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Family Involvement and Corporate Social Responsibility Disclosure

ABSTRACT

Building on the socioemotional wealth perspective, we hypothesize that family control and influence increase CSR disclosure. However, our results contradict this prediction: Panel data analyses for a sample of Spanish non-financial listed companies suggest that both family ownership and/or family governance have a negative influence on firms’ commitment to CSR reporting, but the presence of a second significant shareholder may moderate this negative effect. Additionally, the identity of the second significant shareholder seems to matter: Foreign investors may reduce the negative influence of family ownership, but other families may increase the negative impact of family governance, and of the combined effect of family ownership and governance, on CSR disclosure. We discuss implications for future theory development and research.

Key words: CSR disclosure, family ownership, family governance, second shareholder, shareholders’ identity, panel data

JEL code: M14, G34

1. Introduction

Firms have become more accountable to society. Nowadays they need to consider a wide range of agents who are interested not only in the company's economic and financial aspects, but also its impact on the environment and its interworkings with key social groups (Crane and Matten, 2010). Consequently, Corporate Social Responsibility (CSR) has become an increasingly significant company strategy (Carroll and Shabana, 2010). As the importance of CSR has grown, so has demand for its disclosure (Simnett et al., 2009), with firms spending money and effort to provide information (in annual reports or in separate CSR reports) about their environmental and social performance (Gamerschalg et al., 2011). Thus, voluntary CSR disclosure has become more common, especially for publicly listed firms, with international organizations such as the Global Reporting Initiative (GRI)[1] setting sustainability reporting standards.

Given the growing importance of stakeholders, a significant stream of economic literature in the past few decades has analyzed firms' communication with them and the development of stakeholder dialogue and partnerships (Crane and Livesy, 2003). Some of the studies analyze the factors that may govern voluntary CSR disclosure, with most of these papers examining company characteristics such as size (Archel, 2003; Roberts, 1992), industry (Moneva and Llena, 2000; Reverte, 2009), profitability (Ghazali, 2007), or shareholder structure (e.g. Brammer and Pavelin, 2008; Carina Chan et al., 2014)[2] as potential antecedents to CSR disclosure. Since investments in CSR tend to be long term (Johnson and Greening, 1999) and constitute a legitimate, sustainable means of survival and value creation for the company in

[1] The GRI, an organization comprising thousands of international experts, aims to set guidelines for improving the production and clarity of transparent, reliable and comparable sustainability reports. Its prime objective is the disclosure of social, environmental and economic information.

[2] In the field of corporate governance, other studies have focused on whether certain characteristics of the board of directors affect CSR information transparency (for example, Brammer and Pavelin, 2008; Cabeza et al., 2013; Frias-Aceituno et al.; Halme and Huse, 1997; Haniffa and Cooke, 2005; Marquis and Quian, 2014; Prado-Lorenzo et al., 2009b).

the future (Oh et al., 2011), large shareholders are likely to be in favour of such investments. Moreover, owning a company perceived as “socially irresponsible” may entail high costs (Barnea and Rubin, 2010), which is another reason why large shareholders are likely to be concerned about the firm’s social responsibility reputation and CSR disclosure. However, not all large shareholders may be equally interested in these aspects. Different types of shareholders may have varying objectives, and, consequently, shareholder identity would be expected to affect CSR disclosure practices. Only some studies, for example Campopiano and Massis (2015), Ghazali (2007), Grougiou et al. (2016), Haniffa and Cooke (2005), Khan et al. (2013), Kuo et al. (2012), Lewis et al. (2014), Marquis and Quian (2014), Ndemanga and Koffi (2009), Prado-Lorenzo et al. (2009a), Siregar and Bachtiar (2010), Sundarasen et al. (2016), Testera and Cabeza (2013), and Zeng et al. (2012), analyze the importance of the main shareholder’s identity to CSR disclosure.

Among significant shareholders, families are the most frequent type of large blockholder worldwide (La Porta et al., 1999). In fact, family businesses are the backbone of many economies, creating an estimated 70-90% of global GDP annually (Global Data Points, FFI, 2016). These firms can be small, midsized or large (La Porta et al., 1999). For example, families are present in nearly one-third of all companies in the S&P 500 (Anderson and Reeb, 2003), and in about 37.5% of German exchanged listed firms (Andres, 2008); and the top 100 family businesses in Europe had combined revenue of more than 1.8 trillion euros in 2011, nearly 14% of the European Union’s GDP (CampdenFB, 2012).

Family firms’ unique characteristics have important implications for their social responsibility performance (Dyer and Whetten, 2006) and for their voluntary disclosure practices (Chen et al., 2008). In regard to CSR performance, for example, Block and Wagner (2014a) report for a sample of large U.S. listed firms that family ownership is negatively associated with community-related CSR performance and positively linked to diversity, employee, environment and product-related aspects of CSR; Block and Wagner (2014b), also for a sample of large U.S. public companies, find that family and founder ownership reduces CSR concerns, whereas family and founder CEO presence increases them. Uhlanner et al. (2004) report for a sample of small and medium-sized Dutch listed family firms that the family character of the companies tends to affect relationships with some stakeholders; but Amann et al. (2012), for Japanese listed firms, find that family business identity does not influence CSR in general. The empirical literature analyzing the effect of family involvement on CSR reporting is scarce, in any case. Moreover, the results are mixed and most of the studies simply use an ownership criterion when considering family control and influence. For example, Prado-Lorenzo et al. (2009a), for Spain, report a positive link between the presence of a significant individual shareholder and GRI reports. Campopiano and Massis (2015), for Italian firms, find that family businesses disseminate a greater variety of CSR reports and are less compliant with CSR standards, while Ndemanga and Koffi (2009), for Sweden, find that family ownership reduces CSR disclosure. Furthermore, Cuadrado-Ballesteros et al. (2015) find that independent directors do not influence CSR reporting in family firms and Sundarasen et al. (2016) suggest that independent directors have a negative influence on CSR disclosure in family-controlled companies.

Family firms are characterized by their management and governance, along with families' unique endowments and use of specialized resources (Salvato and Aldrich, 2012), which may explain a positive relationship between family involvement (ownership and/or control) and CSR disclosure. In fact, the socioemotional wealth perspective implies that families may have stronger preferences for non-financial objectives, for affective endowments such as the pursuit of legitimacy (Berrone et al., 2012), or a long-term view (Anderson and Reeb, 2003; Berrone et al., 2010) that may shape family firms' voluntary CSR disclosures. For instance, family owners may prevent their companies from engaging in reputation-damaging activities and generally try to maintain a good image (Block and Wagner 2014a); due to their long-term orientation, family firms may behave differently than non-family companies and may nurture personal relationships with some stakeholders such as employees or clients (Uhlanner et al., 2004); and family businesses may be more inclined than non-family firms to be good corporate citizens, with family firm reputation partially mediating the relationship between citizenship behaviour and company performance (Astrachan et al., 2017). However, we must also consider that when families are the biggest shareholders in listed firms they may not be alone; there may be other large shareholders, whose interests may or may not coincide with those of the families.

Our study contributes in several different ways to the strand of literature that analyzes the influence of family involvement on CSR reporting. First, building on the socioemotional wealth perspective, we hypothesize that there is a positive link between family involvement and CSR disclosure, and so we examine the influence that family presence in ownership or/and governance has on CSR reporting. For that purpose, we initially define family companies by using an ownership criterion. We consider a firm to be a family business when a family owns at least 10% of the equity shares. Employing this methodology allows us to identify not only direct and indirect family ownership, but also family shareholdings as ultimate owner. We do so following the methodology employed by La Porta et al. (1999), Claessens et al. (2000) and Faccio and Lang (2002) that measures as family ownership the stake held by individuals or families at the end of the chain of control. We also consider previous results by, for example, Villalonga and Amit (2006), who find that family ownership creates value only when the founder serves as CEO; and Berrone et al. (2012), who state that family control and influence (such as being CEO or chairman of the board) is one of the major dimensions of socioemotional wealth. Thus, we study the effect of family governance on CSR reporting by considering whether the board chairman is a family member, and we examine the impact of the combination of family ownership and governance. Second, considering the frequent presence of multiple shareholders in family firms (Sacristán-Navarro et al., 2015), we analyze the possible amplifying or inhibiting effect on CSR reporting when there is a second significant shareholder present in a family-owned and governed firm. We also study whether different types of second-largest shareholders − in particular families and foreign investors − and their voting power may affect the relationship between family control and influence and CSR reporting.

