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Résumé de l'article

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Contrôle familial et responsabilité sociale des entreprises : l'effet modérateur du conseil d'administration

Control familiar y responsabilidad social corporativa: el efecto moderador del consejo de administración

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ABSTRACT

This paper examines the effect of family control on corporate social responsibility (CSR) in French-listed companies. Based on quantile regressions, our results show that family identity and involvement in capital and management positively influence CSR performance, particularly for low-CSR firms. These findings support the socio-emotional perspective of family firms. However, families with excess control engage less in CSR activities for expropriation purposes. Additional analysis shows that board size and gender diversity attenuate the negative effect of excess family control on CSR performance and help then mitigating the expropriation risk by family-controlled firms.

Keywords: Family control; corporate social responsibility; board of directors; quantile regression approach.

Résumé

Cet article examine l'effet du contrôle familial sur la responsabilité sociale des entreprises (RSE) sur un échantillon de sociétés cotées en France. Suivant la perspective socio-émotionnelle et sur la base de régressions quantiles, nos résultats montrent que l'identité familiale et l'implication de la famille dans le capital et la gestion influencent positivement la performance RSE, en particulier pour les entreprises à faible engagement RSE. Les résultats montrent également que l'excès de contrôle familial (lorsque les droits de vote sont supérieurs aux droits financiers) impacte négativement la performance RSE. Cette dernière relation est cependant modérée par la taille du conseil d'administration et la diversité de genre.

Mots clés : Contrôle familial; responsabilité sociale des entreprises; conseil d'administration; approche des régressions quantiles.

Resumen

Este artículo examina el efecto del control familiar sobre la responsabilidad social corporativa (RSC) en compañías cotizadas en Francia. Basados en regresiones cuantílicas, nuestros resultados muestran que la identidad familiar y la participación en el capital y la gestión influyen positivamente en el desempeño de la RSC, en particular para las empresas con baja RSC. Estos hallazgos apoyan la perspectiva socioemocional de las empresas familiares. Sin embargo, las familias con exceso de control se involucran menos en actividades de RSC con fines de expropiación. Un análisis adicional muestra que el tamaño del directorio y la diversidad de género atenúan el efecto negativo del exceso de control familiar sobre el desempeño de la RSC y ayudan a mitigar el riesgo de expropiación por parte de las corporativa controladas por la familia.

Palabras Clave: Control familiar; responsabilidad social corporativa; Junta Directiva; enfoque de regresión cuantílica.

The debate on the commitment to Corporate Social Responsibility (CSR, hereafter) has attracted the interest of several researchers around the world. The literature has mainly focused on the drivers of the CSR (Galbreath, 2010). Specifically, the social behavior of family firms is less studied in literature. Debicki *et al.* (2009) argue that it is important to pay attention to the aspects of social responsibility in family firms. Indeed, family firms have specific characteristics. They have mostly concentrated ownership structure, undiversified portfolios, long-term horizons, and are involved within management (Morck *et al.* 1988). Their motivations for CSR practices may then differ from other types of ownership structures (Craig and Dibrell, 2006). The existing literature finds conflicting results regarding the effect of family control on CSR performance (Dyer and Whetten, 2006; Berrone *et al.* 2010; Block and Wagner, 2014; Ducassy and Montandrau, 2015; El Ghoul *et al.* 2016; Cui *et al.* 2018; Labelle *et al.* 2018). According to this literature, there are two competing theoretical frameworks for the family control-CSR relationship. The first one is the socio-emotional perspective suggesting that family members are inclined to preserve their socio-emotional wealth (SEW, hereafter) apart from economic considerations (Berrone *et al.* 2012). Along with this perspective, families are committed to CSR activities to protect their emotional goals (Dyer and Whetten, 2006; Berrone *et al.* 2010; Déniz and Suárez, 2005). The second perspective is the agency theory which highlights the opportunistic behaviour of families. Indeed, in case of excess control, families are less likely to engage in CSR activities and will divert company resources for their own benefits for expropriation purposes (El Ghoul *et al.* 2016).

Most research on the relationship between family firms and CSR performance focuses on a single perspective without dealing with the degree of family involvement within the company. However, family members can have significant control over the firm and perpetuate their influence over the company in several ways, such as holding voting rights beyond their cash flow rights, the involvement of family members in the management etc. Bingham *et al.* (2011) show that the extent of family involvement leads to a different emphasis on CSR initiatives. Our study falls within this research trend as it investigates the extent to which family control affects CSR performance. Specifically, our study aims to examine the relationship between family control and CSR performance not only through family involvement in capital and management but also through family identification with the company and excess control using both socio-emotional wealth

and agency theory perspectives. Our study is particularly interesting in the French context where companies are mostly held by families (Bouzgarrou and Navatte, 2014).

We also examine the effect of board characteristics on CSR performance in family firms. The extant literature emphasizes that the board of directors is a corporate governance device likely to reduce agency conflicts (Anderson and Reeb, 2003). We choose to focus on board features given the relative weakness of the institutional and legal environment in France[1]. Thus, the role of the board of directors is more valuable and is able to influence decision-making regarding CSR activities.

The contribution of this paper is then threefold. First, this study contributes to the literature on the CSR performance of family firms by distinguishing between the agency and socio-emotional perspectives in the context of family-owned companies. Previous studies generally focus on a single theory to examine the relationship between family firms and CSR performance (Bartkus *et al.* 2002; Barnea and Rubin, 2010; Berrone *et al.* 2010; Block and Wagner, 2014; Dyer and Whetten, 2006; El Ghoul *et al.* 2016). We draw on Ducassy and Montandrau (2015) who find that French family firms have a neutral effect on social performance. We consider family firms as a heterogeneous group as their behaviour can vary according to family involvement in the company (Sharma *et al.* 2012; Marques *et al.* 2014; Labelle *et al.* 2018).

Second, we provide new evidence on the moderating role of board features on the relationship between CSR performance and family control. We highlight the influence of gender diversity and small boards to mitigate opportunistic family behavior and protect minority interests in French firms. Third, most of the studies explore the relationship between family control and CSR performance through conditional mean regression estimations. This study is based on a novel technique to test the level of CSR engagement of family firms i.e. the quantile regression approach. This technique assumes that the effect of family control on CSR performance could vary among different levels of the CSR distribution. Indeed, family behavior toward CSR could be heterogeneous considering high and low levels of CSR.

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1. In particular, the World Bank's 2019 "Doing Business" report reveals weaknesses in investor protection in the French context on three points: the possibility for shareholders to sue executives and directors for misconduct, the regulation of conflicts of interest, and the scope of shareholders' rights (World Bank, 2019).

Based on a sample of 97 French companies between 2005 and 2016, we find that the effect of family control on CSR performance is not homogeneous. Family identity and ownership enhance CSR performance for firms with low-CSR levels. As for family involvement in management, we find that CEO family members are positively associated with all CSR levels. More specifically, we find that the strongest effect of CEO family member is recorded for low-CSR firms. However, when the family possesses control rights beyond their cash flow rights, the relationship between family control and CSR performance turns negative, suggesting that controlling families may have expropriation purposes and are likely to privilege their personal interests. These findings suggest that the effect of family control on CSR performance varies according to the family's involvement in the company and to the level of CSR engagement. Regarding board features, the negative effect of excess family control on CSR performance is less prevalent in presence of board gender diversity and for small board firms.

The remainder of the paper is organized as follows. Section 2 presents the theoretical framework. Section 3 presents the existing literature and develops our hypotheses. Section 4 describes the sample and presents the research design. This is followed by results and discussion in Section 5. The last section concludes the paper.

Theoretical Framework

Agency Theory Versus Socio-Emotional Wealth Perspective

Most studies on family businesses are based on the agency theory framework (Schulze et al. 2003; Anderson and Reeb, 2003; Depoers et al. 2020). According to this framework, families are opportunistic and privilege their private benefits to satisfy their economic goals. For instance, Anderson and Reeb (2003) suggest that families engage in opportunistic activities at the expense of minority shareholders' interests. Burkart et al. (2003) argue that family firms may expropriate private benefits of control through excessive salaries and perquisites, transactions with related parties, and special dividends.

In line with these arguments, families will pay less attention to CSR activities. Indeed, CSR activities are considered by families as an additional cost and a source of wealth dissipation. According to Labelle et al. (2018), families "feel the brunt" of overinvestment in CSR activities. In this sense, El Ghoul et al. (2016) find a negative impact of family control on CSR performance in the East Asian context and thus support for the expropriation view. Similarly, in an international sample, Labelle et al. (2018) show that family firms have low levels of CSR performance compared to non-family firms. The authors also find that in weakly protected investors' rights settings, family firms seek financial performance at the expense of social performance.

The preceding discussion shows that the agency theory perspective is linked to opportunistic behavior of family firms and to expropriation purposes. Family members will be therefore less likely to engage in CSR activities.

However, the agency theory remains insufficient to tackle the specificities of family businesses. Gómez-Mejía et al. (2007) develop a model to better deal with family firms' specificities. They point out that this model makes it possible to distinguish family businesses from their non-family counterparts. Their model, called socio-emotional wealth (SEW, hereafter), is an extension of the behavioral theory and claims that "families are emotionally linked to their businesses".

As a result, family firms do not only seek economic gains from their participation in the business but are motivated by non-financial, emotion-related goals, such as reputation, longevity, and firm succession to further generations (Berrone et al. 2010; Gómez-Mejía et al. 2011; Gómez-Mejía et al. 2007). In family firms, "the preservation of SEW is anchored at a deep psychological level among family owners whose identity is inextricably tied to the organization" (Berrone et al. 2010, p. 87). Berrone et al. (2012) suggest a set of five dimensions of SEW grouped under the acronym FIBER: Family control and influence, Identification of family members with the firm, Binding social ties, Emotional attachment of family members, and Renewal of family bonds to the firm through dynastic succession. Numerous empirical studies have used the SEW approach, considered as potentially a dominant paradigm in the field of family business research (Cennamo et al. 2012; Block and Wagner, 2014; Kalm and Gómez-Mejía, 2016; Poletti-Hughes and Williams, 2019).

