)	0.122 (1.00)	0.084 (0.75)	0.104 (0.88)	0.164 (1.62)	0.162 (1.24)	0.159 (1.50)
C	-0.070 (-1.63)	-0.073* (-1.71)	-0.069 (-1.62)	-0.067 (-1.55)	-0.070 (-1.62)	-0.050 (-1.02)	-0.066 (-1.53)	-0.062 (-1.40)	-0.062 (-1.45)
R-Sq	0.226	0.238	0.237	0.218	0.220	0.214	0.226	0.215	0.231
F	11.54***	12.07***	12.14***	13.44***	12.16***	12.26***	11.42***	11.79***	13.25***
N° observations	534	534	534	534	534	534	534	534	534

The sample comprises 99 non-financial listed Spanish companies between 1996 and 2002.

$CAR_i$ , accumulated returns net-of-market of company  $i$  in year  $t$ . The stock return is continuously calculated starting from the prices 12 months before the latest date for the company to disclose its annual report, under Spanish stock market regulations.  $NIE_i$ , the earnings of the company  $i$  before non-recurring revenues in the year  $t$  divided by the market value of equity at the beginning of year  $t$ .  $V_i$ , measured by the percentage of voting rights in the hands of the controlling shareholder of the company  $i$  in year  $t$ .  $CV_i$ , measured by the ratio cash flow rights over voting rights of the controlling shareholder of company  $i$  in year  $t$ .  $BLOCK_i$ , is a binary variable that takes the value of 1 when there is another shareholder with more than 5% of the shares of company  $i$  in year  $t$ .  $Famy_i$ , is a dummy variable used to analyze the effect of family control and adopts a value of 1 when the ultimate owner is a family group or individual, with representation on the executive board and value of 0 if that is not the case.  $DiracFamy_i$ , measured as the percentage of family directors on the board of firm  $i$  in year  $t$ .  $AntCEO_i$ , which measures the number of years that the CEO has held that post in firm  $i$  in year  $t$ .  $CEOFund_i$ , is a binary variable that takes the value of 1 when the CEO is the founder of firm  $i$  in year  $t$  and 0 if not.  $CEODescd_i$ , is a binary variable that adopts the value of 1 if the CEO is a descendant in firm  $i$  in year  $t$  and 0 if not.  $CEOHire_i$ , is a binary variable that takes the value of 1 if the CEO is a contracted individual not belonging to the controlling family in firm  $i$  in year  $t$ .  $Q_i$ , measures the relationship between the market value and the book value of equity at the beginning of year  $t$ .  $LEV_i$ , measured by the relationship between the book value of the debt and total equity at the beginning of year  $t$ .  $SIZE_i$ , measured by the natural logarithm of the market value of equity in thousands of euros at the beginning of year  $t$ .

\*\*\*, \*\*, \*: statistically significant at 1.5 and 10 percent, respectively.

<sup>a</sup>The final sample excludes those observations with  $V < 10$  percent