For our analyses, we used a sample comprising 105 Spanish non-financial companies listed on the Madrid Stock Exchange for the period 2004-2010. The sample is fitting for the study as it refers to voluntary CSR disclosures and includes a high percentage of family firms. CSR reporting became compulsory in Spain after Directive 2014/95/EU took effect in December of 2014. The Directive requires EU companies with more than 500 employees to disclose in their management reports information on policies, risks and outcomes pertaining to environmental, social and employee matters, respect for human rights, anticorruption and bribery issues, and diversity on boards of directors. As evidence of family firms' prominence in the Spanish market, approximately 50% of companies listed on the Madrid Stock Exchange are family businesses, with families frequently exercising their ownership indirectly and through control chains or pyramids (Sacristán-Navarro and Gómez-Ansón, 2007). These firms also have relatively high ownership concentration (Crespí-Cladera and García-Cestona, 2001; Faccio and Lang, 2002) and frequently more than one significant shareholder (Sacristán-Navarro et al., 2015). The results of our analyses, contrary to what we expected in accordance with the socioemotional wealth perspective, suggest that both family ownership and family governance have a negative effect on companies' commitment to CSR disclosure. However, the presence of a second significant shareholder moderates this negative influence and forces companies to provide more CSR information to stakeholders. When we differentiate between types of second-largest shareholders, our results show that not all blockholders may behave the same way: While foreign investors' shareholdings seem to moderate the observed negative impact of family ownership on CSR disclosure (although not the observed negative effect of family governance), the ownership held by other families seems to exacerbate both the negative influence of families as main shareholders and family members as chairmen.

The remainder of the article is structured as follows: We frame our hypotheses in Section 2. The sample, variables and methodology are described in Section 3. Our results are presented in Section 4 and we discuss them in Section 5. We outline our conclusions and the study's limitations, and suggest avenues of future research in Section 6.

2. Theoretical background, literature review and hypotheses

According to Friedman (1962), company owners are expected to pursue the single objective of maximizing profits, but the stakeholder theory (Agle et al., 1999; Freeman, 1984; Mitchell et al., 1997) suggests it is strategically necessary for a firm to consider all the stakeholders that are relevant to its businesses. Nowadays, companies focus not only on economic performance but also on social and environmental performance. The increasing interest in managing a business in a way that considers the needs of its stakeholders has helped consolidate CSR, with companies taking voluntary action in regard to their workers, society and the environment that generally goes beyond what is legally required (Barnea and Rubin, 2010). The CSR literature has grown and scholars of family business have looked through different conceptual lenses that may stress family company positives and negatives pertaining to sustainable firms' behaviour (LeBretton-Miller and Miller, 2016). At the same time, empirical analyses of the relationship between family firm identity and CSR activities have yielded mixed results (see Table 1).

[Table 1]

CSR reporting is part of a firm's strategy. From an economic perspective (Gamerschlag et al., 2011), companies should undertake only those actions that reduce costs or enhance benefits. Thus, CSR disclosures in annual reports or in specific reports should be made if benefits outweigh costs; firms are expected to voluntary provide the information only if it is in their interest to do so. In fact, the empirical evidence suggests that the amount of CSR information a company discloses seems to be determined by various aspects that may linked to the weighing of benefits versus costs, such as the firm's characteristics, those of the industry to which it belongs, or its country (Belkaoui and Karpik, 1989; Cormier et al., 2005; Gamerschlag et al., 2011; Patten, 2002 a and b). However, another factor in CSR disclosure is the company's ownership structure. Previous studies have analyzed, for example, the link between ownership concentration and sustainability and CSR disclosure, with mixed results. While some studies report that when ownership is spread among many investors, some of whom may be interested in social or environmental matters, there may be greater pressure on the company to volunteer information (Brammer and Pavelin, 2008; Reverte, 2009); other studies, such as those by Cabeza et al. (2013), Ghazali (2007), Halme and Huse (1997), and Roberts (1992), do not show a significant relationship between CSR disclosure and ownership concentration.

Families are the most common largest shareholders worldwide. They confer unique characteristics on their firms, which are significantly different than non-family businesses (Gomez-Mejia et al., 2011). In this context, the socioemotional wealth approach has been referred to as a unique feature of family firms that helps explain why the companies may behave distinctively (Berrone et al., 2012; Dawson and Mussolino, 2014). The socioemotional wealth perspective considers that family firms are typically motivated by, and committed to, the preservation of their socioemotional wealth, non-financial matters or affective endowments of family owners (Berrone et al., 2012). Within this perspective, gains and losses in socioemotional wealth become the pivotal frame of reference that family controlled-firms use to make major strategic choices and policy decisions (Berrone et al., 2012). In fact, families tend to see their companies as an extension of the family (Dyer and Whetten, 2006).

Arguments that family companies do less CSR reporting are that they have lower levels of information asymmetry and there are costs to voluntary disclosures (Chen et al., 2008); or, the family has a greater wealth investment in the firm and there is less need to signal agents that the family is acting in the shareholders' interests (Fama and Jensen, 1983); or there is less monitoring, making the firm less likely to take substantive CSR action (Maquis and Quian, 2014). However, the socioemotional wealth perspective predicts the contrary: a higher level of CSR disclosure by family firms. Thus, having a respectable family reputation and being well regarded by the community are considered socioemotional gains that encourage a long-term socially responsible orientation in family firms (Berrone et al., 2010; Zellweger et al., 2012), and therefore the family's presence increases CSR practices and disclosures.

Berrone et al. (2012) point out that family control and influence (such as being CEO or chairman), which may stem from having a strong ownership position, ascribed status or personal charisma, is one of the five major dimensions of socioemotional wealth. The empirical evidence pertaining to the link between family control and influence and CSR reporting refers mainly to family ownership and the results are scarce and mixed. Prado-Lorenzo et al. (2009a) find that the presence of a significant individual shareholder exercising control increases the probability that the company will follow the GRI guidelines. Campopiano and Massis (2015), using a combined ownership and management criterion, report that family involvement increases CSR disclosure, although family firms are less compliant with CSR standards and place emphasis on different CSR topics. Testera and Cabeza (2013) find no evidence of any relationship between the identity of the main shareholder (including families) and CSR transparency, and other studies report family control and influence have a negative impact on disclosure; for example, Ndemanga and Koffi (2009) suggest that companies in which the main shareholder is a family are less transparent with regard to CSR practices.

We favour the socioemotional wealth explanation and therefore argue that families will put more effort into achieving legitimacy by showing strategic conformity to industry norms (Miller et al., 2013) and by demonstrating CSR commitment. Thus, we hypothesize a positive relationship between family ownership and/or governance and CSR disclosure.

Hypothesis 1. Family control and influence increase firm CSR disclosure.

Family firms are heterogeneous, their various configurations arising from different components of control and influence within the enterprise (García-Castro and Aguilera, 2014). Their ownership distributions may range from a single large shareholder to a great number of small investors, with many different situations in between (Sacristán-Navarro et al., 2015). Family firms' ownership structure and the distribution of shareholdings − and consequently the distribution of power among significant shareholders − may determine the extent of family control and influence and therefore the preponderance of socioemotional gains over, for example, financial gains. In this regard, some authors (Attig et al., 2009; Laeven and Levine, 2008; Lehman and Weigand, 2000; Maury and Pajuste, 2005) report, for example, that firm value is positively impacted by an ownership structure in which the participation of shareholders is generally evenly distributed and the dominant shareholder faces more contestability to his or her power. For instance, for the specific case of family firms, Nieto Sánchez et al. (2009) suggest that other large shareholders may have an influence on the relationship between family ownership and company value, and Sacristán-Navarro et al. (2015) report that family firms' ownership structure matters and that the effect of other large shareholders' voting rights on minority investors' wealth should be considered.