Most of the research in SEW approach suggests that family firms are more likely to engage in CSR activities than their non-family counterparts to protect the emotional benefits they gain from controlling the company. From this perspective, family members engage in CSR activities to enhance family identity,

image, and reputation (Berrone *et al*. 2010; Déniz and Suárez, 2005; Gallo, 2004). Along with this perspective, Cruz *et al*. (2014) show that family firms are more likely to adopt social practices and to be socially responsible to protect their reputation and image, and hence, increase their SEW. Dyer and Whetten (2006) suggest that family firms invest in CSR activities to build corporate image, improve employee loyalty, influence customer perceptions, support long-term community growth, encourage innovation, and invest in the future. The authors show that family firms have higher levels of CSR performance than their non-family counterparts. Barnea and Rubin (2010) also argue that family firms are more motivated to protect their reputation than non-family firms. They engage in CSR activities to create a family brand identity among different stakeholders. Studies by Børsting and Thomsen (2017) show that family firms enjoy a good reputation and are socially responsible companies. According to Cennamo *et al*. (2012), family members worry about the reputation of the company and are likely to preserve their own SEW.

These emotional perspective-based arguments predict a positive association between CSR performance and family control as family firms have to be proactive with various stakeholders in order to preserve their socio-emotional wealth.

Hypothesis Development

Family firms are considered as a heterogeneous group because the behavior of family members is likely to vary according to the level of family involvement (Berrone *et al*. 2012; Marques *et al*. 2014; Labelle *et al*. 2018). In this study, we focus on four major dimensions of family involvement: ownership, management, identity, and excess control. Consistent with previous theoretical developments, we draw on the perspectives of the SWE and agency theory to construct our set of hypotheses. Indeed, there is a trade-off between incurring economic costs of CSR activities and preserving the family's socio-emotional wealth (Cennamo *et al*. 2009).

Following Berrone *et al*. (2012), we first consider that the SWE perspective can best capture the uniqueness of family businesses. The objective of preserving the SWE could thus have an impact on the relationship between family firms and CSR performance. Our first three hypotheses are along these lines: we believe that family involvement in capital and management and the self-identification of family members with the firm increase CSR performance. Our fourth hypothesis focuses on a particular configuration of family firms that is, excess control, in which family members behave opportunistically in the pursuit of financial goals. Following this agency perspective, we suggest that family firms with excess control (when voting rights exceed financial rights), under-invest in CSR activities and then exhibit weaker CSR performance. Finally, we suggest the existence of a moderating effect of corporate governance on the relationship between excess control and CSR performance.

Family Involvement in Capital and Management

A key feature of family business is the control and influence family members have over strategic decisions (Anderson and Reeb, 2003). The power to control can be exerted by holding large capital shares in the hands of family members and their presence in the top management positions. Several studies show that the implication of family members in the ownership and management enhances the control dimension of SEW (Berrone *et al*. 2010). In other words, the degree of family members' involvement in the capital and management may be considered as a proxy for the intensity of their SWE.

In order to enhance their socio-emotional wealth, family firms develop proactive relationships with their stakeholders (Cennamo *et al*. 2012). In this sense, several studies show that the concentration of ownership and management in hands of families is associated with more CSR engagement. Berrone *et al*. (2010) suggest that family owners are aware of their firm's reputation through irresponsible actions. Huang *et al*. (2009), Gómez-Mejía *et al*. (2011), and Sharma and Sharma (2011) show that family ownership is likely to have a positive impact on environmental performance. Cui *et al*. (2018) provide evidence that family-owned firms with a family member as CEO are likely to engage in CSR activities to preserve the socio-emotional wealth.

We then assume that the involvement in ownership and management leads the family to engage in CSR activities to preserve their emotional wealth.

The preceding discussion leads to the following hypotheses:

H_1. *Family ownership has a positive effect on CSR performance.*

H_2. *A CEO family member has a positive effect on CSR performance.*

Family Identity

Previous literature points out that joining the family name with the business creates a unique identity in family firms (Berrone *et al.* 2010). Indeed, when the company has the same name as the family (eponymous company), the reputation of the company becomes a very sensitive issue to all stakeholders. For instance, the family name can appear on a company's products or services. In this case, the family is encouraged to engage in social activities. Berrone *et al.* (2010) suggest that family businesses exhibit high levels of corporate social responsibility because of their strong identification with the firm's name. Dyer and Whetten (2006) and Barnea and Rubin (2010) argue that family firms are more inclined to protect their reputation than non-family firms since the company is often named as the family. As a result, the latter seeks to engage in CSR activities to create a family brand identity among different stakeholders. This leads to the following hypothesis:

H_3. *Family identification with the company has a positive effect on CSR performance.*

Family Excess Control

The goal of improving SEW motivates the family to get support from stakeholders (Berrone *et al.* 2012). This idea is at odds with agency concerns that CSR activities are a source of wealth dissipation. Family firms have generally mostly concentrated ownership structure and undiversified portfolios (Morck *et al.* 1988). As a result, family shareholders will "*feel the brunt*" of overinvestment in CSR activities and will bear a large portion of the firm's social responsibility burden (Labelle *et al.* 2018). The tension between SEW motives and the cost of CSR activities suggests a trade-off likely to affect the behavior of family firms towards CSR activities. Particularly, when families have control rights over their cash flow rights, the tendency to engage in opportunistic behaviors prevails the need to preserve socio-emotional wealth. Family-owned companies hold excess voting rights compared to their cash flow rights through the pyramidal structure or double-voting rights. This is likely to increase their power within the company (La Porta *et al.* 1999). In addition, excess control gives the family the ability to control and influence decisions without bearing the consequences of their decisions (Depoers *et al.* 2020). This may encourage such firms to reap private benefits and to seek their own interests (Faccio and Lang, 2002).

Therefore, family firms with an excess of control place greater emphasis on activities that benefit themselves even though they have strong SEW (Claessens *et al.* 2002). In this sense, Kellermanns *et al.* (2012) suggest that the SEW perspective has a "dark side", as high levels of SEW can be associated with low levels of proactive stakeholder engagement. In fact, families with excess control are less pressured by their stakeholders and thus, tend to fall back on their opportunistic behavior by engaging less in CSR activities. Such families can feel secure and therefore seek to decrease the resources to satisfy stakeholders' needs (Morck and Yeung, 2004). Therefore, when families hold excessive control, the achievement of financial goals prevails over SEW preservation motives, leading to a decrease in CSR performance.

The preceding arguments suggest that excess family control exacerbates the opportunistic behavior of the family leading to less engagement in social and environmental issues. Our fourth hypothesis is then as follows:

H_4. *Excess family control has a negative effect on CSR performance.*

The Moderating Effect of Board of Directors' Features

As the risk of expropriation by family firms is exacerbated through their excess control, we now investigate the moderating effect of the board of directors on the relationship between excess family control and CSR performance. The monitoring role of the board of directors depends on some board features, e.g., size, independence, CEO duality, and gender diversity, which could influence CSR engagement by family-controlled firms. We focus on these four board attributes for two reasons. On the one hand, these attributes are the more tested in previous empirical studies, allowing comparisons to be made. On the other hand, most of these attributes are regulated in the French context, which demonstrates their importance.

Board Size

Board size is an important device able to influence the effectiveness of board monitoring (Jensen, 1993). The empirical literature is not unanimous regarding the effect of board size on board decisions. Some literature is in favour of large boards because they have diversified experience and qualifications likely to enhance the quality of board monitoring (De Villiers *et al.* 2011). However, other researchers argue that large boards can be less effective in controlling managerial discretion

and in making decisions. Goodstein *et al.* (1994) document that a large board is more likely to cause difficulty in reaching consensus in the decision-making process. According to Hermalin and Weisbach (2003), a smaller board is easier to coordinate and can then be more effective in monitoring management. Studies on the effects of board size on CSR performance shows that boards with a small number of directors are likely to better coordinate and make decisions in the interests of all stakeholders by investing in CSR (Kassinis and Vafeas, 2002). Moreover, Prado-Lorenzo and García-Sanchez (2010) and Bai (2013) find a smaller board is associated with higher CSR performance. Given the effectiveness of smaller boards toward CSR performance, we formulate our hypothesis as follows:

H_5. *Board size amplifies the negative relationship between excess family control and CSR performance.*

Board Independence

Board independence is likely to improve the board of directors' efficiency. Numerous studies point out that the effectiveness of the board when it comes to CSR depends on the independence of its members (Jo and Harjoto, 2011). Hence, companies with a high proportion of independent directors are more concerned about CSR engagement. Others point out that external directors seem less committed to economic performance and more concerned about reputation, sustainability, and improvement of CSR (Ibrahim and Angelidis, 1995 and Post *et al.* 2011). Indeed, the reputation of independent directors is strongly linked to the reputation of companies. They are, therefore, interested in enhancing the company's responsible behavior since their professional reputation is at stake (García-Sanchez *et al.* 2011).

In addition, independent directors are hired to protect stakeholders' interests (Pfeffer, 1973; Fama and Jensen, 1983; Johnson and Greening, 1999; Ajina *et al.* 2019). Recently, Fuente *et al.* (2017) argued that independent directors bring their expertise, connections, external know-how, and contacts not only to satisfy the interests of stakeholders but also to ensure the long-term survival of the company.

We then assume that the negative relationship between excessive family control and CSR performance is less prevalent in firms with high board independence.

H_6. *Board independence weakens the negative relationship between excessive family control and CSR performance.*

CEO Duality

Duality refers to one person standing as both the CEO and the chairman of the board. This increases the power of the CEO and consequently the likelihood of opportunistic managerial behavior (Surroca and Tribo, 2008). In relation to CSR engagement, Webb (2004) shows that CEO duality is less prevalent in socially responsible firms than non-socially responsible ones.

Based on the agency theory, CEO duality is likely to empower the CEO and to reduce the efficiency of the board's monitoring role. This will result in neglecting stakeholders' interests and in lessening the engagement in CSR activities as the CEO will prefer to advance his or her own interests (Michelon and Parbonetti, 2012). Along with this perspective, Shahzad *et al.* (2016) prove a negative association between CEO duality and corporate social performance. This is due to agency costs associated with the increasing power of the CEO over the board. In family firms, family members become more entrenched and are inclined to invest in CSR activities. We then assume that in the case of CEO duality, the negative relationship between CSR performance and excessive family control is exacerbated.