Contestability and collusion of other large shareholders with the family as largest shareholder may also be present and affect the firm's strategies with regard to CSR practices and reporting. In fact, as the empirical evidence suggests, CSR policies are strongly affected by shareholder preferences. For example, Rugman and Verbeke (1998) show that shareholder pressure plays a significant role in the development of environmental plans in corporations and López-Iturriaga and López-de-Foronda (2011) find that the greater the influence of other key shareholders or of institutional investors, the more CSR activities a company is engaged in. With regard to CSR disclosure, the literature suggests that the possible reduction of the cost of capital linked to voluntary reports benefit shareholders (Amihud and Mendelson, 1986; Diamond and Verrechia, 1991). As a result, we would expect that other large shareholders will favour CSR disclosures by family firms, and so their presence will strengthen or moderate the hypothesized positive effect of family control and influence on CSR disclosure. Thus, we present our next hypothesis:

Hypothesis 2. The ownership held by a second significant shareholder has a positive impact on the link between family control and influence and CSR disclosure.

As pointed out by Aguilera and Crespí (2012), different owners (e.g., family, institutional investors, industrial firms, banks, state, employees, etc.) may have varying interests in the firm, and consequently, each type of owner may use different mechanisms to accomplish their strategic goals. Therefore, the various blockholders may not have similar goals related to CSR disclosure. Attig et al. (2008) point out that different types of blockholders may have varying strategic goals that will also influence their attitudes toward the largest shareholder. Among second blockholders, we refer specifically to other families and foreign investors. Other families are considered because as Sacristán-Navarro et al. (2011) find, the most frequent combination of ownership in family firms is families and individuals as first shareholders and families and individuals as second-largest shareholders. As we did for Hypothesis 1, we favour, also for families as second major shareholders, the socioemotional wealth arguments over agency arguments, and predict a positive relationship between "second families" shareholdings and CSR reporting. Foreign investors as second-largest shareholders are considered because of their specificity. Different studies find that foreign investors' ownership has a positive effect on CSR actions (Qi et al., 2013; Yong et al., 2011). Moreover, foreign shareholders are expected to support a lower level of information and therefore are expected to demand greater CSR disclosure, as reported by Khan et al. (2013). Thus, we state:

Hypothesis 3. Families as second significant shareholders have a positive impact on the link between family control and influence and CSR disclosure.

Hypothesis 4. Foreign investors as second significant shareholders have a positive impact on the link between family control and influence and CSR disclosure.

3. Sample, variables and methodology

3.1. Sample

To test the hypotheses, we created an initial database of all Spanish firms listed in the Madrid Stock Exchange General Index over the period 2004-2010. This resulted in a panel comprising 150 large and medium-sized firms and 844 observations. We removed financial and insurance companies from the initial database because of their particular characteristics, such as their specificity from an accounting point of view or their special regulation (23 firms, 114 observations). We also excluded subsidiary companies (businesses that were more than

90% owned by another listed firm in our sample) (2 firms, 8 observations). Some companies entered and others exited the stock market during the studied period (some were initially listed after 2004, or were delisted during the period), so we were unable to obtain information for the entire period for all companies. Because of these issues, the database was reduced to an unbalanced panel − that is, a panel in which data for all categories are not observed for all the years of the studied period − of 122 non-financial and non-insurance firms and 710 observations[3]. However, in order to have at least four consecutive years of data for every company because of our panel data structure, we reduced the final unbalanced panel for the regression (probit) analyses to 105 firms and 669 observations. This final sample represented 86.1% of the initial real number of companies (122 firms) with a margin of error of 3.6%[4]. We must note that unbalanced panels are used frequently in empirical research, allowing control for both entry and exit, and mitigating potential selection and survivor biases (Carpenter and Petersen, 2002).

We defined family firms according to an ownership criterion. Family companies are those that are "controlled" (in terms of ownership) by families or individuals acting as first or ultimate owners (following the standard methodology employed by La Porta et al., 1999). Ultimate ownership characterizes Spanish ownership structure in many cases (Sacristán-Navarro and Gómez-Ansón, 2007). Whenever the family was the largest owner (direct or indirect), holding more than 10% of the shares, the firm was classified as a family business. However, if the largest owner was a non-financial company whose ultimate owner, identified by following the

[3] A panel data may be unbalanced for several reasons; for example, due to not having the data for one of the transversal units in one of the years of analyses, when the attrition problem takes place (some of the transversal units leave the panel), or when the transversal units do not disappear but some of the variables are not shown for all the analyzed years. In our case, the panel is unbalanced mainly because of circumstances not under our control; for example, when firms are listed or delisted.
[4] The final sample in the estimations represented 84% of the 150 firms in the initial whole sample with a 5.3% margin of error.

chains of control, was a family or an individual holding more than 10% of the voting rights, the company was also classified as a family firm. Thus, we searched for the stake held by individuals or families (adding up for families the voting rights held by all family members), which allowed us to get a better picture of the real ultimate ownership structure of sample firms. Family members were identified by their surnames (first or second surname); that is, they were defined as those who were related by blood. Family members by marriage were also taken into account. By determining the ultimate owners among company blockholders, we were able to identify family businesses without making assumptions that could underestimate or overestimate the importance of family firms in our sample. Table 2 shows the distribution of observations by year. As also shown, 420 observations (63%) are classified as family businesses and 249 (37%) as non-family firms.

[Table 2]

We obtained information on ownership structure mainly from the Annual Corporate Governance Reports filed with the Spanish National Stock Exchange Commission (*Comisión Nacional del Mercado de Valores* – CNMV). We also used the Madrid Stock Exchange, the CNMV and the SABI data base (*Sociedad de Análisis de Balances Ibéricos*) to compile companies' financial data and determine their sectors.

3.2. *Variables definition and measurement*

The dependent variable is an indicator of the company's commitment (low, medium or high) to CSR disclosure (CSRDISCL). It adopts any of these three values for each year in the studied period: a value of 1 if a firm did not report on its environmental and social impacts (48.13% of the cases), a value of 2 if a firm provided this information in its annual report (29% of the cases), and a value of 3 if a firm also issued a CSR report following the GRI guidelines (22.87% of the cases). Thus, almost half of the companies did not report any social or environmental information and when reporting CSR information, slightly less than half of them opted to follow the GRI guidelines.

The explanatory variables relate to the nature of family control and influence (ownership or/and governance) (Hypothesis 1); to other large shareholders' power to counterbalance the main shareholder, the family (Hypothesis 2); and to the voting power of families and foreign investors as the second-largest shareholders (Hypotheses 3 and 4). With regard to the nature of family control and influence we define: a variable (FFSH) that measures the percentage of the capital held by the family or by an individual as the leading significant shareholder and/or the ultimate significant shareholder, provided that the latter holds more than 10% of the capital, and 0 otherwise; a dummy variable taking value 1 if a member of the family is chairman of the board, and 0 otherwise (FAMCHAIR); and a dummy variable that takes value 1 when the company is simultaneously defined as a family firm and a family member is the chairman (FFCHAIR). We determine the influence of a second significant shareholder's power through variable SSH, defined as the percentage of shares of the company's capital held by a second significant shareholder, provided that percentage exceeds 5%. The identity and power of families and foreign investors as second large shareholders are considered through two variables that measure, respectively, the percentage of shares of the company's capital held by families or individuals (SSHFAM) or by foreign investors (SSHFOR) as second significant shareholder, provided they hold more than 5%.