H_7. *CEO duality amplifies the negative relationship between excessive family control and CSR performance.*

Gender Diversity

Gender diversity refers to the appointment of women in the boardroom. Board gender diversity is one important feature of board effectiveness (Liao *et al.* 2015). Adams and Ferreira (2009) show a positive association between the presence of women and the quality of board oversight. Nekhili *et al.* (2017) point out that the presence of women in the boardroom is a substitute for board independence in French companies.

Numerous studies highlight the positive qualities of women. According to Wood and Eagly (2009), women on the board have a set of psychological characteristics that could enable them to satisfy the interests of stakeholders. Francoeur *et al.* (2008) emphasize that diversity within the board facilitates the resolution of complex issues. In addition, women directors are more aware of the social engagement of the company and thus more likely to preserve the interests of stakeholders in the meetings (Nielsen and Huse, 2010).

Borghesi *et al.* (2014) and Galbreath (2016) show that gender diversity enhances the board's ability to effectively manage CSR activities. Hillman *et al.* (2002) and Bear *et al.* (2010) show that women are more likely to meet the needs of the community, while Williams (2003) shows that female directors are more charitable than men. Hence, women may encourage family members to make better social decisions. Moreover, Peake *et al.* (2017) find that women play an important role in family firms' participation in community social responsibility. We then assume that the negative relationship between CSR performance and excessive family control is less prevalent in firms with high board gender diversity.

H_8. Board gender weakens the negative relationship between excessive family control and CSR performance.

Research Design

Sample and Data

Our sample includes all firms listed on the CAC all tradable index. The CSR data were extracted from Thomson Reuters DataStream using the Assets4 model that provides environmental, social, and governance information. Board data and ownership structure were hand-collected from annual reports of listed firms. These were located on the AMF website. Finally, financial and accounting data were retrieved from the Compustat database. After matching Compustat and Datastream databases, we are left with a sample of 97 French-listed companies covering the period 2005-2016, i.e. 1164 firm-year observations.

The industry distribution of the selected companies is presented in Table 1. According to the classification of Campbell (1996), this table shows that the consumer durables industry is the most represented industry in our sample with 55.68% of the companies. It is also the most socially responsible sector with an average *CSR* score of 82.605, followed by the basic industry sector with 78.810. The least responsible companies are those belonging to the capitals goods industry with an average of 56.860.

Variables' Measurements

Corporate Social Responsibility

Our main variable is the CSR performance measured by a score extracted from Assets4 model. This score includes three pillars: social, environmental, and governance. Each pillar includes subcategories. The environmental pillar

TABLE 1
Distribution of the sample by sector

Activity area	SIC Codes	Number of companies	Frequency	Mean CSR
1- Petroleum industry	13, 29	0	0	0
2- Consumer Durables	25, 30, 36, 37, 50, 55, 57	54	55.68	82.605
3- Basic industry	10, 12, 14, 24, 26, 28, 33	6	6.2	78.810
4- Food and Tobacco	1, 2, 9, 20, 21, 54	4	4.2	66.891
5- Construction	15, 16, 17, 32, 52	6	6.2	72.756
6- Capital Goods	34, 35, 38	6	6.2	56.860
7- Transportation	40, 41, 42, 44, 45, 47	12	12.4	67.773
8- Utilities	46, 48	0	0	0
9- Textile and trade	22, 23, 31, 51, 53, 56, 59	0	0	0
10- Finance, insurance	60, 61, 62, 63, 64, 65, 66, 67, 68, 69	9	9.3	67.410
11- Services	72, 73, 75, 76, 80, 82, 87, 89	0	0	0
12- Leisure	27, 58, 70, 78, 79	0	0	0
TOTAL		**97**	**100**	

includes emission reduction, resource reduction, and product innovation. In the social score, there are indicators of workforce, human rights, community, and product responsibility. As for the governance pillar, it includes board structure, board function, compensation, shareholder rights, and vision and strategy. Each data on these pillars were converted into a score from 0 to 100. In this study, we choose to remove the governance score pillar because it is likely to interfere

with governance variables (board characteristics) included in our models. The CSR performance score is then the mean of the environmental and social scores. We normalized the CSR score by a logarithmic transformation to have a mean equal to 0 and a standard deviation of 1.

Family control

To measure "family control", we construct the four following measures:

Family ownership (FAM-OWN) is the percentage of shares held by the family (Chen *et al.* 2008 and Burkart *et al.* 2003). This variable captures the family influence and control dimension of the socio-emotional wealth model. We expect a positive link between this variable and CSR performance.

CEO family member (FAM-MAN) is a binary variable that equals to 1 if the CEO is a member of the controlling family, and 0 otherwise (Chen *et al.* 2008). This variable also captures the family influence and control dimension. We expect a positive effect of CEO family member on CSR performance.

Family identification (FAM-IDENT) is measured as a dummy variable coded as 1 if the name of the firm is part of the family name, and 0 otherwise. This variable captures family identification with the company i.e. the second dimension of socio-emotional wealth model. We expect a positive link between this variable and CSR performance.

Excess family control (EXCESS) captures the expropriation risk of family members. We expect this variable to be negatively related to CSR performance. Following Masulis *et al.* (2011), we measure excess control by the ratio of voting rights on cash flows rights held by family members.

Control Variables

We include company-level variables to control various factors that may affect CSR performance.

Firm size (SIZE) captures the existence of developments and economy of scales. As they grow, large firms face more pressures from their stakeholders, constraining them to respond to their demands. Large companies are likely, therefore, to engage in socially responsible activities than their smaller counterparts (El Ghoul *et al.* 2016 and Labelle *et al.* 2018). We expect a positive link between this variable and CSR performance. Firm size is measured by the log of total assets.

Debt ratio (LEV) measures the firms' attitude toward risk**.** Barnea and Rubin (2010) report a negative link between debt ratio and CSR performance suggesting that firms with higher financial risk may pay less attention to CSR activities. We expect a negative effect of the debt ratio on CSR performance. Debt ratio is measured by the ratio of total debt to total assets.

Growth opportunity (MTB) is the ratio between equity market value and equity book value (El Ghoul *et al.* 2016 and Cui *et al.* 2018). This ratio is a measure of a firm's growth opportunities. Firms with high growth opportunities are more likely to engage in CSR activities to attract more investors and, therefore, reduce the cost of capital (Dhaliwal *et al.* 2011). We expect a positive relationship between growth opportunities and CSR performance.

Return on assets (ROA) is firm performance. Dyer and Whetten (2006) show that firm's financial performance is highly correlated with its socially responsible decisions. Return on assets is measured by the ratio of net income before extraordinary items to total assets. It is expected that firm performance is positively associated with CSR performance.

In addition to these firm-level variables, we also consider firm, industry, and year effects in all our regressions. Appendix 1 reports all variables used in this study.

Model Specification

We first use the conditional mean regression in panel data.

$$CSR_{ESit} = \alpha 0 + \alpha_k FAMILY\text{-}CONTROL_{it} + \alpha_k CONTROLS_{it} + \sum \alpha_k INDUSTRY_{it} + \sum \alpha_k YEAR_{it} + \varepsilon_{it} \quad (1)$$

$$CSR_{ESit} = \alpha_0 + \alpha_k FAMILY\text{-}CONTROL_{it} + \alpha_k BOARD_{it} + \alpha_k FAMILY\text{-}CONTROL_{it} \\ *BOARD_{it} + \alpha_k CONTROLS_{it} + \sum \alpha_k INDUSTRY_{it} + \sum \alpha_k YEAR_{it} + \varepsilon_{it} \quad (2)$$

Where:

FAMILY-CONTROL$_{it}$: is either *FAM-OWN$_{it}$* = percentage of shares held by family members; *FAM-MAN$_{it}$* = a binary variable that equals to 1 if the CEO is a member of the controlling family, and 0 otherwise; *FAM-IDENT$_{it}$* = a dummy variable that equals to 1 if the name of the firm is part of the family name, and 0 otherwise; *EXCESS$_{it}$* = the ratio of voting rights on cash flow rights held by family members.

BOARD$_{it}$: these are board features, namely: $BSIZE_{it}$= the total number of directors; $INDEP_{it}$= the proportion of independent directors on the board relative to the total number of directors; $DUALITY_{it}$= a dummy variable that takes the value of 1 if the CEO is also the chairman of the board, and 0 otherwise; $DIVERSITY_{it}$= the proportion of women on the board of directors.

CONTROLS: are control variables including $FSIZE_{it}$= the log of total assets in fiscal year t; LEV_{it}= the ratio of total debt to total assets; MTB_{it}= the market-to-book ratio; ROA_{it}= the return on assets.

Secondly, we estimate our models using the quantile regression approach. This approach helps overcoming the limitations within the linear regression (OLS estimations). Indeed, simple linear regressions can be inefficient if the errors are highly non-normal or if the sample is slightly asymmetric where quantile regressions are robust to non-normal errors and outliers (Gallego-Álvarez and Ortas, 2016). Furthermore, this approach displays a complete picture of the effect of independent variables on the dependent one (Conyon and He, 2017). The classic OLS model examines the average relationship because it assumes that the conditional distribution of the *CSR* variable is homogeneous. However, the slopes of the *CSR* score variable are different through different parts (quantiles) of the distribution. We estimate three different quantiles of the *CSR* variable: the 25th quantile expresses low levels of CSR performance, 50th is the median level, where the 75th expresses high levels of CSR performance. Indeed, we assume that the relationship between family control and CSR performance may vary along with different levels of CSR performance. Standard deviations of the estimated parameters are obtained using the bootstrap method (Cameron *et al.* 2008). Bootstrap procedures can also handle the joint distribution of various quantile regression estimators, which can simultaneously test the slope parameters on different quantiles (Li *et al.* 2015).

Results and Discussion

Descriptive Statistics

Table 2 shows that the *CSR* score varies between 5.24 and 98.49, with an average of 69.567 and a standard deviation of 24.035. These results suggest that there is considerable variation in the CSR performance among French companies.