We consider firm size, profitability, leverage and industry as control variables. Company size has traditionally been associated positively with social performance (McWilliams and Siegel, 2000; Waddock and Graves, 1997). Large firms are more visible to the general public (Watts and Zimmerman, 1986) and to political groups (Dowling and Pfeffer, 1975), they have more market power and generate more news. They are therefore more likely to be the target of public resentment, consumer hostility, demands by employees and attention from government regulators (Hackston and Milne, 1996; Knox et al., 2006). Their wider exposure to public opinion, their greater resources and their aim to avoid regulation and reduce political costs (Adams et al., 1998; Clarke and Gibson-Sweet, 1999; Gray et al., 1995; Ness and Mirza, 1991) may explain why larger companies tend to voluntarily disclose their CSR activities. Firm size is introduced in the analyses as a logarithm and is measured as the company's total assets expressed in thousands of euros (SIZE) (Brammer and Pavelin, 2008; Zeng et al., 2012).

Profitability, an indicator of firm performance, may increase or decrease CSR reporting. On one hand, even though companies may wish to follow the rules of good corporate citizenship, their real behaviour and, consequently, disclosure of their CSR activities, may depend on the resources available (Carmona and Carrasco, 1988; Cowen et al., 1987; Ismail and Chandler, 2005; Roberts, 1992). In addition, the managers of profitable companies may be interested in disclosing more information in order to improve their own remuneration and positions (Giner, 1997). On the other hand, a negative relationship between profitability and CSR disclosure may be explained by the fact that investing in CSR activities is costly (Balabanis et al., 1998), or that there is opportunistic behaviour by managers in the context of an executive remuneration structure that is linked to short-term profit. Profitability is defined as the ratio of return on assets (ROA) (Brammer and Pavelin, 2008; Prado-Lorenzo et al., 2009a; Marquis and Quian, 2014).

Company leverage level is defined as the ratio between short-term and long-term debt over total assets (LEV) (Castelo and Lima, 2008; Reverte, 2009). Leverage may also increase or decrease CSR disclosure. In the context of agency theory, companies with a higher level of debt will voluntarily offer information in order to reduce their agency costs and, therefore, their cost of capital (Jensen and Meckling, 1976). But, creditors will also exert less pressure on company managers regarding CSR activities and CSR disclosure when the level of debt is low (Brammer and Pavelin, 2008).

Finally, firm industry is expected to influence CSR reporting. For instance, companies belonging to industries whose production processes may have a negative impact on the environment tend to disclose more much information than businesses in other sectors (Reverte, 2009). Firm industry is defined as a dummy variable that takes value 1 if the company belongs to more “environmentally sensitive” sectors (mining, oil, gas, chemicals, paper, iron and steel and other metals, electricity, gas distribution and water), and 0 otherwise (INDUSTRY) (Halme and Huse, 1997; Kuo et al., 2012; Reverte, 2009).

3.3. Methodology

The econometric model used to test the hypotheses is determined by the fact that the dependent variable “CSR disclosure” is an ordinal qualitative variable. Every value taken by variable CSRDISCL generates a continuous evaluation of the company that is included in a latent variable that is not observed, which we called CSRDISCL*. This variable is linear and depends on the same independent and control variables.

Since there is a limited number of categories for “CSRDISCL”, this variable has several “cut-off points” delimiting each category. These are:

$$\text{CSRDISCL} = \begin{cases} 1 \text{ if } \text{CSRDISCL}^* < cut_1 \\ 2 \text{ if } cut_1 < \text{CSRDISCL}^* < cut_2 \\ 3 \text{ if } cut_2 < \text{CSRDISCL}^* \end{cases}$$

Wooldridge (2002) proposes two approximations for estimating panel data models with an ordinal dependent variable. The most widely used of these considers that errors are distributed normally and is estimated by maximum likelihood. The following is the approximation in STATA by Rabe-Hesketh et al. (2001) and improved by Frechette (2001a and 2001b). The program estimates a probit model with random effects.

Specifically, the estimated model is the following:

$$CSRDISCL_{it} = a_0 + \beta X_{it} + \sum_{t=2004}^{2010} Y_t + \mu_{it}$$

Where *i* denotes the company, *t* time, X the explanatory and control variables, $\sum_{t=2004}^{2010}$ is a set of annual dummies and $_{it}$ is the error term $\mu_{it} = \gamma_i + \varepsilon_{it},$ bearing in mind that γ_i covers the individual unobservable effect that we assume is constant for company *i* during *t*, that is, it captures the unobservable heterogeneity among companies, and ε_{it} is random disturbance.

Similarly, for the analyses of moderation (Hypotheses 2, 3 and 4), we first considered a model to analyse the influence of the main explanatory variable (and the control variables) on the dependent variable. In a second model we studied the impact of the main explanatory variable and of the moderating variable (and the control variables) on the dependent variable and, finally, we included the explanatory variable, the moderating variable and a new variable that is the product of both (and the control variables) in a single model.

4. Results

4.1. *Descriptive statistics*

Table 3 shows the main descriptive statistics of the independent variables used in the study. Families' average share in the capital is 25.541% (FFSH). In 44.69% of the sample firms' a family member occupies the post of chairman of the board (FAMCHAIR), and 42.45% of the companies have a family as ultimate owner holding more than 10% of the shares and a family member as chairman (FFCHAIR). The average share in the capital in cases where there is a second significant shareholder with a stake in excess of 5% is almost 9% (SSH). This figure, although not shown, amounts to 8.776% and 9.139%, respectively, in family firm and non-family firm observations. The ownership held by families as second shareholder (SSFAM) amounts to 2.533% and the holdings of foreign investors as second shareholder (SSHFOR) to 0.925%. In 19.58% and 9.72% of the observations, respectively, there is a second shareholder that is a family or a foreign investor. The average company size (SIZE) is 6,438,317 thousand euros, although the size of the firms in the sample varies considerably.

[Table 3]

Table 4 presents the bivariate correlations of the variables we employed in the analyses. CSR disclosure is negatively correlated to family governance and to family ownership and governance (FAMCHAIR and FFCHAIR). It is also negatively correlated to the percentage of shares held by families as second shareholders (SSHFAM) and positively to firm size (SIZE) and firm return on assets (ROA), but is not significantly correlated to the ownership held by the second shareholder (SSH). The ownership held by families as first shareholder (FFSH) is positively correlated to the family governance variable (FAMCHAIR) and negatively correlated to the ownership held by a second shareholder (SSH); while family governance (FAMCHAIR) is not negatively correlated to the ownership held by the second shareholder (SSH).

[Table 4]

4.2. Regression analyses

First, we present the results pertaining to the possible impact of family control and influence and the moderating effect of a second significant shareholder’s voting power (Hypotheses 1 and 2) on CSR disclosure (Table 5). These results were obtained using the STATA12 program. The dependent variable is CSRDISCL in all the models.

Contrary to what was suggested in Hypothesis 1, the ownership held by families as principal shareholder seems to significantly and negatively influence the probability of CSR disclosure (model 1, Table 5). In fact, although the results are not shown, when family and non-family companies are considered separately, for family firms the dependent variable (CRSDISCL) takes value 1 in 50.48% of cases; value 2 in 29.29% of cases; and value 3 in 20.24% of cases. For non-family firms the figures are 44.18%, 28.51% and 27.31%, respectively. Thus, family companies disclose information of a social or environmental nature less often than non-family firms; and non-family companies follow the GRI guidelines more frequently than family firms.

Also contrary to what was predicted in Hypothesis 1, FAMCHAIR has a significant and negative influence on CSR disclosure, suggesting that when a family member chairs the board, companies will be less transparent about CSR (model 4, Table 5). The results are similar regarding the joint consideration of ownership and governance, variable FFCHAIR. When the leading shareholder is a family and a member of the family is chairman, the probability of transparency about CSR decreases (model 7, Table 5). Over all, these results contradict Hypothesis 1 and do not support the view that significant socioemotional gains outweigh the costs associated with CSR disclosure.

Next, we analyze how a second large shareholder's stake in the company's capital affects the above relationships. Models 2, 5 and 8 show that this variable is not significant when considered in isolation. In order to determine whether the second shareholder has a positive impact on the link between family control and influence and CSR disclosure as suggested in Hypothesis 2, we introduce a term of interaction formed by the product of the proxy variable of family control and influence and the variable whose moderation effect we wish to study (models 3, 6 and 9). The coefficients of interaction between the various proxies of family control and influence and the shareholdings of a second significant owner are significant and positive. The fact that the second significant shareholder's stake in the capital is not significant in itself indicates that there is a pure moderation effect. The positive sign of the coefficient of the interaction variable reflects the reduction effect exerted by the power of a second significant shareholder on the initial negative relation between family control and influence and CSR disclosure. This evidence supports Hypothesis 2.

Given that the shareholdings of a second blockholder moderate the negative effect on CSR disclosure exerted by family control and influence, and considering that other types of shareholders may have varying interests and affect disclosure differently (Hypotheses 3 and 4), we analyze how families, and foreign investors as second significant shareholders, may have a different impact on the relationship between family control and influence and CSR disclosure (Table 6). The results show that other families as second-largest owner increase the negative effect of family governance (FAMCHAIR) and of combined family ownership and governance (FFCHAIR) on CSR disclosure. Thus, the view that socioemotional gains outweigh disclosure costs is again contradicted when there is family ownership and control. Foreign firms as second significant owners have no impact on the relationship between family control and influence and CSR disclosure, but may moderate the negative relationship between family ownership and CSR reporting (the coefficient of the interaction variable is positive and significant at a 5 percent level). Over all, these results do not support Hypothesis 3 as they suggest that families as second significant shareholders do not consider CSR disclosure and the reputation and socioemotional gain it brings to be worthwhile. In this sense they may coincide with the first shareholders, the families, and will not force them to provide more information to the market. However, similarly to the results reported by Khan et al.

(2013), foreign investors may moderate or reduce families' resistance to CSR disclosure, as suggested by Hypothesis 4.

Firm size and leverage level turn out to be significant in most of the considered in the models. In line with studies by Archel (2003), Prado-Lorenzo et al. (2009b) and Reverte (2009) for Spain, Ghazali (2007) for Malaysia and Castelo, and Lima (2008) for Portugal, firm size is positively associated with the disclosure of CSR activities. Larger companies have the greatest capacity for doing social and environmental damage and have more resources for compiling this information. Similarly, a higher level of leverage (LEV) also seems to lead to greater CSR disclosure. This result is in line with findings by Zeng et al. (2012) and Roberts (1992), who suggest that firms that rely more on loans are more likely to reveal information about their activities pertaining to the natural environment, environmental protection and resource use. In general, business profitability does not significantly influence CSR disclosure. A similar result is reported in previous studies for Spain, such as Archel (2003), Carmona and Carrasco (1988), Moneva and Llena (1996) and Reverte (2009). Unlike the findings in previous studies (including those by Reverte, 2009, and Prado-Lorenzo et al., 2009b, for Spain) but in line, for example, with research by Ghazali (2007) for a sample of listed companies in Malaysia, the business sector (INDUSTRY) does not seem to have a statistically significant influence on CSR disclosure.

[Table 5] [Table 6]

4.3. Robustness test and additional results

To establish the robustness of our results, we repeated our estimations considering different samples, employing additional measures and estimating new models.

First, considering there could be a bias related to our unbalanced panel, using the initial sample of 710 observations we analyzed whether there were statistical differences (employing the Mann-Whitney U test) among those firms for which we have a balanced panel (525 observations) and the rest of the cases (185 observations). We found statistical differences in the dependent variable and in the FFSH, FAMCHAIR and FFCHAIR variables. However, when we repeated our estimations with only the companies for which we have a balanced panel, that is, complete information for the seven considered years (2004-2010) with a sample of 75 firms (62% of the original 122-company sample) and 525 observations, the results related to Hypotheses 1 and 2 were the same as those presented in the main text, corroborating the positive and significant effect of the interactive variables. The only difference was that when we considered the identity of the second significant shareholder the moderation exerted by the presence of a family as second shareholder (SSHFAM) disappeared. Thus, using a “balanced” or an “unbalanced” panel did not lead to important differences in the final results, although it is necessary to be especially cautious in the finding related to the negative moderating effect of a family being the second significant shareholder.

Additionally, we analyzed whether there were statistical differences (employing the Mann-Whitney U test) in the study’s main variables among the sample of firms used in the estimations (105 firms, 669 observations) and those cases that we did not consider as they did not have at least four consecutive years in the panel (17 firms, 41 observations). We found statistical differences only in the dependent variable and in the variable FAMCHAIR. Moreover, when we repeated the estimations of the ordered probit model without the restriction about having four consecutive years in the panel (122 firms, 710 observations), the results did not vary significantly.

Second, we repeated the estimations using ROE instead of ROA and the results did not vary significantly.

Third, we employed additional proxies for the second significant shareholder variable. The first proxy was defined as the percentage of shares of the company's capital held by a second significant shareholder, provided the holding was more than 3%. The results remained the same as those shown in Tables 5 and 6. Alternatively, we considered the percentage of shares of the company's capital held by a second significant shareholder provided the holding was more than 10%. In this case our findings were the same, except that the moderation effect of the presence of a second significant shareholder on the family firm (in terms of ownership) and CSR disclosure disappeared (models 1-3 Table 5). When the second shareholder's ownership stake was not so large, it significantly moderated family control, showing a contestation effect reducing the negative effect. But when the stake increased, the second shareholder turned into an owner, showing a collusion effect with the main owner − the family − and increasing its SEW objectives.

Fourth, also regarding the moderating variable, we considered a dummy variable that adopted a value of 1 if there were multiple significant (over 3%) large owners (not just a second shareholder) apart from the largest, and 0 otherwise. In this case, the presence of multiple large shareholders seemed to positively moderate the negative relationship between family firms (in terms of ownership, control and both criteria at the same time) and CSR disclosure.

Finally, we employed another proxy for family control: a dummy variable that adopted the value of 1 if a member of the family was the CEO or chairman, and 0 in other cases. The results were similar to those presented in Tables 5 and 6.

5. Discussion

Firms have become involved in CSR activities relatively frequently and voluntarily in order to improve social and environmental conditions in their businesses, as well as their relations with different stakeholders (Renneboog et al., 2008). CSR disclosure helps reduce information asymmetry between the company and its stakeholders by providing relevant data to agents outside the firm while exerting influence on their perceptions and on future financial projects (Cui et al., 2016). Several studies have shown that this provision of information is affected by a variety of characteristics of the companies, of their business sectors, and even of the countries in which the firms operate (Brammer and Pavelin, 2008; Haniffa and Cooke, 2005; Reverte, 2009).

Our study adds to the empirical literature that analyzes the effect of company ownership and governance characteristics on CSR disclosure. Chen et al. (2008) report that family firm ownership has important implications for voluntary reporting. Our results corroborate these findings not only in relation to family ownership, but also to family governance. In our study family control and influence, one of the five dimensions of socioemotional wealth (Berrone et al., 2012), negatively impacts CSR reporting, contradicting the view that disclosure brings significant socioemotional gains that justify revealing the information. Moreover, our results suggest that families are reluctant to signal to the market their commitment to CSR practices because they have lower asymmetry of information, a large investment in the firm, less need to indicate to agents that the family is acting in the shareholders' interests, and they face less monitoring. Therefore they may be less prone to disclose information. Overall, our results do not support that families' desire to preserve socioemotional wealth impels them to disclose CSR information as a way to achieve legitimacy or enhance their image or reputation.

In this sense, our results are in line with the traditional secrecy attributed to family firms (Kets de Vries, 1983), and are also similar to those of McGuire et al. (2012), who report that family firms achieve worse social performances than non-family firms. Likewise, Ndemanga and Koffi (2009), for Sweden, find that family ownership reduces CSR disclosure. Conversely, Prado-Lorenzo et al. (2009a), for Spain, report a positive relationship between the presence of a significant family shareholder and CSR reporting; and Campopiano and Massis (2015), for Italian companies, find that family firms disseminate a greater variety of CSR reports, although they are less compliant with CSR standards and emphasize different topics, compared with non-family companies. Alternative measurements of the dependent variable and of the explanatory variables that relate, for example, to firm ownership, or the different samples and methodology used may be the cause of the disparity in results.