As for family control, Table 2 shows that on average, 43.94% of companies' shares are held by family members. Family participation in capital reaches a maximum of 80.97% suggesting a concentration of family ownership in the French context. We also notice that 42.5% of family companies are managed by a CEO who is a family member. Regarding the identity of the company, 34.95% of the family-controlled firms in our sample hold the same name as the family. Besides, the average of the *EXCESS* variable is 1.13, which suggests that families have on average about 13% of voting rights above their cash flow rights.

Descriptive statistics in Table 2 also show that boards have an average of 13 members. Board independence is on average 43.42%. In addition, 43% of our sampled firms have a dual structure on the board where there is no separation between the CEO and the chairman positions. Finally, the proportion of women appointed on the boardroom is on average 20.28%. This proportion is likely to increase with the Copé-Zimmermann law that constrains companies to appoint a quota of 40% of women in the boardroom from 2017.

TABLE 2
Descriptive statistics

Variables	Mean	Std. Dev.	Min	Max
CSR$_{ES}$	69.567	24.053	5.24	98.49
FAM-OWN	0.4394	0.17	0.07	0.8097
EXCESS	1.13	0.23	0.69	1.83
BSIZE	12.91	3.74	4	23
INDEP	43.42	23.94	0	100
DIVERSITY	20.28	15.02	0	71.81
FSIZE	9.43	1.69	6.07	14.55
LEV	0.28	0.24	0.001	2.38
MTB	1.85	1.96	-6.38	9.81
ROA	0.04	0.05	-0.33	0.46

	Proportion (0)		Proportion (1)	
FAM-MAN	0.575		0.425	
FAM-IDENT	0.651		0.349	
DUALITY	0.570		0.430	

Note: This table reports the descriptive statistics. See appendix 1 for variable definitions.

Before testing our hypotheses, we check for the lack of the multicollinearity problem between the independent variables. Table 3 shows the Pearson correlation matrix between our independent variables. The correlations do not exceed the threshold of 0.8 (Gujarati, 2004). For a deeper analysis, we calculate the VIF values. Table 3 shows that the average VIF is 1.48, which is far below the limit of 10 (Neter, 1986). We then confirm the lack of the multicollinearity problem.

Multivariate Analysis

Family Control and CSR Performance

Tables 4 and 5 report the results of the family control effect on CSR performance. Columns 1 and 2 report OLS and OLS firm-level fixed effects, respectively. We next present our quantile regression results in column 3.

The OLS regression in Table 4 shows a positive and significant relationship between family ownership and CSR performance at the 1% level. However, the OLS regression with fixed effects shows a non-significant relationship. These mixed results are based on the conditional mean of the *CSR* distribution. Using quantile regressions, we find that the effect of family ownership on CSR performance is positive and significant at the 25th and 50th quantiles of *CSR* and becomes insignificant at a higher CSR engagement level (75th quantile). The largest magnitude is recorded at the 25th quantile, with a coefficient of 0.141, compared to the median (0.106). These results suggest that there is a heterogeneous effect of family ownership on the *CSR* distribution. Specifically, family ownership has a stronger positive impact on low levels of *CSR* relatively to high-CSR engagement. This means that the effect of family ownership is stronger

TABLE 3
Pearson correlation matrix (N = 1164)

		1	2	3	4	5	6	7	8	F9	10	11	12
FAM-OWN	1	1.0000											
FAM-MAN	2	0.4988*	1.0000										
EXCESS	3	0.7318*	0.5275*	1.0000									
FAM-IDENT	4	0.5437*	0.4956*	0.5252*	1.0000								
BSIZE	5	-0.1777*	-0.0018	-0.0769*	-0.0814*	1.0000							
INDEP	6	0.1481*	0.0434	0.1627*	0.0238	-0.1865*	1.0000						
DIVERSITY	7	-0.0303	-0.0785*	-0.0462	-0.0130	0.1153*	0.1548*	1.0000					
DUALITY	8	-0.0589*	0.0152	0.0014	0.0060	-0.0376	0.0579*	0.1918*	1.000				
FSIZE	9	-0.2481*	-0.2098*	-0.2556*	-0.1416*	0.1520*	-0.0445	0.1810*	0.0918*	1.0000			
LEV	10	-0.1632*	-0.1068*	-0.1209*	-0.1011*	0.1436*	-0.1959*	-0.0280	0.0054	-0.1493*	1.0000		
MTB	11	0.2293*	0.0021	0.1693*	0.0913*	-0.2166*	-0.0257	-0.0398	-0.0514	-0.1786*	-0.1054*	1.000	
ROA	12	0.1500*	0.1015*	0.1338*	0.0985*	-0.0674*	-0.0408	-0.1466*	-0.1623*	-0.2678*	0.1320*	0.339	1.000
VIF		2.55	1.62	2.45	1.62	1.25	1.16	1.13	1.08	1.18	1.17	1.25	1.28
VIF Mean		1.48											

Note: Here, * indicates statistical significance at the 10% level. See appendix 1 for variable definitions.

in low-*CSR* firms. These findings suggest that family firms are likely to enhance their low-*CSR* levels to preserve their socio-emotional wealth. However, when the firm is already highly engaged in CSR activities, families do not seek to enhance their CSR commitments. These results are consistent with those of Dyer and Whetten (2006) and support Hypothesis 1. Table 4 also shows the effect of family ownership on both *CSR* dimensions, namely the environmental dimension (*ENVIRONMENT*) and the social dimension (*SOCIAL*), respectively. The results show that family ownership is positively associated with low levels of both environmental and social dimensions.

Table 5 reports the results on the effect of CEO family members and *CSR* scores. The quantile regressions show that the effect of the presence of a CEO family member on CSR performance differs across quantiles of the *CSR* variable. At the 25th, median and 75th quantiles, we find a positive and significant relation between CEO family members and CSR performance. However, the strongest effect is recorded for the 25th quantile (0.418), compared to the median (0.137) and the 75th quantile (0.061). These findings suggest that family members with both financial and human capital involved within the company are more committed to increase low-CSR performance compared to companies with already

TABLE 4
Effect of family ownership on CSR performance

| | CSR TOTAL | | | | | ENVIRONMENT | | | SOCIAL | | |
| | | | Quantile approach | | | Quantile approach | | | Quantile approach | | |
	OLS	Fixed effect	Q25	Q50	Q75	Q25	Q50	Q75	Q25	Q50	Q75
FAM-OWN	0.219	0.234	0.141	0.106	-0.033	0.387	0.399	-0.062	0.215	0.057	-0.026
	(0.002)***	(0.344)	(0.000)***	(0.028)**	(0.237)	(0.000)***	(0.186)	(0.148)	(0.000)***	(0.000)***	(0.187)
FSIZE	0.171	0.167	0.191	0.133	0.077	0.278	0.173	0.092	0.172	0.085	0.048
	(0.000)***	(0.016)**	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
LEV	-0.159	-0.238	-0.122	-0.111	-0.142	-0.104	-0.107	-0.069	-0.243	-0.145	-0.142
	(0.017)**	(0.152)	(0.042)**	(0.000)***	(0.000)***	-0.932	(0.203)	(0.532)	(0.000)***	(0.006)***	(0.000)***
MTB	0.009	0.008	-0.011	0.012	0.006	0.018	0.024	0.016	0.001	0.004	0.002
	(0.202)	(0.232)	(0.699)	(0.139)	(0.000)***	-0.059	(0.000)***	(0.000)***	(0.359)	(0.205)	(0.041)**
ROA	1.143	0.275	0.863	0.803	0.605	3.627	2.219	1.609	-0.602	-0.538	-0.338
	(0.004)***	(0.343)	(0.0)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.015)**	(0.029)**	(0.000)***
Constant	2.934	3.457	2.893	3.765	4.417	1.102	2.556	3.470	2.653	3.653	4.082
	(0.000)***	(0.000)***	(0.000)***	(0.000) ***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
Industry fixed effects	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	No	No	No	No	No	No	No	No	No
R-squared	0.3722	0.1663	0.2386	0.1624	0.1050	0.1780	0.1295	0.0756	0.2343	0.1683	0.0792

Note: This table presents a regression result of family ownership on CSR performance indicator variables and controls for the full sample, 2005-2016, inclusive. Coefficients and standard deviations are estimated at three different quantiles (25th, 50th, and 75th). Here, *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. See appendix 1 for variable definitions.
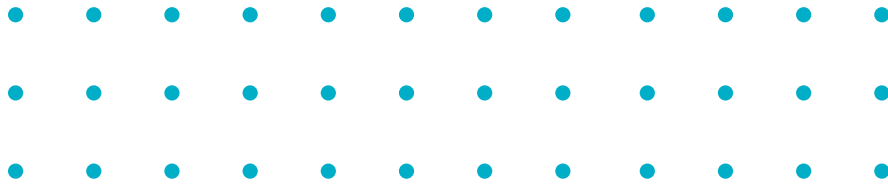
high-*CSR* levels. Our empirical results are consistent with those of Cui *et al*. (2018) suggesting that family firms with a CEO family member are likely to invest in CSR activities in order to preserve the socio-emotional wealth of their family, as predicted in Hypothesis 2. Table 5 also shows that the positive relationship between CSR performance and CEO family members holds for both *CSR* dimensions.

Regarding the identity of the family, Table 5 shows that when the company name coincides with the family name, families are likely to improve their low CSR performance. Indeed, the *FAM-IDENT* coefficient is positive and significant at the 25th quantile and at the median, and insignificant at the high-CSR level (75th quantile). This finding also supports the emotional perspective as the reputation of the family is important for all stakeholders. As a result, family firms are more inclined to enhance their CSR engagement; particularly when the firm commits less to CSR activities. This is consistent with the findings of Barnea and Rubin (2010) and confirms our Hypothesis 3. Similar results are reported for environmental and social scores. Particularly, the family identity is more sensitive to environmental improvements, which supports Berrone *et al*. (2010), who argue that the family's desire to protect its socio-emotional wealth can lead to a higher environmental engagement.