Our study also expands upon previous findings pertaining to the link between families' involvement and CSR reporting. In line with earlier studies that suggest that other large shareholders may contest the largest shareholder, enhancing firm value (Attig et al., 2009; Laeven and Levine, 2008; Lehman and Weigand, 2000; Maury andPajuste, 2005), our results indicate that the ownership held by a second large shareholder seems to moderate the negative relationship between family control and influence and CSR reporting: Other significant shareholders seem to curb the owning family's power to restrict what CSR information is disclosed to the market and they also appear to foster a greater sense of transparency and accountability to all stakeholders. But not all shareholders seem to mitigate the observed negative effect that family control and influence has on CSR disclosure. In line with findings by Khan et al. (2013) that show foreign investors may demand greater CSR disclosure, our results indicate that foreign investors may moderate the negative influence of family ownership (but not of governance) on CSR reporting. Similarly to Chen et al. (2008), who report that families tend to reduce voluntary disclosure, we suggest that families, also as second significant shareholders, may prefer to provide less CSR information to the market.

6. Conclusions, limitations and future developments

In this study, we examined how family control and influence, the power exercised by other large shareholders and their identity contribute to firms' CSR disclosure practices. Overall, the results indicate that family ownership or/and governance reduces CSR reporting; that the ownership held by the second-largest shareholder moderates the negative influence of family control and influence on CSR disclosure; that other families' ownership as second-largest shareholder seems to increase the negative influence of family governance and family ownership and governance on CSR reporting; and that foreign investors' ownership as second-largest shareholder may moderate the negative relationship between family ownership and CSR disclosure.

This article contributes to the literature about families' and other shareholders' influence on the firm's strategy for reporting CSR practices. Our results contradict the idea that CSR reporting may bring about significant socioemotional gains for families that would impel them as major shareholders to make the disclosures. Our results also show that other large shareholders may play a role in this strategic decision. In our sample, family firms do not appear to see a socioemotional gain worth investing in by providing the market with significant CSR information that may guarantee a better relationship with all stakeholders and enhance the company's reputation. However, the existence of other large shareholders, such as foreign investors whose interests may not coincide with the family's, may cause the firm to improve communication with stakeholders, developing a deeper dialogue and stronger partnership with them. In contrast, when other families are the second-largest shareholders, they seem to behave similarly to the main family and reduce CSR reporting.

Our study has several limitations. The first is the measure of CSR disclosure that we build. More detailed or composite indexes that measure CSR disclosure levels can be obtained by conducting surveys or interviews. However, because of the panel data structure of our database, it would be hard to gather such information for different years. A cross-sectional analysis may be more appropriate in that case. A second limitation of our study is that the sample used is composed of only Spanish listed firms. In future studies, it might be interesting to increase the scope of this research by including non-listed companies or firms from other countries. A third limitation is that we did not separate the sample firms into founder and non-founder companies. Previous studies (Block and Wagner, 2014b) have found significant differences between these types of firms when it comes to CSR aspects. Therefore, future research should consider this distinction in order to better understand the underlying dynamics and heterogeneities among family firms. A fourth limitation of our study pertains to some low coefficients in our regression analyses. While we corroborated the robustness of the findings through several additional tests, the results and implications should be interpreted with care and necessitate further exploration with larger and varied samples.

This article opens up other avenues for research. Future studies could further analyze the role played by different shareholder identities, and could examine possible variations in transparency depending on the generation (founders or descendants) holding control of the family firm. Furthermore, different CSR practices and disclosures may carry with them various levels of socioemotional wealth for the families and may be viewed differently by other large shareholders. For example, for families, CSR disclosures that relate to the community most closely linked to the firm or family may generate greater socioemotional gains, and therefore families may be more prone to do the reporting. Thus, as suggested by Marquis et al. (2013), future studies could separately analyze different CSR practices with regard to their effects in the communities nearest to the families and other shareholders, and determine how these factors influence CSR disclosure.

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Table 1
Family firms and CSR activities

Authors	Objective	Sample	Methodology	CSR measure	Results
Jo and Harjoto (2011)	Investigate the effects of corporate governance on the choice of CSR engagement and the value of firms. Being a family firm is considered as control variable	Sample of firms within Russell 2000, S&500 and Domini 400 indices.1993-2004	Heckman's two-stage estimation, instrumental variables, Tobit model	KLD data	CSR engagement positively influences firm value. The board leadership and independence, blockholders' ownership and institutional ownership play a relatively weaker role in enhancing firm value. Family firms are more prone to CSR engagement
López-Iturriaga and López-de-Foronda (2011)	Analyze whether the largest shareholder's identity or the national context may be relevant for CSR	1,248 firms from five European Union countries (United Kingdom, Germany, France, Italy, and Spain). 2000-2004	Logit analysis	Inclusion in the Dow Jones Sustainability STOXX Index (DJSI)	The power of the largest shareholder is negatively related to CSR, family shareholder shows an negative influence on CSR, institutional investors and other reference shareholders as non-largest shareholders improve the firm's commitment to socially responsible actions
Dam and Scholtens (2012)	Examine how different types of owners relate to CSR engagement	691 European firms, 2005 year	OLS regression	Corporate social performance taken from Ethical Investment Research Service (EIRIS)	Ownership by employees, individuals and firms is associated with relatively poor corporate social policies. Banks and institutional investors and the state appear to be neutral
McGuire et al. (2012)	Analyze social performance of non-family and family firms	118 family firms and 355 non-family firms, USA. 2000 year	Stepwise regression	KLD index of social performance	Negative relationship between family firm status and poor social performance. No evidence that corporate governance is related to firm social performance. Corporate governance moderates the relationship between extent of family control and social performance
Ben Lahouel et al. (2014)	Study whether capital concentration, the proportion of equity held by institutional investors, family shareholders or the proportion of equity held by government affect CSR	126 non-financial French companies. 2006 and 2007	Multiple linear regression models	CSP was measured using DEA method	Companies with dispersed ownership and a high proportion of institutional shareholders record a high score of CSP. Lack of correlation between family ownership and company commitment to CSR, but it does not appear to be influenced by the presence of the state as shareholder
Cabrera-Suarez et al. (2014)	Analyze the drivers of non-financial goals in the family firm	173 Spanish non-listed family firms	Structural equation modelling (SEM)	5-item scale was created to evaluate the importance of non-financial goals	Greater identification of the family with the firm. In turn, identification leads the firm to adopt value creation goals specific to the family or non-financial goals
Campopiano et al. (2014)	Investigate how family firms affect engagement in firm philanthropy	130 Italian family firms. 2012	Logit regression	Firm's engagement in philanthropy survey questionnaire	Family involvement in ownership positively influences firm philanthropy while its interaction with family involvement in management produces a negative effect

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Family firms and CSR activities

Authors	Objective	Sample	Methodology	CSR measure	Results
Delmas and Gergaud (2014)	Investigate how transgenerational succession can be associated with the adoption of sustainable practices	Wine industry, 378 wineries and vineyards in California	Generalized linear model approach	The percentage of eco-certified production per winery	The results show that family business owners who intend to pass down their wineries to their children are more likely to be responsive to perceived customer demand for green certification
Dou et al. (2014)	Examine the impact of family involvement on corporate charitable donations	2,821 Chinese private firms. 2010 year	Tobit analysis	Corporate charitable donations	Family ownership and the duration of family control positively affect charitable donations and when the next generation is unwilling to take over the business, the positive relationship between family ownership and charitable donations becomes weaker
Marques et al. (2014)	Explore the foundations of CSR in family firms and examine whether the extent of engagement is based on values, and how and why this happens	12 Spanish family firms	Descriptive analysis	CSR questionnaire	Links between family involvement with values and values with CSR outcomes. Values of identification and commitment should be considered as a relevant source of heterogeneity among family firms to explain different CSR performance
Deschênes et al. (2015)	Examine whether certain board characteristics have an impact on CSR scores of corporations, with family firm as a control variable	Companies of the S&P/TSX 60 Index as of July 1, 2011. 120 of Canada's largest public companies. 2004-2008.	Ordinary least squares regressions	Jantzi social responsibility score of firm	CSR score is positively linked with the percentages of women and independent directors. Family firms do not have a significant impact on the overall CSR. Only in the governance dimension, family-owned companies adopt less effective governance practices
Rees and Rodionova (2015)	Investigate the impact of family equity holdings on CSR and evaluate how firm governance mediates the effect of family ownership on environmental and social improvements and how national governance systems influence the response of family holdings to ESG.	23,902 firm-year observations drawn from 2002 to 2012 covering 46 countries and 3,893 firms	OLS regressions	ESG Score is the firm-specific assessment provided by ASSET4	Both closely held equity and family ownership are negatively associated with ESG performance. When controlling for governance, closely held equity is no longer associated with environmental and social rankings, but family ownership retains a significant negative association. These results are strong and consistent across liberal market economies, whereas coordinated market economies exhibit generally weaker results and considerable diversity

Table 1
Family firms and CSR activities

Authors	Objective	Sample	Methodology	CSR measure	Results
Aragon et al. (2016)	Propose a new construct called responsible family ownership which includes both the commitment of the family to its stakeholders in the long term and the explicit behaviour associated with responsible ownership in small and medium- (SME)sized family enterprises	84 SME Spanish family enterprises with 20 to 250 employees and whose chief executive officers (CEOs) are family members	Ad hoc survey answered	Four dimensions using a 27-item initial scale and a final scale with 16 items that exhibits sufficient robustness, and theoretical underpinnings for use in research and practice	Presenting a responsible family ownership construct, a key driver of balance in family and firm systems that is therefore critical to the health of small and medium-sized family enterprises. In addition, a scale is proposed as a means to operationalize the construct and to derive practical implications for the governance of this kind of firm
Dekker and Hasso (2016)	Investigate whether private family firms have a greater environmental performance than non-family firms, and whether this relationship is moderated by the strength of the firms' social embeddedness	1452 private Australian small and medium-sized enterprises. Five periods of reference data (2004–2005, 2005–2006, 2006–2007, 2007–2008, and 2008–2009)	Ordered logit model	They utilize the following question from the BLD: ''To what extent did this business focus on the following when assessing overall business performance: environmental measures?'' The choices available for participants were: (0) Not at all; (1) A small extent; (2) A moderate extent; (3) A major extent	Family firms have a lower environmental performance than non-family firms. However, in cases where the firm is highly embedded in the social community, family firms have a higher environmental performance focus
Laguir et al. (2016)	Explore whether small and medium- sized family enterprises (SMEs) are more or less likely to be socially responsible than non-family firms of comparable size.	20 qualitative case studies in Morocco	Semi-structured interviews with SME managers in charge of CSR issues	Questions related to CSR practices, drivers and difficulties	Family SMEs are more likely to be socially responsible than non-family firms. Indeed, support of and communication with the local community is of crucial importance for family SME managers, who attempt to develop the local economy through such actions. Furthermore, family SMEs are more committed to improving work-life balance and innovating in order to solve social or environmental issues in response to consumer expectations. Last, CSR practices of family SMEs are linked with the CEO's commitment, values and culture.

Table 2
Sample annual and ownership classification

Year	Total observations	Non-family firms observations	Family firms observations
2004	86	38	48
2005	88	34	54
2006	95	34	61
2007	105	35	70
2008	103	37	66
2009	98	35	63
2010	94	36	58
Total	669	249	420

Table 3
Summary statistics

FFSH measures the percentage of the capital held by the family or by an individual as the leading significant shareholder and/or the ultimate significant shareholder, providing that the latter holds more than 10% of the capital. FAMCHAIR is a dummy variable taking value 1 if a member of the family is Chairman of the Board. FFCHAIR is a dummy variable that takes value 1 when the company is simultaneously defined as a family firm and a family member is the Chairman of the Board. SSH is defined as the percentage of shares of the company's capital held by a second significant shareholder providing it holds more than 5% of the capital. SSHFAM and SSHFOR denote the percentage of shares of the company's capital held by families or individuals or by foreign investors (SSHFOR) as second significant shareholder, providing they hold more than 5% of the firm's capital, respectively. SIZE is the firm's total assets expressed in thousands of euros. ROA is the ratio of return on assets. LEV is the ratio between short-term and long-term debt over total assets. INDUSTRY is a dummy variable that takes value 1 if the company belongs to more "environmentally sensitive" sectors.

		Stand. Dev.	Median	Percentage [a]	Minimum	Maximum
FFSH	25.541	26.350	21.103		0	97.721
FAMCHAIR				44.69		
FFCHAIR				42.45		
SSH	8.911	7.614	8.059		0	36.145
SSHFAM	2.533	5.763	0		0	26.764
SSHFOR	0.925	3.144	0		0	23.331
SIZE	6,438,317	1.56+07	939,569		18,562.2	1.30+08
ROA	0.058	0.102	0.054		-0.516	0.719
LEV	0.628	0.210	0.639		0.072	2.712
INDUSTRY				27.95		

n = 669
[a] % of the cases where variable takes value = 1

Table 4
Correlation matrix

FFSH measures the percentage of the capital held by the family or by an individual as the leading significant shareholder and/or the ultimate significant shareholder, providing that the latter holds more than 10% of the capital. FAMCHAIR is a dummy variable taking value 1 if a member of the family is Chairman of the Board. FFCHAIR is a dummy variable that takes value 1 when the company is simultaneously defined as a family firm and a family member is the Chairman of the Board. SSH is defined as the percentage of shares of the company's capital held by a second significant shareholder, providing it holds more than 5% of the capital. SSHFAM and SSHFOR denote the percentage of shares of the company's capital held by families or individuals or by foreign investors (SSHFOR) as second significant shareholder, providing they hold more than 5% of the firm's capital, respectively. SIZE is the firm's total assets expressed in thousands of euros. ROA is the ratio of return on assets. LEV is the ratio between short-term and long-term debt over total assets. INDUSTRY is a dummy variable that takes value 1 if the company belongs to more "environmentally sensitive" sectors.

Variables	CSRDISCL	FFSH	FAMCHAIR	FFCHAIR	SSH	SSHFAM	SSHFOR	SIZE	ROA	LEV	INDUSTRY
CSRDISCL	1										
FFSH	0.037	1									
FAMCHAIR	-0.080*	0.466***	1								
FFCHAIR	-0.091*	0.512***	0.955***	1							
SSH	0.050	-0.244***	-0.060	-0.080*	1						
SSHFAM	-0.081*	-0.013	0.081*	0.065†	0.388***	1					
SSHFOR	-0.027	-0.036	0.082*	0.047	0.104***	-0.129***	1				
SIZE	0.622***	-0.051	-0.132***	-0.142***	0.019	-0.239***	-0.045	1			
ROA	0.135***	-0.035	-0.031	-0.087*	0.127***	-0.055	0.000	0.067†	1		
LEV	0.243***	0.067†	0.084*	0.073†	-0.074†	-0.110**	-0.022	0.329***	-0.129***	1	
INDUSTRY	0.022	-0.340***	-0.238***	-0.259***	-0.099*	0.039	0.015	0.050	0.043	-0.203***	1

n = 669; † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 5

Family firms, second shareholder and CSR

FFSH measures the percentage of the capital held by the family or by an individual as the leading significant shareholder and/or the ultimate significant shareholder, providing that the latter holds more than 10% of the capital. FAMCHAIR is a dummy variable taking value 1 if a member of the family is Chairman of the Board. FFCHAIR is a dummy variable that takes value 1 when the company is simultaneously defined as a family firm and a family member is the Chairman of the Board. SSH is defined as the percentage of shares of the company's capital held by a second significant shareholder, providing it holds more than 5% of the capital. SIZE is the firm's total assets expressed in thousands of euros. ROA is the ratio of return on assets. LEV is the ratio between short-term and long-term debt over total assets. INDUSTRY is a dummy variable that takes value 1 if the company belongs to more "environmentally sensitive" sectors.