We now consider excess family control. Table 5 shows that when the family holds control rights beyond their cash flow rights, there is a negative and significant effect across all the *CSR* distribution. Family-controlled firms have then less incentive to engage in CSR activities to privilege personal interests. This result confirms our Hypothesis 4. This finding suggests that when families hold excessive control, the achievement of financial goals prevails over SEW preservation motives, leading to a decrease in CSR per-formance. This finding supports the idea that in countries where minority interests are weakly protected, family firms with voting rights over their cash flow rights are likely to behave opportunistically (La Porta *et al*. 1999). Thus, excess family control is associated with high agency costs and with an expro-priation risk of minority interests.

Overall, our quantile regression results show that the effect of family control on CSR performance depends on the family's involvement in the business and also on the CSR engagement level.

For the control variables, *CSR* has a positive relationship with firm size for the 25th, 50th, and 75th quantiles. Nevertheless, the positive effect (Waddock and Graves, 1997 and Labelle *et al*. 2018) is stronger at the lowest level of CSR performance. This result shows that large companies increase their weak CSR performance. As for the effect of debt, the results show a negative and significant effect on all quantiles. This finding suggests that highly indebted companies adopt a less socially responsible behavior (Barnea and Rubin, 2010 and Labelle *et al*. 2018). The *ROA* variable positively affects social performance as found by Labelle *et al*. (2018). However, the strongest magnitude is recorded for the lowest quantile, suggesting that companies with better financial performance (*ROA*) and low-*CSR* scores are more likely to improve their CSR engagement.

The Moderating Effect of Board Attributes

We now test the moderating effect of board attributes on one feature of family control i.e. excess control. Table 6 reveals that using the quantile regression approach, the impact of board size is negative. For small-size boards, family excess control increases firm's engagement in CSR activities, particularly, low-*CSR* levels. Hence, in family firms, a small board is able to control the opportunistic behavior of family members toward stakeholder interests. Indeed, family firms would be able to further improve their low-*CSR* levels.

Table 6 shows also that the interaction terms between board independence and excess control (*EXCESS*INDEP*) and duality functions (*EXCESS*DUALITY*) are insignificant using both conditional mean and quantile regression techniques.

Table 6 shows that the interaction term between excess control and diversity is positive and significant at the 25th quantile and at the median, but insignificant at the upper *CSR* quantile. These results suggest that the effect of excess control on CSR performance turns positive when women are appointed on the boardroom. This finding suggests that board gender diversity helps monitoring family actions and encourages the family to enhance at least their weak engagement in CSR activities. This finding confirms that women on boards constrain the expropriation behavior of the controlling family regarding CSR commitment, as their presence is considered an effective control device. It also supports the Copé-Zimmermann law adopted in 2011, which has required that French companies appoint women to a minimum quota of 40% of board directorships from 2017. This result supports our hypothesis 8.

TABLE 5

Effect of excess family control, a CEO family member, and identity on CSR performance

	CSR TOTAL					ENVIRONMENT			SOCIAL		
			Quantile approach			Quantile approach			Quantile approach		
	OLS	Fixed Effect	Q25	Q50	Q75	Q25	Q50	Q75	Q25	Q50	Q75
FAM-MAN	0.241	-0.054	0.418	0.137	0.061	0.681	0.255	0.103	0.134	0.047	0.037
	(0.000)***	(0.877)	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.001)***	(0.000)***	(0.022)**	(0.081)*
FAM-IDENT	0.046	-0.196	0.034	0.045	0.004	0.112	0.029	0.006	0.051	0.012	0.008
	(-0.338)	(0.572)	(0.000)***	(0.000)***	(-0.779)	(0.000)***	(-0.61)	(-0.262)	(-0.4)	(-0.499)	(-0.354)
EXCESS	-0.146	0.038	-0.291	-0.105	-0.057	-0.435	-0.207	-0.101	-0.087	-0.047	-0.031
	(0.000)***	(0.649)	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
FSIZE	0.162	0.089	0.186	0.127	0.078	0.256	0.16	0.089	0.166	0.085	0.049
	(0.000)***	(0.011)**	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
LEV	-0.199	-0.286	-0.249	-0.134	-0.106	-0.342	-0.119	-0.079	-0.331	-0.154	-0.151
	(0.003)***	(0.327)	(0.037)**	(0.000)***	(0.000)***	(0.000)***	(0.001)***	(0.070)*	(0.000)***	(-0.107)	(0.028)**
MTB	0.022	0.002	-0.003	0.021	0.011	0.031	0.036	0.02	0.008	0.007	0.002
	(0.006)***	(0.94)	(0.000)***	(0.000)***	(0.000)***	(0.226)	(0.001)***	(0.004)***	(-0.619)	(0.000)***	(0.000)***
ROA	1.137	0.979	1.838	0.781	0.419	4.991	2.192	1.474	-0.265	-0.546	-0.286
	(0.005)***	(0.004)***	(0.000)***	(0.068)*	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(-0.764)	(0.000)***	(0.098)*
Constant	3.039	3.630	2.719	3.544	4.298	1.455	2.782	3.538	2.729	3.693	4.082
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
Industry fixed effects	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	No	No	No	No	No	No	No	No	No
R-squared	0.3722	0.1598	0.4129	0.3088	0.2119	0.1859	0.1398	0.0809	0.2435	0.1715	0.0806
N	1164	1164	1164	1164	1164	1164	1164	1164	1164	1164	1164

Note: This table presents regression results of excessive family control, a CEO family member, and family members' identification with the company on CSR performance indicator variables and controls for the full sample, 2005-2016, inclusive. Coefficients and standard deviations are estimated at three different quantiles (25th, 50th, and 75th). Here, *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. See appendix 1 for variable definitions.

TABLE 6
The moderating effect of the board of directors

	OLS	Fixed Effect	Quantile approach		
			Q25	Q50	Q75
EXCESS	0.466	0.363	0.677	0.314	-0.081
	(0.000)***	(0.073)*	(0.027)**	(0.022)**	(0.128)
EXCESS*BSIZE	-0.046	-0.025	-0.059	-0.032	-0.012
	(0.000)***	(0.13)	(0.001)***	(0.004)***	(0.018)**
EXCESS*INDEP	0.006	-0.245	-0.242	-0.062	0.023
	(0.943)	(0.176)	(-0.278)	(0.644)	(0.18)
EXCESS*DIVERSITY	0.359	0.51	0.562	0.388	0.109
	(0.021)**	(0.111)	(0.000)***	(0.002)***	(0.306)
EXCESS*DUALITY	-0.035	-0.105	-0.037	-0.019	0.012
	(0.446)	(0.496)	(-0.579)	(0.76)	(0.763)
BSIZE	0.024	0.018	0.061	0.015	0.006
	(0.000)***	(0.315)	(0.001)***	(0.000)***	(0.000)***
INDEP	-0.034	0.247	0.118	0.008	0.011
	(0.557)	(0.051)*	(0.019)**	(0.883)	(0.596)
DIVERSITY	-0.003	-0.479	0.097	-0.098	-0.072
	(0.688)	(0.141)	(-0.293)	(0.288)	(0.070)**
DUALITY	-0.003	-0.048	0.061	0.049	0.003
	(0.915)	(0.579)	(0.003)***	(0.016)**	(0.855)
FSIZE	0.159	0.101	0.179	0.123	0.078
	(0.000)***	(0.003)***	(0.000)***	(0.000)***	(0.000)***
LEV	-0.248	-0.229	-0.198	-0.149	-0.149
	(0.000)***	(0.449)	(-0.145)	(0.000)***	(0.000)***
MTB	0.021	0.001	0.017	0.019	0.007
	(0.004)***	(0.958)	(-0.214)	(0.000)***	(0.000)***
ROA	1.053	0.796	1.441	0.755	0.549
	(0.007)***	(0.038)**	(0.002)***	(0.007)***	(0.000)***
Constant	3.182	3.865	2.573	3.695	4.368
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
Industry fixed effects	Yes	No	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	No	No	No
R-squared	0.2268	0.1850	0.3128	0.2091	0.1232
N	1164	1164	1164	1164	1164

Note: This table presents a regression of the moderating effect of the board of directors' indicator variable and controls for the full sample, 2005-2016, inclusive. Coefficients and standard deviations are estimated at three different quantiles (25th, 50th, and 75th). Here, *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. See appendix 1 for variable definitions.

Robustness Checks

We perform an additional analysis to check the robustness of our results. We use an alternative estimation technique i.e. the binomial negative regression. Indeed, our dependent variable, the *CSR* score, is a count data variable that varies between 0 and 99. The negative binomial estimation is then more appropriate for count data because it helps overcoming the problem of over-dispersion in data (Allison, 2009). The results reported in Table 7 remain qualitatively unchanged and show a positive relationship between family identity and involvement in capital and management and CSR performance. However, a negative relationship is reported between excessive family control and CSR performance.

Discussion and Conclusion

The purpose of this paper is to investigate the effect of family identity and involvement in capital and management on CSR performance for French-listed companies. It also sheds light on the moderating effect board features have on the relationship between excess family control and CSR performance.

Using the quantile regression approach, we find that the effect of families on CSR performance is heterogeneous across the CSR distribution. More specifically, we show that family ownership and identity have a positive impact on CSR performance, particularly in firms with low-CSR performance. In addition, the results show that family involvement in management improves all CSR levels supporting the socio-emotional perspective. However, our findings show that families that have excess control engage less in CSR activities suggesting that controlling families may have expropriation purposes and are likely to privilege their personal interests.

Our findings are important twofold: first, unlike Ducassy and Montandrau (2015), we underline the heterogeneity of French family businesses. We prove that family behavior toward CSR varies with family involvement within the company by focusing on two dimensions of the SEW perspective: family control and influence and identification with the firm. Second, by extending previous studies on family firms and CSR performance (Dyer and Whetten, 2006; Berrone *et al.* 2010; Déniz and Suárez, 2005; El Ghoul *et al.* 2016), we show that the effect of family control on CSR performance depends on the level of engagement in CSR activities, using the quantile regression approach.