VARIABLES	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	MODEL 7	MODEL 8	MODEL 9
FFSH	-0.008*	-0.009*	-0.013**						
	(-2.19)	(-2.38)	(-2.87)						
FAMCHAIR				-0.414*	-0.417*	-0.949***			
				(-2.32)	(-2.32)	(-3.59)			
FFCHAIR							-0.402*	-0.402*	-0.915**
							(-2.22)	(-2.21)	(-3.46)
SSH		-0.008	-0.021		0.004	-0.018		0.003	-0.017
		(-0.73)	(-1.42)		(0.39)	(-1.18)		(0.28)	(-1.17
FFSH x SSH			0.001*						
			(2.56)						
FAMCHAIR X SSH						0.071**			
						(2.93)			
FFCHAIR X SSH									0.073**
									(3.04)
LSIZE	0.907***	0.919***	0.964***	0.866***	0.863***	0.939***	0.873***	0.871***	0.937***
	(10.78)	(10.55)	(11.64)	(11.49)	(11.48)	(11.88)	(11.34)	(11.34)	(11.53)
ROA	-0.071	-0.008	0.358	-0.073	-0.115	0.286	-0.276	-0.308	0.191
	(-0.10)	(0.21)	(0.54)	(-0.11)	(-0.16)	(0.42)	(-0.39)	(-0.43)	(0.28)
LEV	0.603	0.570	0.798*	0.863*	0.893*	0.889*	0.826*	0.844*	0.867*
	(1.53)	(1.46)	(2.07)	(2.06)	(2.09)	(2.25)	(1.99)	(2.00)	(2.19)
INDUSTRY	0.014	0.011	0.014	0.003	0.003	0.007	0.008	0.008	0.008
	(0.40)	(0.35)	(0.41)	(0.08)	(0.08)	(0.23)	(0.22)	(0.10)	(0.25)
Annual effect considered [a]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Log-likelihood	-367.359	-367.105	-365.612	-366.577	-366.501	-363.866	-366.810	-366.770	-364.074
LR chi2	135.84***	136.34***	139.33***	137.40**	137.55***	142.82***	136.93***	137.01***	142.41***
_cut1	13.511***	13.578***	14.296***	12.952***	12.957***	13.929***	13.037***	13.041***	13.916***
	(11.28)	(11.10)	(12.09)	(11.83)	(11.91)	(12.28)	(11.70)	(11.77)	(11.91)
_cut2	15.849***	15.918***	16.635***	15.343***	15.349***	16.316***	15..421***	15.426***	16.298**
	(12.47)	(12.27)	(13.22)	(13.08)	(13.15)	(13.38)	(12.93)	(13.00)	(13.04)
Rho	0.850***	0.855***	0.859***	0.830***	0.829**	0.856***	0.831***	0.831***	0.856***
	(39.05)	(39.72)	(40.58)	(38.70)	(38.55)	(42.45)	(38.57)	(38.36)	(42.29)
z_1	123.32***	120.19***	149.31***	147.54***	150.21***	157.01***	140.54***	142.67***	144.08***
z_2	13.88*	14.28*	11.35†	12.95*	12.89*	11.36†	12.29†	12.25†	11.65†
Observations	669	669	669	669	669	669	669	669	669
Nº of firms	105	105	105	105	105	105	105	105	105

Dependent variable is a qualitative dummy that takes value 1 to 3 depending on the firm commitment to CSR disclosure (CSRDISCL); t values in parentheses

Z_1 is a Wald test for the reported coefficients of the explanatory variables, asymptotically distributed as χ^2 under the null hypothesis of no relationship for all the explanatory variables. Z_2 is a Wald test of the joint significance of the time dummies, asymptotically distributed as χ^2 under the null hypothesis of no relationship.

[a] In models 1, 2, 4, 5 , 7 and 8 dummy related to 2006, 2007, 2008, 2009 and 2010 turn out to be significant. Dummy 2006 is not significant in models 3, 9 and 9.

† $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.000$

Table 6

Family firms, family and foreign second shareholder and CSR

FFSH measures the percentage of the capital held by the family or by an individual as the leading significant shareholder and/or the ultimate significant shareholder, providing that the latter holds more than 10% of the capital. FAMCHAIR is a dummy variable taking value 1 if a member of the family is Chairman of the Board. FFCHAIR is a dummy variable that takes value 1 when the company is simultaneously defined as a family firm and a family member is the Chairman of the Board. SSH is defined as the percentage of shares of the company's capital held by a second significant shareholder, providing it holds more than 5% of the capital. SSHFAM and SSHFOR denote the percentage of shares of the company's capital held by families or individuals or by foreign investors (SSHFOR) as second significant shareholder, providing they hold more than 5% of the firm's capital, respectively. SIZE is the firm's total assets expressed in thousands of euros. ROA is the ratio of return on assets. LEV is the ratio between short-term and long-term debt over total assets. INDUSTRY is a dummy variable that takes value 1 if the company belongs to more "environmentally sensitive" sectors.

VARIABLES	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6
FFSH	-0.008* (-2.17)	-0.010** (2.76)				
FAMCHAIR			-0.481** (-2.63)	-0.452* (-2.35)		
FFCHAIR					-0.465* (-2.51)	0.064 (0.26)
SSHFAM	-0.011 (-0.37)		0.057** (3.35)		0.059*** (3.49)	
SSHFOR		0.002 (0.06)		0.077* (2.00)		0.048† (1.66)
FFSH x SSHFAM	4.595-04 (0.41)					
FFSH x SSHFOR		0.003* (2.40)				
FAMCHAIR X SSHFAM			-0.054* (-1.96)			
FAMCHAIR X SSHFOR				-0.037 (-0.80)		
FFCHAIR X SSHFAM					-0.059* (-2.15)	
FFCHAIR X SSHFOR						0.021 (0.46)
LSIZE	0.905*** (9.90)	0.949*** (10.81)	0.816*** (12.58)	0.862*** (11.20)	0.823*** (12.22)	1.094*** (10.04)
ROA	-0.051 (-0.07)	0.478 (0.71)	-0.267 (-0.38)	0.196 (0.24)	-0.514 (-0.73)	1.745† (1.84)
LEV	0.593 (1.50)	0.579 (1.50)	0.850* (2.08)	0.778† (1.84)	0.815* (2.00)	0.611* (1.52)
INDUSTRY	0.016 (0.46)	-0.004 (-0.12)	-0.016 (-0.48)	0.006 (0.16)	-0.009 (-0.29)	-0.022 (-0.54)
Annual effect considered [a]	Yes	Yes	Yes	Yes	Yes	Yes
Log-likelihood	-367.268	-361.756	-366.462	-363.561	-366.666	-367.297
LR chi2	136.02***	147.04***	137.63**	143.43***	137.22***	135.96***
_cut1	13.469*** (10.34)	14.105*** (11.30)	12.225*** (12.81)	12.953*** (11.64)	12.303*** (12.52)	16.703*** (10.52)
_cut2	15.806*** (11.55)	16.488*** (12.42)	14.592*** (14.15)	15.372** (12.99)	14.665** (13.86)	19.153*** (11.44)
Rho	0.849*** (38.64)	0.865*** (39.05)	0.841*** (41.61)	0.837*** (38.72)	0.841*** (41.19)	0.796*** (29.30)
z_1	120.90***	129.00***	175.53***	147.56***	163.92***	130.38***
z_2	13.36*	13.13*	13.76*	12.60*	12.66*	11.85†
Observations	669	669	669	669	669	669
Nº of firms	105	105	105	105	105	105

Dependent variable is a qualitative dummy that takes value 1 to 3 depending on the firm commitment to CSR disclosure (CSRDISCL); t values in parentheses

Z_1 is a Wald test for the reported coefficients of the explanatory variables, asymptotically distributed as χ 2 under the null hypothesis of no relationship for all the explanatory variables. Z_2 is a Wald test of the joint significance of the time dummies, asymptotically distributed as χ 2 under the null hypothesis of no relationship.

[a] In models 1, 2, 3, 4 and 5 dummy related to 2006, 2007, 2008, 2009 and 2010 turn out to be significant. Dummy 2006 is not significant in model 6.

† $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.000$