TABLE 7
Binomial Negative regression

	(1)	(2)	(3)
FAM-OWN	0.125		
	(0.000)***		
FAM-MAN		0.18	
		(0.004)***	
FAM-IDENT		0.052	
		(0.000)***	
EXCESS		-0.13	0.361
		(0.002)***	(0.000)***
EXCESS*BSIZE			-0.037
			(0.000)***
EXCESS*INDEP			-0.009
			(0.009)
EXCESS*DIVERSITY			0.338
			(0.006)***
EXCESS*DUALITY			-0.026
			(0.478)
BSIZE			0.018
			(0.000)***
INDEP			-0.016
			(0.847)
DIVERSITY			-0.068
			(0.543)
DUALITY			0.017
			(0.543)
FSIZE	0.148	0.142	0.142
	(0.000)***	(0.000)***	(0.000)***
LEV	-0.127	-0.146	-0.192
	(0.041)**	(0.000)***	(0.000)***
MTB	0.01	0.019	0.018
	(0.040)**	(0.000)***	(0.002)***
ROA	0.922	0.875	0.888
	(0.153)	(0.060)*	(0.000)***
Constant	2.81	2.936	-101.476
	(0.000)***	(0.000)***	(0.046)**
Industry fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Firm fixed effects	No	No	No
N	1164	1164	1164

Note: This table presents a negative binomial analysis. See Table 1 for the variable definitions. Here, *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. See appendix 1 for variable definitions.
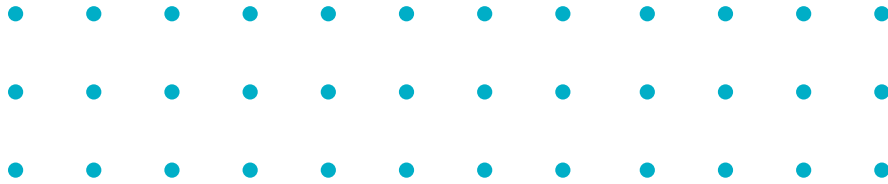
We also investigate the moderating effect of board features on the relationship between family control and CSR performance in a situation where the family has an excess of control. The findings show new evidence on the importance of gender diversity and small boards as effective devices able to mitigate the negative effect of excess family control on CSR performance.

In terms of theoretical implications, our findings support that both socio-emotional and economic considerations are important in family businesses. By using both perspectives, we contribute to the literature on CSR for family firms. We argue that, the effect of family control with regard to CSR performance is dynamic as it is affected by both owners' socio-emotional wealth (SEW) and economic goals. Indeed, our findings show that the SEW motive does not necessarily lead to proactive stakeholder management suggesting a trade-off between incurring economic costs of CSR activities and preserving the family's socio-emotional wealth. Our results suggest that family firms can engage in harmful stakeholder behavior when they control decisions through excess control. Accordingly, the family behavior regarding CSR activities is related to the degree of family involvement within the firm.

These results have practical implications as they help managers, shareholders, and stakeholders analyzing family behavior regarding CSR engagement. Market participants must be aware that CSR decisions in family firms vary depending on the family's involvement in the business. Our results provide useful insights on the benefits in CSR performance of family identity and involvement in capital and management. However, when families have excess control through double or multiple shareholdings or through pyramiding, the family behavior could harm stakeholders' interests as controlling families engage less in CSR activities to privilege their own interests. Policymakers may enforce then controlling mechanisms to encourage companies in general and family firms in particular enhancing their CSR practices.

However, this study has some limitations. First, we only focus on two SEW dimensions (i.e., family control and influence and identification of family name). Thus, significant work remains to be done to deepen our understanding on the heterogeneity of family businesses. In particular, future research could focus on different SEW dimensions such as intergenerational succession, the age of family business, values, and culture. Second, to test the moderating effect of the board, we focus on four features traditionally tested in literature. Other attributes such as director experience and education may also be tested.

References

Adams, Renée B.; Ferreira, Daniel (2009). "Women in the boardroom and their impact on governance and performance", *Journal of Financial Economics*, Vol. 94, N° 2, p. 291-309.
Google Scholar   https://doi.org/10.1016/j.jfineco.2008.10.007

Ajina, Aymen; Lakhal, Faten; Ayed, Sabrine (2019). "Does Corporate Social Responsibility Reduce Earnings Management? The Moderating Role of Corporate Governance and Ownership", *Management International/International Management/GestiónInternacional*, Vol. 23, N° 2.
Google Scholar   https://doi.org/10.7202/1060030ar

Allison, Paul D. (2009). "Fixed effects models for count data", *Fixed Effects Regression Models. Thousand Oaks, CA: SAGE*, p. 49-69.
Google Scholar   https://dx.doi.org/10.4135/9781412993869.d20

Anderson, Ronald C.; Reeb, David M. (2003). "Founding-family ownership and firm performance: evidence from the S&P 500", *The Journal of Finance*, Vol. 58, N° 3, p. 1301-1328.
Google Scholar   https://doi.org/10.1111/1540-6261.00567

Bai, Ge (2013). "How do board size and occupational background of directors influence social performance in for-profit and non-profit organizations? Evidence from California hospitals", *Journal of business ethics,* Vol. 118, N° 1, p. 171-187.
Google Scholar   https://doi.org/10.1007/s10551-012-1578-x

Barnea, Amir; Rubin, Amir (2010). "Corporate social responsibility as a conflict between shareholders", *Journal of Business Ethics*, Vol. 97, N° 1, p. 71-86.
Google Scholar   https://doi.org/10.1007/s10551-010-0496-z

Bartkus, Barbara R.; Morris, Sara A.; Seifert, Bruce (2002). "Governance and corporate philanthropy: restraining Robin Hood?", *Business & Society*, Vol. 41, N° 3, p. 319-344.
Google Scholar   https://doi.org/10.1177/0007650302041000304

Bear, Stephen; Rahman, Noushi; Post, Corinne (2010). "The impact of board diversity and gender composition on corporate social responsibility and firm reputation", *Journal of Business Ethics,* Vol. 97, N° 2, p. 207-221.
Google Scholar   https://doi.org/10.1007/s10551-010-0505-2

Bebchuk, Lucian A.; Kraakman, Reinier; Triantis, George (2000). "Stock pyramids, cross-ownership, and dual class equity: the mechanisms and agency costs of separating control from cash-flow rights", *Concentrated Corporate Ownership, University of Chicago Press*, p. 295-318.
Google Scholar
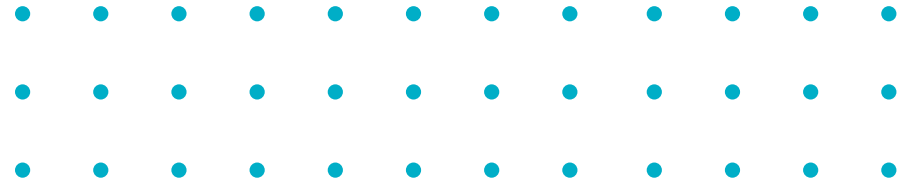
Berrone, Pascual; Cruz, Cristina; Gomez-Mejia, Luis R.; Larraza-Kintana, Martin (2010). "Socioemotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less?", *Administrative Science Quarterly*, Vol. 55, N° 1, p. 82-113.
Google Scholar   https://doi.org/10.2189/asqu.2010.55.1.82

Bingham, John B., Dyer, Gibb W., Smith, Isaac; Adams, Gregory L. (2011). "A stakeholder identity orientation approach to corporate social performance in family firms", *Journal of Business Ethics*, Vol. 99, N° 4, p. 565-585.
Google Scholar   https://doi.org/10.1007/s10551-010-0669-9

Block, Joern H.; Wagner, Marcus (2014). "The effect of family ownership on different dimensions of corporate social responsibility: Evidence from large US firms", *Business Strategy and the Environment*, Vol. 23, N° 7, p. 475-492.
Google Scholar   https://doi.org/10.1002/bse.1798

Borghesi, Richard; Houston, Joel F.; Naranjo, Andy (2014). "Corporate socially responsible investments: CEO altruism, reputation, and shareholder interest", *Journal of Corporate Finance*, Vol. 26, p. 164-181.
Google Scholar   https://doi.org/10.1016/j.jcorpfin.2014.03.008

Børsting, Christa; Thomsen, Steen (2017). "Foundation ownership, reputation, and labour", *Oxford Review of Economic Policy,* Vol. 33, N° 2, p. 317-338.
Google Scholar   https://doi.org/10.1093/oxrep/grx023

Bouzgarrou, Houssam; Navatte, Patrick (2014). "Family Firms and the Choice of Payment Method in Domestic and International Acquisitions", *Management international/ International Management/GestiònInternacional*, Vol. 18, N° 4, p. 107-124.,
Google Scholar   http://dx.doi.org/10.7202/1026032ar

Burkart, Mike; Panunzi, Fausto; Shleifer, Andrei (2003). "Family firms", *The Journal of Finance*, Vol. 58, N° 5, p. 2167-2201.
Google Scholar   https://doi.org/10.1111/1540-6261.00601

Cameron, Colin A.; Gelbach, Jonah B.; Miller, Douglas L. (2008). "Bootstrap-based improvements for inference with clustered errors", *The Review of Economics and Statistics*, Vol. 90, N° 3, p. 414-427.
Google Scholar   https://doi.org/10.1162/rest.90.3.414

Campbell, John, Y. (1991). "Understanding risk and return", *Journal of Political Economy*, Vol. 104, N° 2, p. 298-345.
Google Scholar   https://doi.org/10.1086/262026

Cennamo, Carmelo; Berrone, Pascual; Cruz, Cristina; Gomez–Mejia, Luis R. (2012). "Socioemotional wealth and proactive stakeholder engagement: Why family–controlled firms care more about their stakeholders", *Entrepreneurship Theory and Practice*, Vol. 36, N° 6, p. 1153-1173.
Google Scholar   https://doi.org/10.1111/j.1540-6520.2012.00543.x

Cennamo, Carmelo; Berrone, Pascual; Gómez-Mejía, Luis R. (2009). "Does stakeholder management have a dark side?", *Journal of Business Ethics*, Vol. 89, N° 4, p. 491-507.
Google Scholar   https://doi.org/10.1007/s10551-008-0012-x

Chen, Shuping; Chen, X. I. A.; Cheng, Qiang (2008). "Do family firms provide more or less voluntary disclosure?", *Journal of Accounting Research*, Vol. 46, N° 3, p. 499-536.
Google Scholar   https://doi.org/10.1111/j.1475-679X.2008.00288.x

Claessens, Stijn; Djankov, Simeon; Fan, Joseph PH; Lang, Larry HP (2002). "Disentangling the incentive and entrenchment effects of large shareholdings", *The Journal of Finance*, Vol. 57, N° 6, p. 2741-2771.
Google Scholar   https://doi.org/10.1111/1540-6261.00511

Conyon, Martin, J., Lerong, He. (2017). "Firm performance and boardroom gender diversity: A quantile regression approach", J*ournal of Business Research*, Vol. 79, p. 198-211.
Google Scholar   https://doi.org/10.1016/j.jbusres.2017.02.006

Craig, Justin; Dibrell, Clay (2006). "The natural environment, innovation, and firm performance: A comparative study", *Family Business Review*, Vol. 19, N° 4, p. 275-288.
Google Scholar   https://doi.org/10.1111/j.1741-6248.2006.00075.x

Cruz, Cristina; Larraza–Kintana, Martin; Garcés–Galdeano, Lucía; Berrone, Pascual (2014). "Are family firms really more socially responsible?", *Entrepreneurship Theory and Practice*, Vol. 38, N° 6, p. 1295-1316.
Google Scholar   https://doi.org/10.1111/etap.12125

Cui, Victor; Ding, Shujun; Liu, Mingzhi; Wu, Zhenyu (2018). "Revisiting the effect of family involvement on corporate social responsibility: a behavioral agency perspective", *Journal of Business Ethics*, Vol. 152, N° 1, p. 291-309.
Google Scholar   https://doi.org/10.1007/s10551-016-3309-1

De Villiers, Charl; Naiker, Vic; Van Staden, Chris J. (2011). "The effect of board characteristics on firm environmental performance", *Journal of Management,* Vol. 37, N° 6, p. 1636-1663.
Google Scholar   https://doi.org/10.1177/0149206311411506

Debicki, Bart J.; Matherne III, Curtis F.; Kellermanns, Franz W.; Chrisman, James J. (2009). "Family business research in the new millennium: An overview of the who, the where, the what, and the why", *Family Business Review*, Vol. 22, N° 2, p. 151-166.
Google Scholar   https://doi.org/10.1177/0894486509333598

Dénis, Maria de la Cruz Déniz; Suárez, Ma, Katiuska, Cabrera (2005). "Corporate social responsibility and family business in Spain", *Journal of Business Ethics*, Vol. 56, N° 1, p. 27-41.
Google Scholar   https://doi.org/10.1007/s10551-004-3237-3

Depoers, Florence; Guizani, Assil; Lakhal, Faten (2020). "Contrôle familial, conseil d'administration et risque de chute du cours d'action: le cas des entreprises françaises", *Management Avenir*, N° 5, p. 109-129.
Google Scholar   https://doi.org/10.3917/mav.119.0109

Dhaliwal, Dan S.; Li, Oliver, Zhen; Tsang, Albert; Yang, Yong, George (2011). "Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting", *The Accounting Review,* Vol. 86, N° 1, p. 59-100.
Google Scholar   https://doi.org/10.2308/accr.00000005

Ducassy, Isabelle; Montandrau, Sophie (2015). "Corporate social performance, ownership structure, and corporate governance in France", *Research in International Business and Finance*, Vol. 34, p. 383-396.
Google Scholar   https://doi.org/10.1016/j.ribaf.2015.02.002

Dyer, Jr, Gibb, W.; Whetten, David A. (2006). "Family firms and social responsibility: Preliminary evidence from the S&P 500", *Entrepreneurship Theory and Practice*, Vol. 30, N° 6, p. 785-802.
Google Scholar   https://doi.org/10.1111/j.1540-6520.2006.00151.x

El Ghoul, Sadok; Guedhami, Omrane; Wang, He; Kwok, Chuck CY. (2016). "Family control and corporate social responsibility", *Journal of Banking & Finance*, Vol. 73, p. 131-146.
Google Scholar   https://doi.org/10.1016/j.jbankfin.2016.08.008

Faccio, Mara; Lang, Larry HP. (2002). "The ultimate ownership of Western European corporations", *Journal of financial economics*, Vol. 65, N° 3, p. 365-395.
Google Scholar   https://doi.org/10.1016/S0304-405X(02)00146-0

Fama, Eugene F.; Jensen, Michael C. (1983). "Separation of ownership and control", *The Journal of Law and Economics*, Vol. 26, N° 2, p. 301-325.
Google Scholar   https://doi.org/10.1086/467037

Francoeur, Claude; Labelle, Réal; Sinclair-Desgagné, Bernard (2008). "Gender diversity in corporate governance and top management", *Journal of Business Ethics*, Vol. 81, N° 1, p. 83-95.
Google Scholar   https://doi.org/10.1007/s10551-007-9482-5

Fuente, Juan, Antonio; García-Sanchez, Isabel, Maria; Lozano, Maria, Belén (2017). "The role of the board of directors in the adoption of GRI guidelines for the disclosure of CSR information", *Journal of Cleaner Production*, Vol. 141, p. 737-750.
Google Scholar   https://doi.org/10.1016/j.jclepro.2016.09.155

Galbreath, Jeremy (2010). "Drivers of corporate social responsibility: The role of formal strategic planning and firm culture", *British Journal of Management*, Vol. 21, N° 2, p. 511-525.
Google Scholar   https://doi.org/10.1111/j.1467-8551.2009.00633.x

Galbreath, Jeremy (2016). "When do board and management resources complement each other? A study of effects on corporate social responsibility", *Journal of Business Ethics*, Vol. 136, N° 2, p. 281-292.
Google Scholar   https://doi.org/10.1007/s10551-014-2519-7

Gallego-Álvarez, Isabel; Ortas, Eduardo (2016). "Corporate environmental sustainability reporting in the context of national cultures: A quantile regression approach", *International Business Review,* Vol. 26, N° 2, p. 337-353.
Google Scholar   https://doi.org/10.1016/j.ibusrev.2016.09.003

Gallo, Miguel, Angel (2004). "The family business and its social responsibilities", *Family Business Review*, Vol. 17, N° 2, p. 135-148.
Google Scholar   https://doi.org/10.1111/j.1741-6248.2004.00009.x

Gedajlovic, Eric; Carney, Michael; Chrisman, James J.; Kellermanns, Franz W. (2012) "The adolescence of family firm research: Taking stock and planning for the future", *Journal of Management*, Vol. 38, N° 4, p. 1010-1037.
Google Scholar   https://doi.org/10.1177/0149206311429990

Gómez-Mejía, Luis R.; Cruz, Cristina; Berrone, Pascual; De Castro, Julio (2011). "The bind that ties: Socioemotional wealth preservation in family firms", *Academy of Management Annals*, Vol. 5, N° 1, p. 653-707.
Google Scholar   https://doi.org/10.5465/19416520.2011.593320

Gómez-Mejía, Luis R.; Haynes, Katalin, Takács; Núñez-Nickel, Manuel; Jacobson, Kathyrn, JL.; Moyano-Fuentes, José (2007). "Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills", *Administrative Science Quarterly*, Vol. 52, N° 1, p. 106-137.
Google Scholar   https://doi.org/10.2189/asqu.52.1.106

Goodstein, Jerry; Gautam, Kanak; Boeker, Warren (1994). "The effects of board size and diversity on strategic change", *Strategic Management Journal*, Vol. 15, N° 3, p. 241-250.
Google Scholar   https://doi.org/10.1002/smj.4250150305

Gujarati, Damodar; Porter, Dawn C. (2004). "Basic Econometrics, 2004", *Editura McGraw-Hill*, 858 p.
Google Scholar

Hermalin, Benjamin, E., Weisbach, Michael, S. (2003). "Boards of directors as an endogenously determined institution: A survey of the economic literature", *Economic Policy Review*, Vol. 9, N° 1, p. 7-26.
Google Scholar

Hillman, Amy J.; Cannella, Jr, Albert A.; Harris, Ira C. (2002). "Women and racial minorities in the boardroom: how do directors differ?", *Journal of Management*, Vol. 28, N° 6, p. 747-763.
Google Scholar   https://doi.org/10.1177/014920630202800603

Huang, Yi-Chun; Ding,Hung-Bin; Kao,Ming-Rea (2009). "Salient stakeholder voices: Family business and green innovation adoption", *Journal of Management & Organization*, Vol. 15, N° 3, p. 309-326.
Google Scholar   https://doi.org/10.5172/jmo.2009.15.3.309

Ibrahim, Nabil A.; Angelidis, John P. (1995). The corporate social responsiveness orientation of board members: Are there differences between inside and outside directors?", *Journal of Business Ethics*, Vol. 14, N° 5, p. 405-410.
Google Scholar   https://doi.org/10.1007/BF00872102

Jensen, Michael C. (1993). "The modern industrial revolution, exit, and the failure of internal control systems", *the Journal of Finance*, Vol. 48, N° 3, p. 831-880.
Google Scholar   https://doi.org/10.1111/j.1540-6261.1993.tb04022.x

Jo, Hoje; Harjoto, Maretno A. (2011). "Corporate governance and firm value: The impact of corporate social responsibility", *Journal of Business Ethics*, Vol. 103, N° 3, p. 351-383.
Google Scholar   https://doi.org/10.1007/s10551-011-0869-y

Johnson, Richard A.; Greening, Daniel W. (1999). "The effects of corporate governance and institutional ownership types on corporate social performance", *Academy of Management Journal*, Vol. 42, N° 5, p. 564-576.
Google Scholar   https://doi.org/10.5465/256977

Kalm, Matias; Gomez-Mejia, Luis R. (2016). "Socioemotional wealth preservation in family firms ", *Revista de Administração (São Paulo)*, Vol. 51. N° 4. p. 409-411.
Google Scholar   https://doi.org/10.1016/j.rausp.2016.08.002

Kassinis, George; Vafeas, Nikos (2002). "Corporate boards and outside stakeholders as determinants of environmental litigation", *Strategic Management Journal*, Vol. 23, N° 5, p. 399-415.
Google Scholar   https://doi.org/10.1002/smj.230

Kellermanns, Franz W.; Eddleston, Kimberly A.; Zellweger, Thomas M. (2012). "Article commentary: Extending the socioemotional wealth perspective: A look at the dark side", *Entrepreneurship Theory and Practice*, Vol. 36, N° 6, p. 1175-1182.
Google Scholar   https://doi.org/10.1111/j.1540-6520.2012.00544.x

La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei (1999). "Corporate ownership around the world", *The Journal of Finance*, Vol. 54, N° 2, p. 471-517.
Google Scholar   https://doi.org/10.1111/0022-1082.00115

Labelle, Réal; Hafsi,Taïeb; Francoeur, Claude; Ben Amar, Walid (2018). "Family firms' corporate social performance: A calculated quest for socioemotional wealth", *Journal of Business Ethics,* Vol. 148, N° 3, p. 511-525.
Google Scholar   https://doi.org/10.1007/s10551-015-2982-9

Li, Mingxiang (2015). "Moving beyond the linear regression model: advantages of the quantile regression model", *Journal of Management*, Vol. 41, N° 1, p. 71-98.
Google Scholar   https://doi.org/10.1177/0149206314551963

Liao, Lin; Luo, Le; Tang, Qingliang (2015). "Gender diversity, board independence, environmental committee and greenhouse gas disclosure", *The British Accounting Review*, Vol. 47, N° 4, p. 409-424.
Google Scholar   https://doi.org/10.1016/j.bar.2014.01.002

Marques, Pilar; Presas, Pilar; Simon, Alexandra (2014). "The heterogeneity of family firms in CSR engagement: The role of values", *Family Business Review*, Vol. 27, N° 3, p. 206-227.
Google Scholar   https://doi.org/10.1177/0894486514539004

Masulis, Ronald W.; Kien, Peter; Jason, Zein, Pham (2011). "Family business groups around the world: Financing advantages, control motivations, and organizational choices", *The Review of Financial Studies,* Vol. 24, N° 11, p. 3556-3600.
Google Scholar   https://doi.org/10.1093/rfs/hhr052

Michelon, Giovanna; Parbonetti, Antonio (2012). "The effect of corporate governance on sustainability disclosure", *Journal of Management & Governance*, Vol. 16, N° 3, p. 477-509., http://dx.doi.org/10.1007/s10997-010-9160-3
Google Scholar   https://doi.org/10.1007/s10997-010-9160-3

Morck, Randall; Shleifer, Andrei, Vishny, Robert W. (1988). "Management ownership and market valuation: An empirical analysis", *Journal of Financial Economics*, Vol. 20, p. 293-315.
Google Scholar   http://dx.doi.org/10.1016/0304-405x(88)90048-7

Morck, Randall; Yeung, Bernard (2004). "Family control and the rent–seeking society", *Entrepreneurship Theory and Practice*, Vol. 28, N° 4, p. 391-409.
Google Scholar   https://doi.org/10.1111/j.1540-6520.2004.00053.x

Nekhili, Mehdi; Nagati, Haithem; Chtioui, Tawhid; Nekhili, Ali (2017). "Gender-diverse board and the relevance of voluntary CSR reporting", *International Review of Financial Analysis*, Vol. 50, p. 81-100.
Google Scholar   https://doi.org/10.1016/j.irfa.2017.02.003

Neter, John (1986). "Boundaries of Statistics—Sharp or Fuzzy?", *Journal of the American Statistical Association*, Vol. 81, N° 393, p. 1-8.
Google Scholar   https://doi.org/10.1080/01621459.1986.10478227
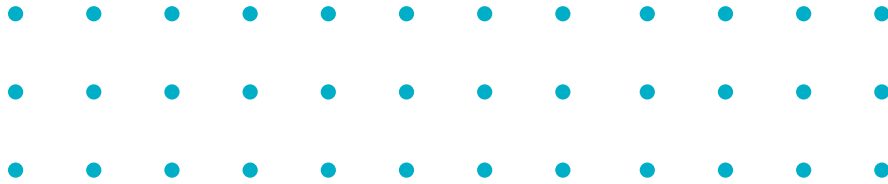
Nielsen, Sabina; Huse, Morten (2010). "The contribution of women on boards of directors: Going beyond the surface", *Corporate governance: An international review*, Vol. 18, N° 2, p. 136-14.
Google Scholar   https://doi.org/10.1111/j.1467-8683.2010.00784.x

Peake, Whitney O.; Cooper, Danielle; Fitzgerald, Margaret A.; Muske, Glenn (2017). "Family business participation in community social responsibility: The moderating effect of gender", *Journal of Business Ethics*, Vol. 142, N° 2, p. 325-343.
Google Scholar   https://doi.org/10.1007/s10551-015-2716-z

Pfeffer, Jeffrey (1973). "Size, composition, and function of hospital boards of directors: A study of organization-environment linkage", *Administrative Science Quarterly*, p. 349-364., http://dx.doi.org/10.4324/9780203337394_chapter_30
Google Scholar   https://doi.org/10.2307/2391668

Poletti-Hughes, Jannine; Williams, Jonathan (2019). "The effect of family control on value and risk-taking in Mexico: A socioemotional wealth approach", *International Review of Financial Analysis*, Vol. 63, p. 369-381.
Google Scholar   https://doi.org/10.1016/j.irfa.2017.02.005

Post, Corinne; Rahman, Noushi; Rubow, Emily (2011). "Green governance: Boards of directors' composition and environmental corporate social responsibility", *Business & Society*, Vol. 50, N° 1, p. 189-223.
Google Scholar   https://doi.org/10.1177/0007650310394642

Prado-Lorenzo, Jose-Manuel; Garcia-Sanchez, Isabel-Maria (2010). "The role of the board of directors in disseminating relevant information on greenhouse gases", *Journal of business ethics,* Vol. 97, N° 3, p. 391-424.
Google Scholar   https://doi.org/10.1007/s10551-010-0515-0

Sanchez, Isabel-Maria, Garcia; Dominguez, Luis, Rodríguez; Alvarez, Gallego, Isabel (2011). "Corporate governance and strategic information on the internet: A study of Spanish listed companies", *Accounting, Auditing & Accountability Journal*, Vol. 24, N° 4, p. 471-501.
Google Scholar   https://doi.org/10.1108/09513571111133063

Schulze, William S.; Lubatkin, Michael H.; Dino, Richard N. (2003). "Toward a theory of agency and altruism in family firms", *Journal of business venturing,* Vol. 18, N° 4, p. 473-490.
Google Scholar   https://doi.org/10.1016/S0883-9026(03)00054-5

Shahzad, Ali M.; Mousa, Fariss T.; Sharfman, Mark P. (2016). "The implications of slack heterogeneity for the slack-resources and corporate social performance relationship", *Journal of Business Research*, Vol. 69, N° 12, p. 5964-5971.
Google Scholar   https://doi.org/10.1016/j.jbusres.2016.05.010

Sharma, Pramodita; Chrisman, James J.; Gersick, Kelin E. (2012). "25 years of family business review: reflections on the past and perspectives for the future", p. 5-15.
Google Scholar   https://doi.org/10.1177/0894486512437626

Sharma, Pramodita; Sharma, Sanjay (2011). "Drivers of proactive environmental strategy in family firms", *Business Ethics Quarterly*, Vol. 21, N° 2, p. 309-334.
Google Scholar   https://doi.org/10.5840/beq201121218

Surroca, Jordi; Tribó, Josep A. (2008). "Managerial entrenchment and corporate social performance", *Journal of Business Finance & Accounting*, Vol. 35, N° 5-6, p.748-789.
Google Scholar   https://doi.org/10.1111/j.1468-5957.2008.02090.x

Waddok, Sandra, A., Graves. Samuel, B. (1997). "The corporate social performance- financial performance link", *Strategie Management Journal*, Vol. 18, N° 4, p. 303-319.
Google Scholar   https://doi.org/10.1002/(SICI)1097-0266(199704)18:4<303::AID-SMJ869>3.0.CO;2-G

Webb, Elizabeth (2004). "An examination of socially responsible firms' board structure", *Journal of Management and Governance*, Vol. 8, N° 3, p. 255-277.
Google Scholar   https://doi.org/10.1007/s10997-004-1107-0

Williams, Robert J. (2003). "Women on corporate boards of directors and their influence on corporate philanthropy", *Journal of Business Ethics*, Vol. 42, N° 1, p. 1-10.
Google Scholar   https://doi.org/10.1023/A:1021626024014

Wood, Wendy; Eagly, Alice H. (2009). "Gender identity", *Handbook of individual differences in social behavior,* p. 109-125.
Google Scholar

World Bank Group (2019). Doing Business 2019: training for reform, 16th edition, World BankPublications.
Google Scholar

APPENDIX 1
Definition of variables

Variable	Description	Measure	Expected sign
Dependent variable			
CSR	Corporate social responsibility performance	Mean of the sum of the environmental and social scores.	
Variables of interest			
FAM-OWN	Family ownership	Percentage of shares held by the family.	+
FAM-MAN	CEO-family member	Dummy variable that equals to 1 if the founder is the CEO and 0 otherwise.	+
FAM-IDENT	Family identification	Dummy variable that equals to 1 if the name of the firm is part of the family name and 0 otherwise.	+
EXCESS	Excessive family control	Ratio of the percentage of voting rights on the percentage of cash flow rights held by family members.	-
Moderating variables			
BSIZE	Board size	Total number of directors in the board.	-
INDEP	Board Independence	Proportion of independent directors on the board of directors relative to the total number of directors.	+
DUALITY	CEO duality	Dummy variable that takes the value of 1 if the CEO is also the chairperson of the board, and 0 otherwise.	-
DIVERSITY	Gender diversity	Proportion of women on the board of directors.	+
Control variables			
FSIZE	Firm size	Natural log of total assets.	+
LEV	Leverage	Total debt to total assets.	-
MTB	Market-to-book ratio	Ratio between equity market value and equity book value.	+
ROA	Return on assets	Ratio of net income before extraordinary items to total assets.	+